APPENDICES

A. Morses Pond Beach Master Plan, 2020
B. Morses Pond Beach & Bathhouse Feasibility Study, May 2024
C. Morses Pond Beach Advisory Committee Recommendations and Considerations
D. Permit Feasibility Assessment, June 2025
E. Updated Project Goals, Operations and Proposed Programming, July 2025
F. Site Constraint Clarifications, July 2025
G. Test Pit Results – Stormwater, August 2025
H. Supplemental Geotechnical Explorations, September 2025
I. Supplemental Geotechnical Explorations, November 2025
J. ASTM Phase I Environmental Site Assessment Report, September 2025
K. Wildlife Habitat Assessment, September 2025
L. Morses Pond Bathhouse Asbestos Assessment
M. Building Location Analysis
N. Building Code Compliance
O. Approved Conceptual Site Plan
P. Opinion of Probable Cost, PM&C, 2025
Q. Total Project Budget- Detailed Breakdown

APPENDIX A

Morses Pond Beach Master Plan, 2020

Morses Pond Beach Master Plan

2020

Weston & Sampson

INDEX

Introduction	4
Master Planning Process	6
Site History	8
Existing Conditions	11
Preferred Master Plan	15
Project Funding and Budget Considerations	28

Introduction

The Town of Wellesley Recreation Department engaged the team of Weston & Sampson and Maryann Thompson Architects to assess the existing conditions and develop a master plan for the renovation of the Morse Pond Beach property in Wellesley. The beach and surrounding property form a treasured and essential asset for the town and its residents, having been a leisure and recreation destination for generations.

During 2019 and early 2020, Weston & Sampson developed a series of preliminary and final master plan designs, which were generated in response to the expressed needs and desires from a wide variety of town departments as well as residents from the surrounding neighborhood and greater town. Three community meetings were held and this created a venue for residents to express their opinions and preferences on a wide range of topics that included:

- The condition of the existing site and bathhouse
- Need and location options for new bathhouse
- Improved guest amenities
- Parking and pedestrian circulation system needs
- Town wellhead and water quality protection
- Traffic and safety issues
- Maintenance and operations concerns
- Security issues
- Other elements of community interest

The final preferred master plan, as shown in this document, represents the “consensus plan” as it matches the goals and aspirations of the majority of the individuals who participated in the planning process. It is understood that the plan will be implemented over a period of time and potentially include multiple phases of improvements.

It is important to note that "Master Plan" recommendations are typically general and therefore they should not be considered to be "cast in stone". It is expected that future improvements will generally follow the recommendations contained in this report, but that specific details will be adjusted or refined as needed to meet community preference and actual site conditions.

This report represents the culmination of the master planning process. The document contains narrative and graphic depictions of the preferred master plan with relevant sections dedicated to identifying the full extent of potential improvements. The overall goal is to improve the Morses Pond Beach and surrounding property with a series of context appropriate enhancements. It is required that the enhancements respect unique and inherent historical, environmental and landsape qualities in a way that will foster enhanced beach and pond usage, community interaction, park aesthetics, and environmental stewardship.

The Master Planning Process

The master planning effort included three basic tasks. The tasks were performed by Weston & Sampson and Maryann Thompson Architects with support from town staff as follows:

Task 1- Project Kick-off and Site Assessment
Task 2- Public Meetings
Task 3- DRAFT and FINAL Master Plan

Key aspects of these three basic work tasks are included below.

Task 1 | Project Kick-off Meeting-

This initial meeting was held with town staff, elected officials and other key project stakeholders. The meeting confirmed the scope of work that was to be performed by the consultant team, with support from the town and set forward all basic project goals and expectations. The town also turned over for review all documents that contributed to the understanding of the Morses Pond Beach site and all of its natural and manmade features. Documents included topographic and property maps and other pertinent site and architectural plans.

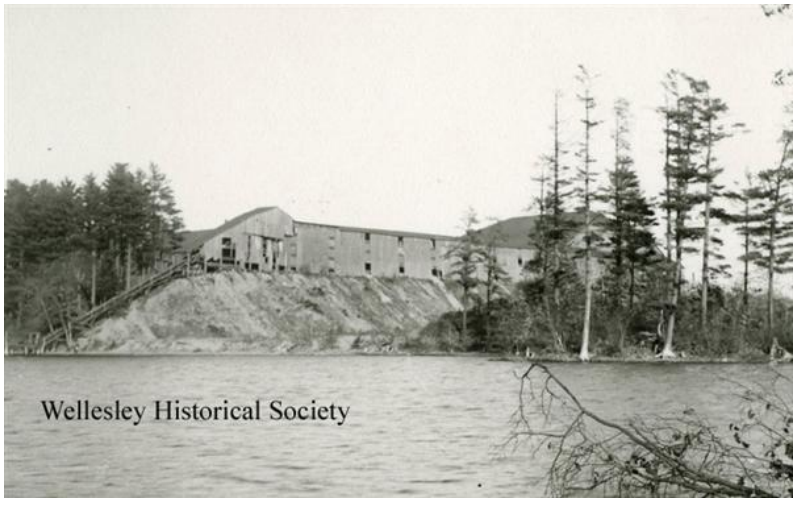
Task 2 | Public Meetings- three advertised public meetings and multiple other project related meetings were held as summarized in the table below.

Date	Venue	Meeting Purpose
06.19.2019	Town Hall	Kick-off Meeting with Recreation Department to outline project goals, timelines, and review initial thoughts and desires for improvements to Morses Pond.
08.07.2019	Town Hall	Presentation of concepts to public to solicit comments and desires to be included in project.
10.16.2019	Warren Building	Meeting with Recreation Commission to review design progress and solicit feedback
12.16.2019	Warren Building	Public Forum to present design progress
01.21.2020	Wellesley DPW	Presentation to Public Works Commission to present concepts and solicit feedback.
02.12.2020	Police Department	Review of draft design plan to solicit comments and concerns from residents regarding design.
03.03.2020	Warren Building	Recreation Commission meeting to present final concepts and solicit final comments prior to preparation of the Master Plan report.

The community engagement meetings were very productive with a great deal of spirited discussion. Between 20 and 30 residents attended each meeting, with nearly every attendee contributing his or her thoughts on a variety of matters. In essence, the intention was to achieve common ground on the level of renovation to the property while attempting to retain and enhance the rustic and natural character of the beach and overall property while also satisfying the varying neighborhood and town-wide recreational and municipal needs.

Task 3 | DRAFT and FINAL Master Plan- after completing the third community meeting and receiving considerable input related to final recommendations for improving the Morses Pond Beach, a draft master plan was prepared and submitted to the Recreation Department for review and for posting on the town website.

History + Evolution of the Site

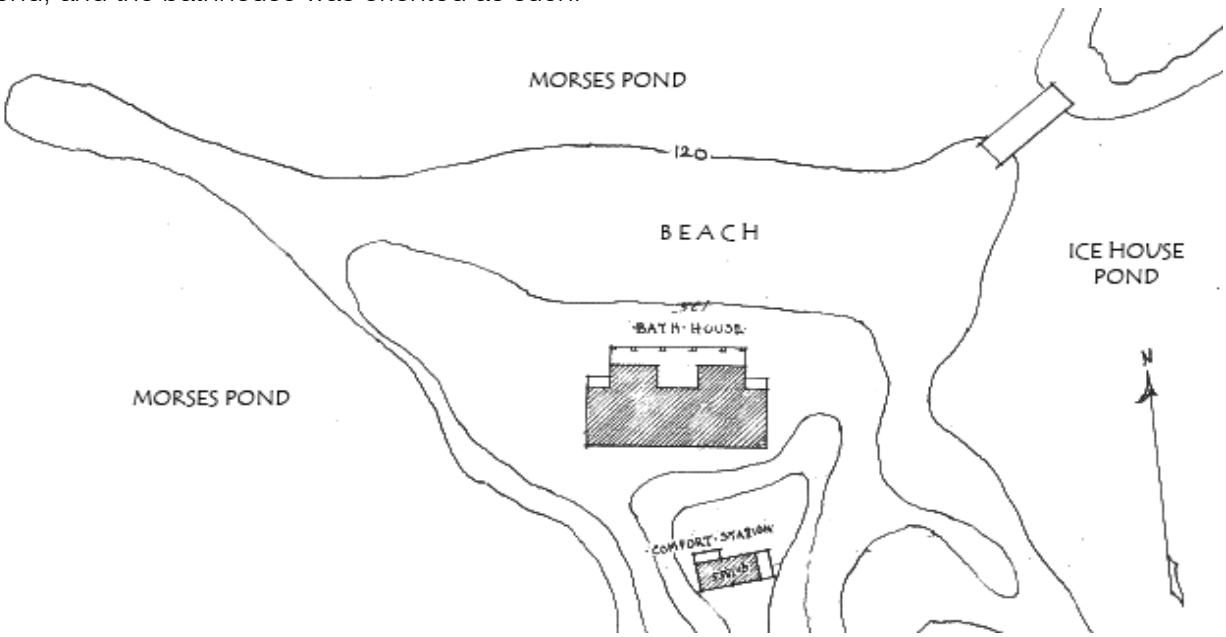


Morses Pond has a rich history dating back to 1738, when Edward Ward dammed his brook to create a small mill pond. The original Morses Pond was much smaller than the pond we enjoy today. During the following century, a string of owners from railroad companies to paint manufacturers built up the dam and used the impounded water as a source of hydropower. Towards the end of the 1800's and into the early 1900's, the property was used as a location for ice harvesting in the winter. Two different ice-making companies sequentially owned the pond, the Russell Ice Company

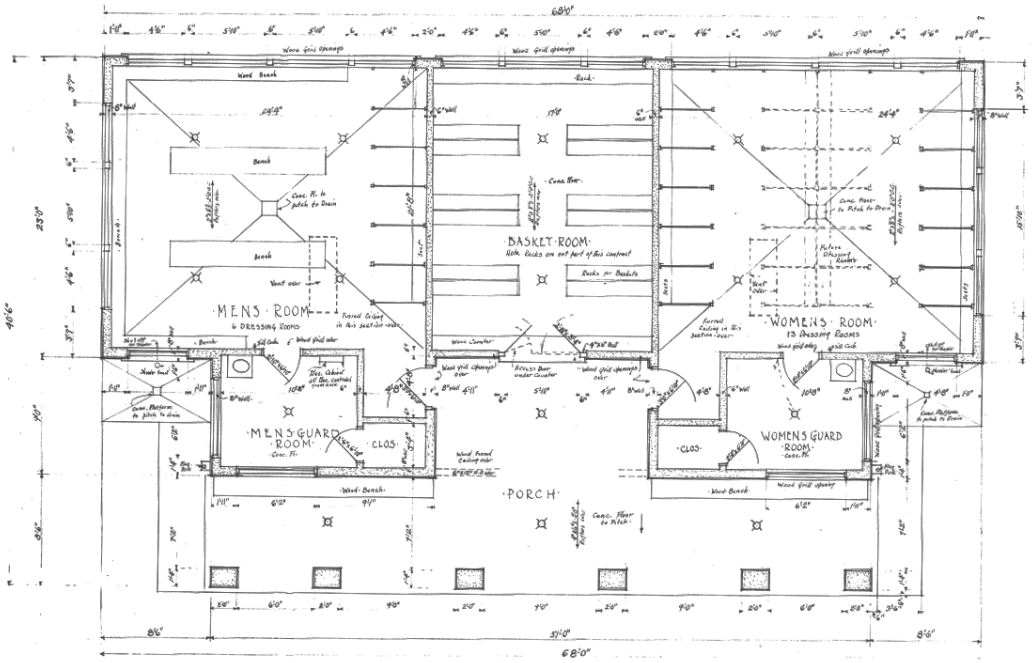
in 1888 and the Boston Ice Company in 1902. Both companies built the pond up to the Morses Pond as it exists today. Icehouse workers carved blocks of ice out of the pond and loaded them onto a large conveyor belt which brought them to the warehouse atop the pond's bank, before being loaded onto rail cars as needed. The advent of refrigeration and the struggles of the Great Depression forced the Boston Ice Company to close. The property was then purchased by the Town in 1931 for $3,000 and opened as a public beach in 1935. It has been a community recreation resource since that time.

BATHHOUSE

The 'old beach' as it is referred to now was on the north side of the peninsula that extends into the pond, and the bathhouse was oriented as such.



The original bathhouse was a simple structure with a central 'basket room' where guests would leave their change of clothes after having put on bathing suits in either the men's or women's changing rooms. There were also a small room for each male and female lifeguards.



The original design drawings for the structure show the building in the Mediterranean Revival architectural style with clay tile roof and a stucco finish, which was popular regionally during the time period that this was built, in the early 1930's.

The current building is a much less grandiose building with painted brick, and an asphalt shingle roof.

EXISTING CONDITIONS

The Site

Morses Pond covers about 100 acres of area between Routes 135 and 9 in the northwest corner of Wellesley. A large area of the pond is less than 10-feet deep; its average depth is about 8 feet and its maximum depth is 23 feet. Water enters the north end of the pond from Bogle Brook, Boulder Brook, and Jennings Brook. Water exits the pond through the dam adjacent to Route 135 and continues south onto Paintshop Pond, Lake Waban, and eventually the Charles River. Water also exits via the groundwater wells that extract water for public consumption in both Natick and Wellesley.[1]

The property is accessed off Weston Road via the Morse Pond Access Road which begins at the intersection of Turner Road and Halsey Avenue. The Wellesley College campus is located to the south of this property across the railroad tracks and Route 135.

Access + Circulation

The site is accessed off Weston Road by Turner Road. At the corner of Turner Road and Halsey Avenue is the entry gate which is currently locked during the evenings and all but two weeks of the unprogrammed off season, marking the beginning of the Morses Pond Access Road. During the times when the gate is locked cars often park along Turner Road in order to access the site for trail and dog walking. The Morses Pond trails are popular and connect to the Crosstown Trail. Along with the North 40 property to the southwest of the site, there are many smaller walking trails through the woods. Within the project area is a portion of what is identified below as the Morses Pond Trail, a popular route for residents and guests both during and off-season.

Vegetation & Wildlife Habitat

The site is comprised of a predominance of coarse to fine sand, which was mined over the years. This soil type also results in the vegetation of the site being primarily composed of white pine (Pinus strobus) and a combination of other deciduous trees including red oak, white oak, red maple, beech, birch, catalpa, and poplar. Certain invasive species have begun to populate the site, most notably oriental bittersweet and European buckthorn.

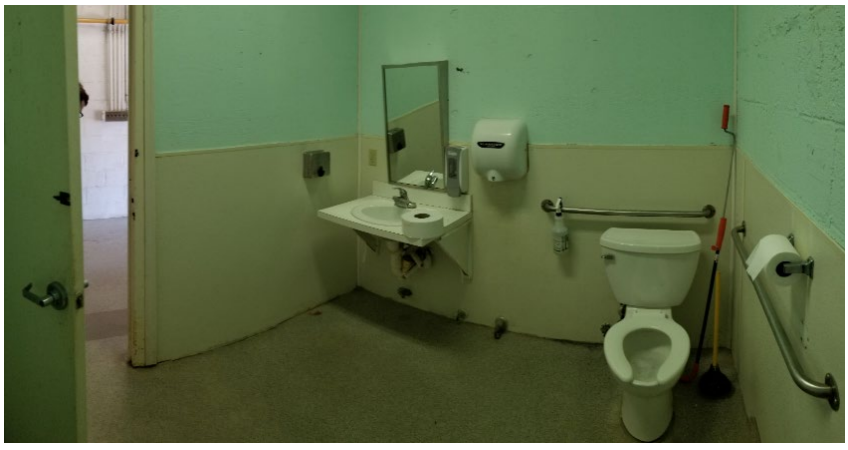
The site is populated by a wide variety of wildlife including birds, waterfowl (ducks, herons, swans, and Canada geese), squirrels, racoons, chipmunks, opossum, and the occasional fox and coyote and well as a wide variety of turtles, amphibians, and fish.

Pond Ecology- Over the years as a result of residential development upstream and around Morses Pond, it has become eutrophic primarily from an excess of phosphorus, typically from lawn fertilizers. Extra phosphorus reduces water clarity and supports the rampant growth of algae and other undesirable plants and weeds. While algae and undesirable plants and weeds thrive in a phosphorus-rich environment, they strangle fish and other aquatic animals by consuming the oxygen necessary for life. Algal blooms kill fish and other animals, create unpleasant odors, and nurture vegetation that grows dense and thick enough to close large areas of the pond to swimmers and boaters for much of the summer. The Town has been managing this issue with the assistance of a weed harvester, which collects the weeds daily during the summer season and hauls the material off site to be composted.

Bathhouse

As outlined earlier in the report, the existing bathhouse has morphed over the years with a series of configuration changes and additions, particularly the roof structure over the current entrance and the storage addition on the west side of the building.
The overall condition and configuration of the building is poor and it was determined during the assessment period that it was not financially viable to simply renovate the building, since so much would have to get reorganized and rebuilt. The roof consists of some simple A-frame timber framing, and the open vents do not allow for sufficient air flow leading to issues with mold and mildew.

There is inadequate interior storage, desk space, staff locker and changing areas.



Shade Shelters

There are two shade shelters on the property with picnic tables, grills, and trash cans. These structures are fairly basic in their construction and the asphalt shingle roofs and in fair to poor shape. One is ADA accessible, located directly of the main path that cuts along the back of the site, whereas the second is located in the lawn area, and therefore not ADA accessible. These are popular both for families and for day camps.

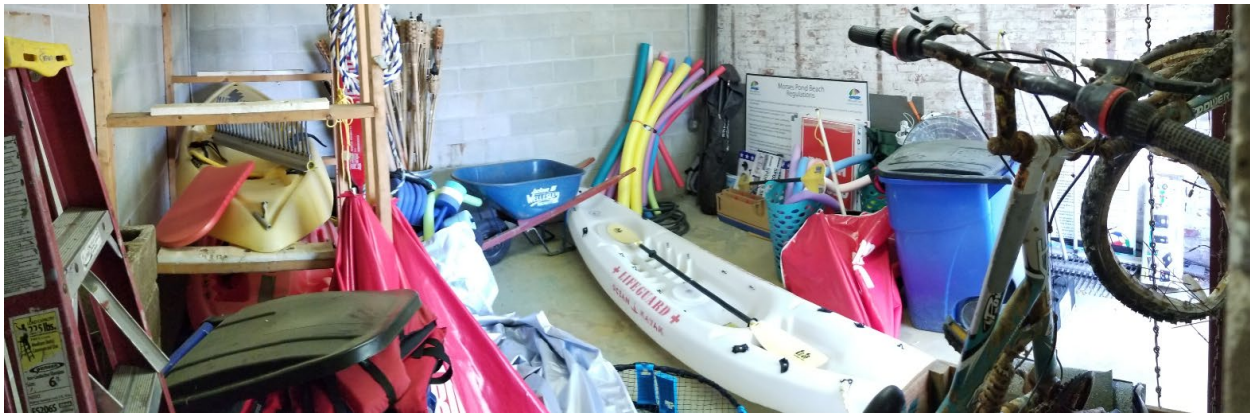
This smaller shade structure, with built in table and seats is located closer to the beach and is used by a variety of guests, lifeguards, and the park ranger.

Retaining Wall

The site is divided between a lawn area and the sandy beach area by a timber retaining wall which is starting to fail. Guests enjoy the ability to lay blankets on either the grass or the sand. The height of the wall varies from approximately 18" to 8" in height.

Storage

There exists an incongruous and haphazard collection of storage solutions on the site, that do not fully and adequately meet the requirements that exist; such as lifeguard supplies, kayaks, paddles and life jackets, and miscellaneous maintenance equipment. This collection is both unsightly and inefficient.



Play equipment

There are two areas of 'dry play' play equipment. The first is a swing set located off the main path, while the second is a multi-feature slide and play area down on the sandy beach.

Although the play equipment location is convenient for parents who want to keep an eye on some kids who may be in the water and others on the play equipment, the current location and lack of walkways to the slide structure make this non-ADA accessible.

There is also a sand volleyball court located approximately in the middle of the beach front, within the grass area. This is used primarily by day campers, but only periodically. Given its limited usage, and prime location roughly at the center of the beach, the area was determined to be more useful as lawn area for sunbathers, and the sand volleyball moved to roughly the location of the existing play equipment which is typically a lesser populated portion of the beach.

Boat Access

There is an accessible kayak launch located at the north side of the beach. Kayaks and equipment are available for rental from the office in the bathhouse. Kayaks are stored in the green storage container and brought out by guards for rental.

Access to this launch by residents bringing their own kayaks is difficult given the distance away from the parking lot.

The existing boat launch is able to be accessed for public rooftop boats and kayaks, but it is fairly hidden from view and often busy with the operating weed harvesting equipment for the pond.

Existing Parking

The existing parking area is located on the east side of Ice House Pond and the Water Department Building. The lot is approximately one and a half acres and has a compacted gravel surface. The western edge of the lot is adjacent to the Zone 1 wellhead protection area. There is no striping or organization of the lot and leads to inefficient parking congestion on busy days.

Recommendations and the Preferred Master Plan

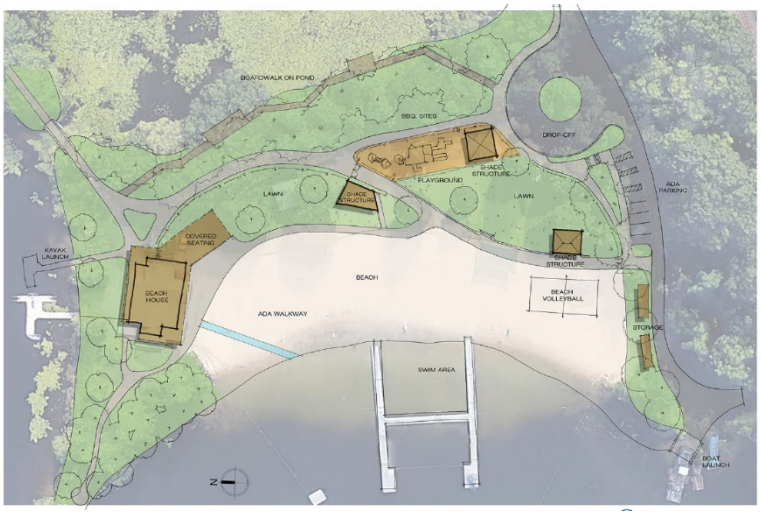
The preferred master plan was established in direct response to the ideas and preferences put forth by very engaged community members, Recreation Commission and other key stakeholders. As previously noted, dialogue at the three public meetings was extremely spirited and thoughtful, with participants interested in striking just the right balance in the approach to refurbishing and enhancing this important property and recreational resource. To find that balance, project proponents kept returning to the central themes that community members continually gravitated toward, and these are summarized below:

- The site is very much loved as it is, so a master plan tenet should include preserving and enhancing all that is great.
- The bathhouse has outlived its practical and functional life and given the extent of repairs and upgrades required in order to bring the building into full code compliance and functionality, it is more cost effective and practical to demolish the existing building and create a new building.
- In order to improve universal access for all site amenities, walkways and paths must be graded in compliance with ADA guidelines.
- Designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural and social site character.
- Through the establishment of meadows and native landscape plantings, wildlife habitat can be improved.
- New enhancements should be attractive, low-intensity, and supportive of neighborhood and town-wide use both during and outside of the summer swimming season.

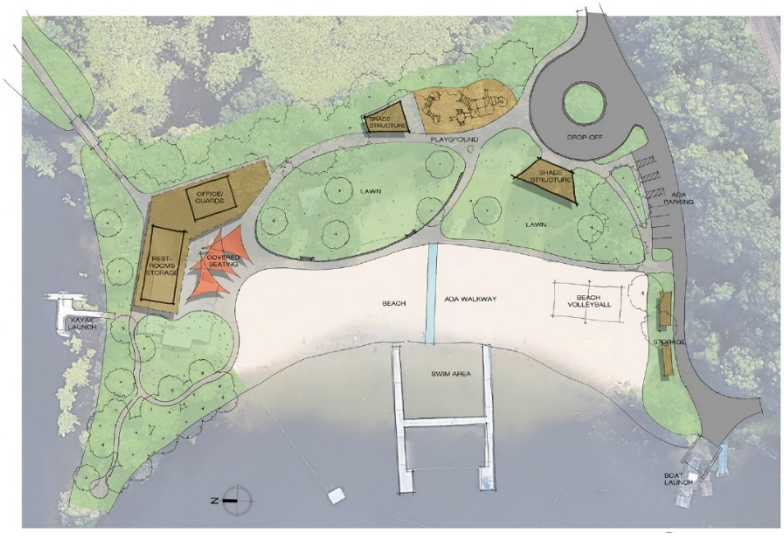
The master plan was designed to strike the right balance as it introduces a relatively modest array of improvements that are in keeping with the preferences of master planning participants, and with the Town of Wellesley's capacity to maintain and operate the property in good order, while protecting the public drinking water supply wells and systems.

Preliminary Studies

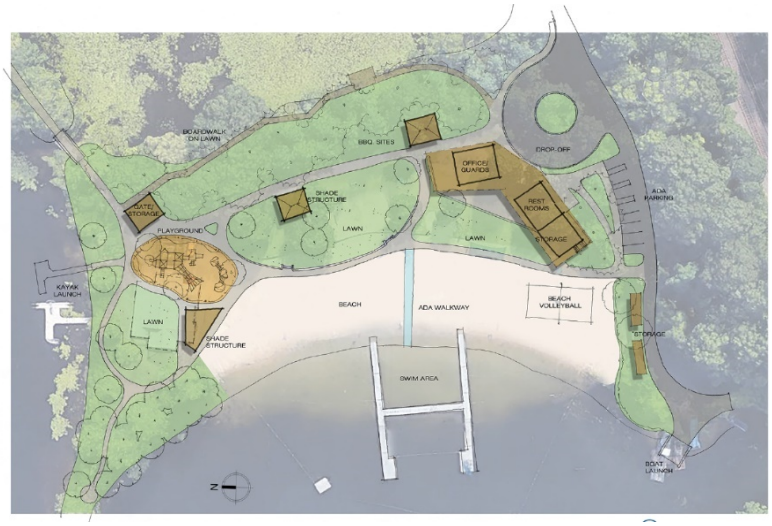
The design team developed a series of preliminary beach area designs looking at three main configurations. The first looked at creating a new building in roughly the same location as the existing building. This scheme was not pursued because the building did not function well trying to squeeze all of the programming into a single footprint and its position in the relation to the primary swim area was not advantageous.



The second scheme created a new pair of buildings closer to the bridge. Advantages of this scheme included the creation of a forma and highly visible gateway between the buildings and to create the sense of arrival, while the building locations help to open up more space for guests around the perimeter of the beach.



The third scheme became the preferred scheme. The building has been moved to the opposite side of the beach, closer to the drive. This maintained the benefit of the second scheme in creating a gateway entrance while also opening up green space and view corridors by removing the existing structure from its current location.



Overall Site Master Plan

Key features of the Master Plan include:

Parking and Arrival

- Adjusted and improved parking lot, with potential PV solar arrays.
- Reconfigured drop off.
- Open lawn area on east side of Ice House Pond.
- New wooden boardwalk along southern portion of Ice House Pond
- New walkway along west edge of Ice House Pond, allowing guests without passes to have access to the new bathhouse building location.
- Walkway separated from Water Department driveway

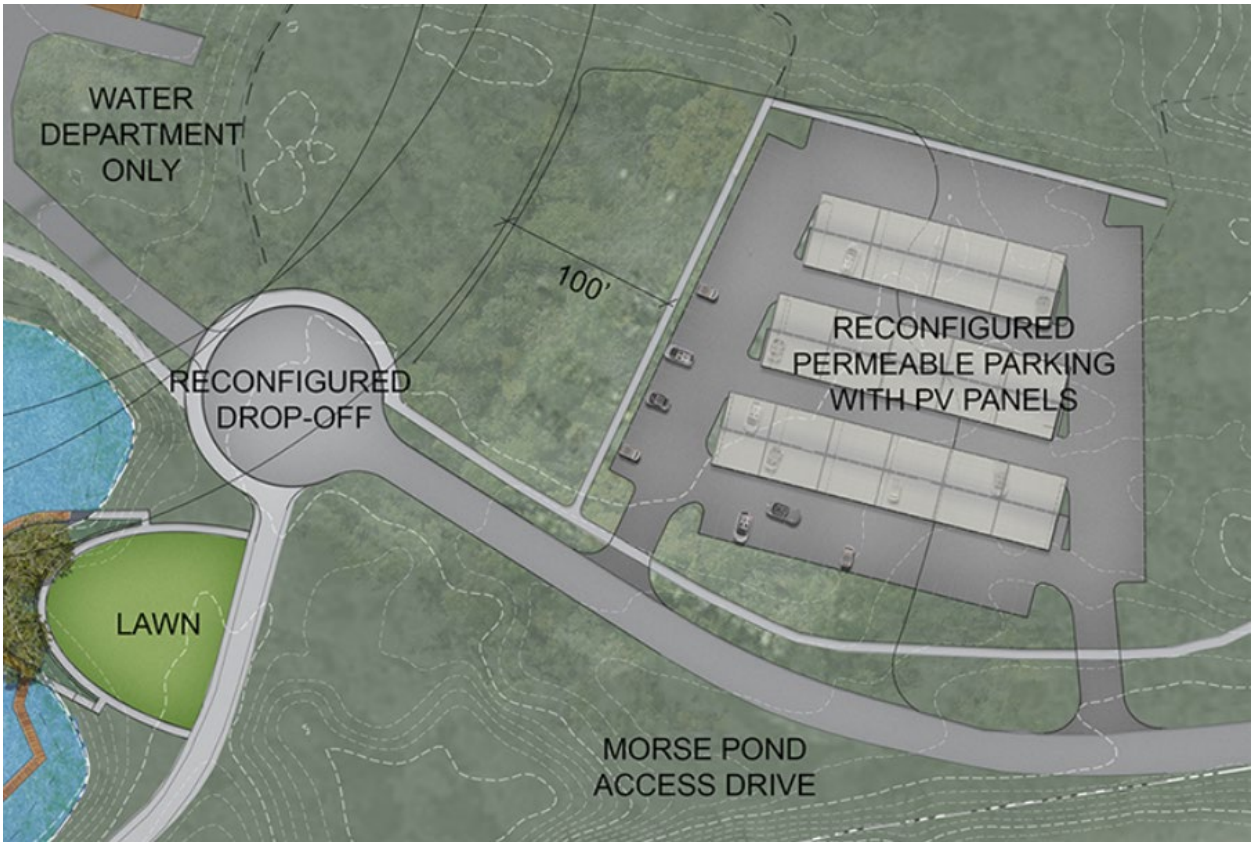
Bathhouse

- New bathhouse buildings location closer to entrance drive/walkway.
- Bathhouse broken into two buildings, one which can be shut down during off-season.
- ADA parking brought into compliance.
- Increased and improved storage areas.
- One continuous roof connecting the two building footprints to create covered shaded outdoor space.

Beach and Lawn area

- New walkways at beach area including flush wooden walkway at beach.
- ADA accessible mat across beach
- New playground along walkway
- Volleyball relocated to beach area
- New kayak rental/storage which small check-in office.

Parking Area /Drop-off Modifications



The current parking and drop off sequence is very unclear as to where exactly the entrance is, and how either vehicles or pedestrians are supposed to get to the beach area from their car.

In order to clarify and remedy this issue the intent is to reconfigure the drop-off area, developing signage and visual clues to promote using what is currently the service and handicapped parking drive into the main pedestrian walkway. These changes will also create a more distinct vehicular access drive for the Water Department.

In an effort to help protect the town drinking wells, the parking lot, which currently abuts the Zone 1 wellhead protection area is proposed to be moved approximately 100' to the east in order to give a larger buffer to the wellheads. The parking lot, while still porous, would be laid out in a more efficient configuration. Unless the lack of rebates and credits makes it cost prohibitive, there is the potential of adding solar arrays at the parking area.

Pedestrian/ADA Parking Access

In addition to expanding the width of the drive to allow for emergency vehicle access, the drive will have designated drive and walkway lanes in the infrequent event that both pedestrians and a vehicle are sharing the road. The intent is that only the following vehicles would be allowed on roadway;

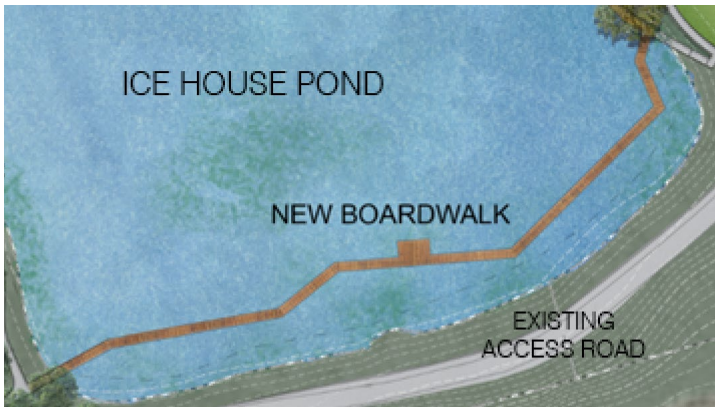
- Emergency vehicles
- DPW vehicles in conjunction with the weed harvester
- ADA/Handicapped guest vehicles (with proper identification)
- Cartop boat vehicles utilizing boat launch

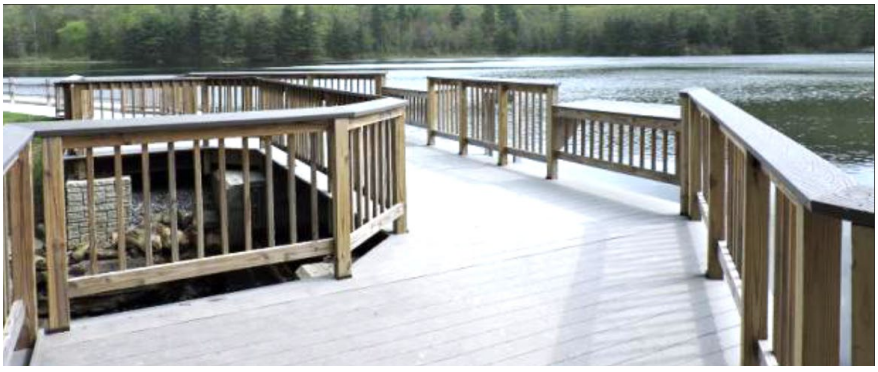
Other than the signage, the existing ADA parking is essentially non-conforming on multiple fronts. Both the dirt parking and the slope from parking up to the main walkway, do not conform to the requirements set forth for accessible parking,

Ice House Pond Existing Conditions

Boardwalk at Ice House Pond

In order to provide greater access Ice House Pond the design team has proposed a boardwalk that would cross along the southern edge of the pond. This would both allow access closer to the water but also provide a second walkway for pedestrians moving between the parking area and beach front in the event of vehicular traffic along the access drive.





In conjunction with dredging, invasive species removal, and other measures this small pond could have improved water clarity, and biodiversity, and create additional opportunities for recreation such as fishing, ice skating, and other activities.

Removal of Invasive Plant Species

There are several invasive species that affect the property, but oriental bittersweet (Celastrus orbiculatus) has had a particular impact on the aesthetics and openness of Ice House Pond. By eliminating this pervasive climbing vine, wide areas of currently inaccessible shoreline would be opened up and would prevent further damage to the surrounding landscape. Other invasive species to be controlled include buckthorn, multiflora rose, poison ivy, bush honeysuckle, autumn olive, and black locust.

Erosion Control Measures

At several locations throughout the site, measures should be taken to reduce soil erosion and siltation into the pond. A variety of solutions will likely be required including the use of riprap stabilization, groundcover plantings, and grading to redirect stormwater. One location in particular need of attention is the woodland path on the north side of the 'Old Beach' near the Water Department property.

Preferred Site Plan

BEACH AREA IMPROVEMENTS

Relocate Bathhouse

The design team looked at a series of improvements for the beach area, starting with the relocation of the bathhouse to the opposite side of the beach front. The relocation of this building has several advantages:

1. Moves the building and functions closer to the ADA parking and emergency vehicle access.
2. Opening of views/sightlines from the beach area out to the greater Morses Pond which are currently blocked by the existing building.
3. Creates more open lawn space for guests to use for either lounging, passive recreation, or use by day campers.

Beach Area

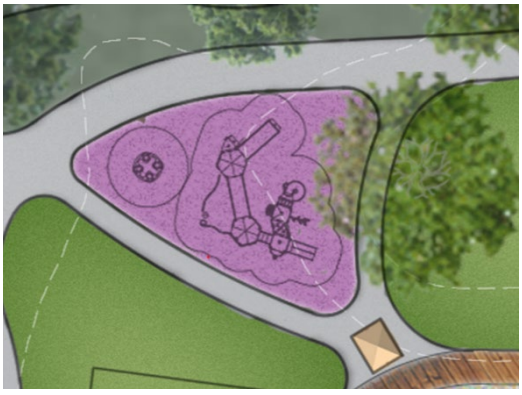
Within the beach area itself there are minor modifications. The play structure has been moved in order to be in a more accessible location, while the volleyball area was moved from the hillside down onto the beach. Additionally, an accessible mat system is proposed to allow guests with disabilities to get across the sand to the docks and water.

Lawn Areas

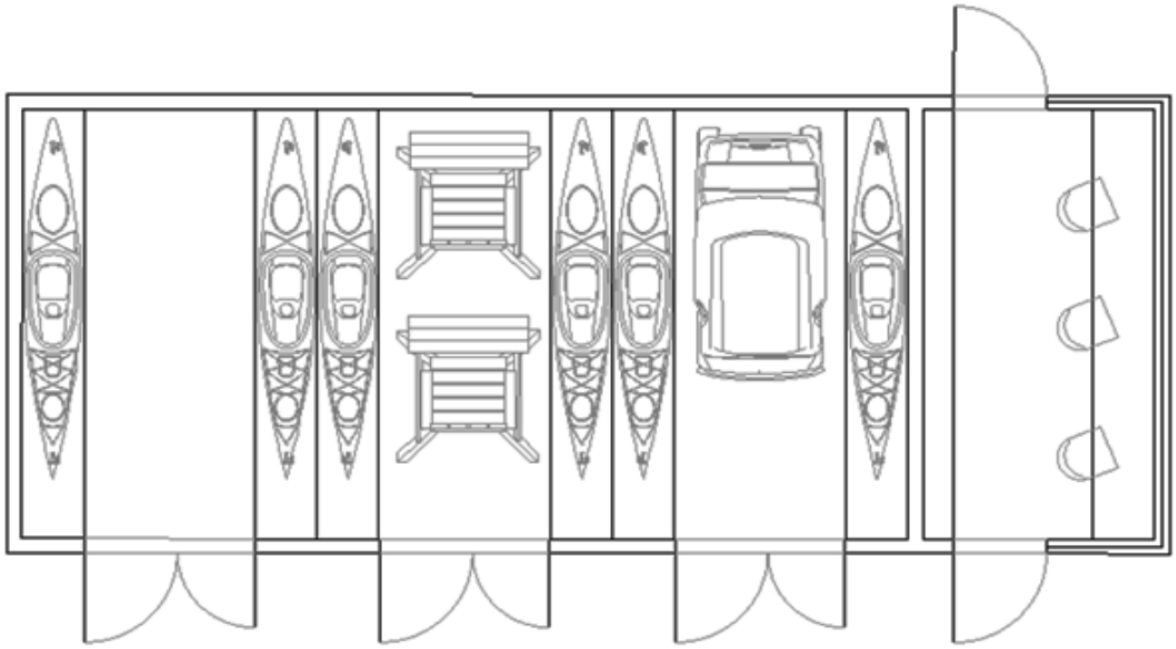
One feature of the Morses Pond Beach area that is not seen at many other pond beaches is the lawn area that lies beyond the sandy beach. Current beach guests expressed a strong desire to maintain and enhance this feature, since it provides a softer and cooler place to lay out and enjoy the beach area without having to be directly on the sand. Additionally, maintaining and adding shade trees provides respite from the sun on the hottest days of summer.

Playground

The existing play structure is located down on the sandy beach area which makes it inaccessible from and ADA point of view. The playground has been relocated to be accessible from the walkways. Its location is such that parents are still able to keep an eye on kids at both the beachfront and the play area simultaneously.

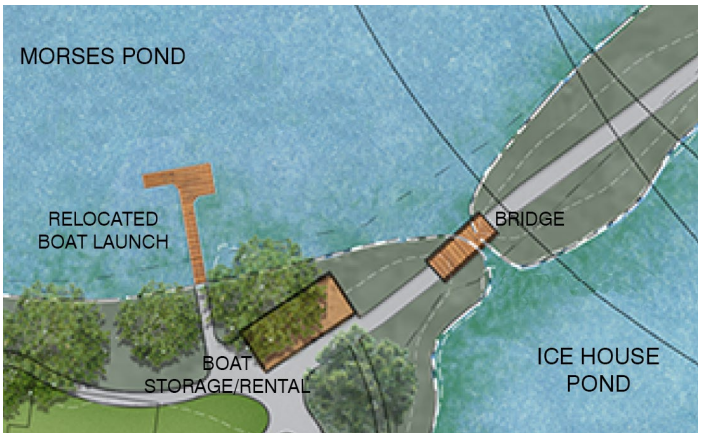


Boat Storage and Rental Office Plan



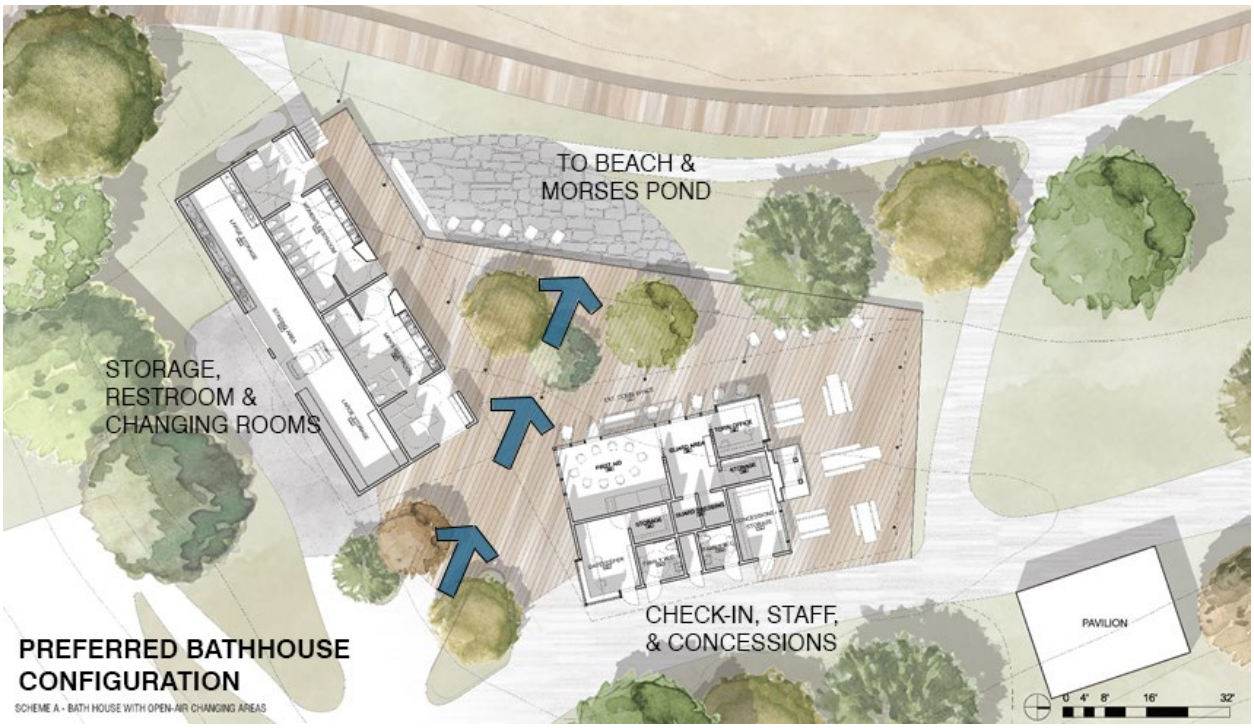
Boat Access and Boat Rentals

Continuing the existing kayak rentals, the preferred plan identifies a new storage and kayak rental building, which can also double as a location for checking annual guest passes for those guests who decide to come down the bridge walkway. This new building would provide stacked kayak storage as well as space for golf carts or beach equipment to be stored in the off season.



For those guests who bring their own cartop boats or kayaks, a new boat ramp is proposed adjacent to the existing boat launch. This will allow for the continuation of the weed harvesting activities at the existing boat launch be without interruption by boater access and vice versa. There will be a limited number of cartop boat parking spaces in conjunction with the ADA parking spaces.

Bathhouse



In the study of the existing and desired functions of the bathhouse, it was determined that a two-building solution would be more practical than a single building solution. The siting of the new bathhouse with functional spaces split into two building volumes serves as a gateway to the beach area. One building footprint contains bathrooms with changing areas and a large storage space. This volume will be unconditioned and shut down after the summer beach season. The other volume contains staff spaces, first aid room, family bathrooms and concession spaces. This volume will be conditioned and could be used year-round if desired. When arriving to the beach area visitors walk between the two buildings where passes and entry fees are collected by staff at a walk-up window.

Both buildings are proposed to have large overhang/canopies, to provide both shade from the sun and shelter from passing rain showers. Adjacent to the concessions area is a covered area that would allow for seating/dining in the shade during the summer and protection from snow and rain in the colder seasons. In addition to the buildings themselves, a large open patio or deck space is provided to create an overlook to the beach and swim area, as well as an accessible area for guests that are not able to use grass or beach area surfaces.

Finish Materials/Design Character

During the course of the study, a series of images were presented to stakeholders as a way to discuss and select a preferred design character. Through this process a general consensus was formed on the design character that the new structures for the facility should exhibit. Below is a summary of the characteristics that were requested by both patrons and town staff members:

- Simple, modest appearance (not fancy or ornate)
- Natural material palette (i.e. wood) was preferred to man-made materials
- Durable materials for ease of maintenance and longevity
- Bathrooms and staff spaces opening toward beach area

- Lots of natural light for interior spaces
- Blending of landscape and building through the use of building siting or layering of architecture and landscape elements
- Roof with overhangs for covered gathering area to provide shaded areas

Sustainability

The bathhouse will feature a range of sustainability features and strategies such as:

- Daylighting Strategy: Large windows allow interior spaces to be lit during the day by natural sunlight rather than electric light.
- Cross Ventilation: The building will be designed to be cooled down by natural breezes through the use of operable windows. This will reduce the use of AC systems in any conditioned spaces.
- Roof Overhangs: Large overhangs shade the exterior envelope to keep the building cooler in the summer but will allow low winter light in.
- Exterior envelope: Conditioned spaces to be super-insulated (approx. R-40 walls and R-60 roof). This will keep the building warmer in the winter and cooler in the summer. Windows for these spaces to be triple-paned.
- Materials: Specify wherever possible the use of locally available and environmentally friendly materials
- Solar Hot Water System: Install a Solar Hot Water system on the building to provide the hot water for the building.
- LED lighting: All lighting to be highly efficient LED lighting, lowering the energy consumption of the building.
- Electric Building Systems: HVAC and hot water systems to be all electric, eliminating the use of fossil fuels.
- PV system: a PV system located in the parking area or elsewhere could be installed to offset building energy use

SCHEME A - ENTRY LOOKING TOWARDS POND AND BEACH (NOTE: GATEKEEPER ON RIGHT)

Structural Systems

The structural foundation system is proposed to be a concrete slab on grade foundation system with concrete footings. Geotechnical investigation would need to be performed early in the design process in order to determine specifics related to the foundation system. Roof and wall structure will consist of wood framing. Exterior roof posts are proposed to be steel with a rust resistant finish.

HVAC

The primary mechanical system of the bathroom volume will be a central exhaust fan ducted to all occupiable spaces. This system will be complimented with natural ventilation through louvers and operable windows. In the staff volume an air source heat pump is proposed to provide heating and cooling. A centralized HRV system will be included to provide fresh air and ventilation.

Electrical Systems

Electrical systems should be designed to provide the lowest level of base energy use achievable. Lighting will be provided with all LED fixtures and controlled through daylight and occupancy sensors where practical. Any site lighting that will be provided that complies with dark-sky friendly products to minimize light pollution. A fire alarm system will be provided to meet all current codes and safety standards.

Plumbing Systems

Plumbing systems will be designed with water conserving low or no flow fixtures. Additional study during design development should be undertaken to investigate the feasibility of the inclusion of water reclamation. Water heating will be achieved through electric water heaters in conjunction with a rooftop solar hot water system.

Improvement Funding

The intial improvement program will be implemented using Community Preservation Act funds or other capital funding resources designated by the Town. Future funding sources are likely to include the Community Preservation Act/Committee, town capital funds, funds from donors (private individuals, institutions and corporations) and other sources.

Total Project Budget

The four focus area improvement programs can be accomplished one at a time or in groups or all at once, based on funding availability. The Friends of Morses Pond Beach group has also expressed a strong willingness to participate in the funding of capital improvements at the site and their continued support should be further encouraged and understood.

The summarized budget for potential improvements identified within this report is outlined below.

Improvement Area	Estimated Cost
Building Improvements	$ 2,106,000
Site Improvements	$ 1,674,000
Subtotal	$ 3,780.500
Mobilization, Overhead & Profit @ 15%	$ 567,500
Subtotal	$ 4,374.575
Construction Contingency @ 10%	$ 434,758
Subtotal	$ 4,782.333
Design & Engineering @ 12%	$ 574,000
Grand Total	$ 5,356.333
Option: PV Panels at Parking Area	$ 1,500,000

*15% Design and Permitting Fee is included in final total.

Conclusion

In laying out the range of potential improvements to the Morses Pond Beach property, an attempt has been made to strike a balance between updating the functionality of the site amenities and maintaining the charming character that has existed at this property for years.

Given the age and condition of the existing bathhouse, it is necessary to develop a new bathhouse solution. This situation gives the Town of Wellesley the opportunity to not just repair or replace the building in its current location but to look at the property more holistically and develop a scheme that works better for both staff and patrons, while at the same time enhancing the overall natural and aesthetic qualities of the site.

APPENDIX B

Morses Pond Beach & Bathhouse Feasibility Study, May 2024

MORSES POND BEACH & BATHHOUSE FEASIBILITY STUDY

May 7, 2024

MARYANN THOMPSON ARCHITECTS
www.maryannthompson.com

Weston & Sampson SM
design studio

INDEX

Acknowledgements	3
Introduction	3-4
The Site Master Planning Process	5-8
History and Evolution of the Site	9
Existing Site Conditions	10-18
Existing Bathhouse Conditions	19-21
Community Needs Building Assessment	22-23
Building Code Review	24-25
Preferred Site Master Plan Recommendations	26-38
Conceptual Building Design	39-44
Proposed Site Renderings	45-48
Estimated Construction Costs for Value Engineered Concept	49
Site Value Engineering Exercise	50
Estimated Construction Costs for Value Engineered Concept	51-52
Permitting	52
Estimated Designer Services Fees	53-55
Conclusion	56
Appendices	57

Acknowledgements

We would like to thank every stakeholder, Town employee, public official, and resident who contributed their time and input during this feasibilty study. Your participation, knowledge, and dedication has been instrumental in guaranteeing that this feasibilty study reflects the needs and desires of the Town of Wellesley, MA. Your work on the Morses Pond Beach and Bathhouse Improvements project will ensure that future generations of town residents will enjoy this wonderful resource for many years to come.

Introduction

The Town of Wellesley Recreation Department engaged Weston & Sampson Engineers as the prime consultant for this feasibilty study for the renovation of the Morses Pond Beach property in Wellesley. Maryann Thompson Architects (architecture), TCi Consulting (cost opinion), and Brennan Consulting (topographical land survey) were included as sub consultants to assist with the study. The beach and surrounding property form a treasured and essential asset for the town and its residents, having been a leisure and recreation destination for generations.

Aerial image of Morses Pond

During 2019, and early 2020, Weston & Sampson developed a series of preliminary and final master plan designs, which were generated in response to the expressed needs and desires from a wide variety of town departments as well as residents from the surrounding neighborhood and greater town. Three community meetings were held and this created a venue for residents to express their opinions and preferences on a wide range of topics that included:

- The condition of the existing site and bathhouse
- Need and location options for new bathhouse
- Improved guest amenities
- Parking and pedestrian circulation system needs

- Town wellhead and water quality protection
- Traffic and safety issues
- Maintenance and operations concerns
- Security issues
- Other elements of community interest

After a brief hiatus to obtain approvals for CPC funds to perform this feasibilty study, the project started back up in January 2022. The Town formed its own working group to assist the design team in moving the project forward to reach concensus on the final preferred master plan for the site. Due to the pandemic all meetings were conducted remotely.

The design team met twice with the Town working group in early 2022. During these meetings, the site master plan was reviewed and revised slightly to accommodate emergency access as vehicles enter the main 12-foot-wide pedestrian path that runs parallel to the beach. During this time the site master plan also went through an opinion of probable costs exercise to determine the overall project budget current costs. Due to the pandemic, material and construction costs had increased significantly which had an impact on the master plan overall projected costs.

After further discussions with the Town regarding the increase in project costs it was decided that the removal of some scope items were required to get the costs back inline with the conceptual design budget. The items to be removed were agreed upon after discussions with Town staff. The items removed from the scope can be designed and constructed at a later date should more funds become available.

The final preferred site master plan, as shown in this document, represents the "consensus plan" as it matches the goals and aspirations of the majority of the individuals who participated in the planning process. It is understood that the plan will be implemented over a period of time and potentially include multiple phases of improvements.

It is important to note that "Site Master Plan" recommendations are typically general and therefore they should not be considered to be "cast in stone". It is expected that future improvements will generally follow the recommendations contained in this report, but that specific details will be adjusted or refined as needed to meet community preference and actual site conditions.

This report represents the culmination of the master planning process and feasibilty study. The document contains narrative and graphic depictions of the preferred site master plan with relevant sections dedicated to identifying the full extent of potential improvements. The overall goal is to improve the Morses Pond Beach and surrounding property with a series of context appropriate enhancements. It is required that the enhancements respect unique and inherent historical, environmental and landsape qualities in a way that will foster enhanced beach and pond usage, community interaction, park aesthetics, and environmental stewardship.

The Site Master Planning Process

The overall site master planning effort included three basic tasks. The tasks were performed by Weston & Sampson and Maryann Thompson Architects with support from town staff as follows:

Weston & Sampson was hired by the Town to develop the initial site master plans in 2019 and 2020. In 2021, the Town retained their services to prepare this feasibility study. Tasks also included design updates to the previously approved site master plans. Key aspects of these three basic work tasks are included below.

Task 1 | Project Kick-off Meeting

This initial meeting was held with Town staff, elected officials, and other key project stakeholders. The meeting confirmed the scope of work that was to be performed by the consultant team, with support from the Town and set forward all basic project goals and expectations. The Town also turned over for review all documents that contributed to the understanding of the Morses Pond Beach site and all of its natural and manmade features. Documents included topographic and property maps and other pertinent site and architectural plans.

Task 2A | Master Planning Public Meetings in 2019 and 2020

Three (3) advertised public meetings and multiple other project related meetings were held as summarized in the table below.

Date	Venue	Meeting Purpose
06.19.2019	Town Hall	Kick-off Meeting with Recreation Department to outline project goals, timelines, and review initial thoughts and desires for improvements to Morses Pond.
08.07.2019	Town Hall	Presentation of concepts to public to solicit comments and desires to be included in project.
10.16.2019	Warren Building	Meeting with Recreation Commission to review design progress and solicit feedback

Date	Venue	Meeting Purpose
12.16.2019	Warren Building	Public Forum to present design progress
01.21.2020	Wellesley DPW	Presentation to Public Works Commission to present concepts and solicit feedback.
02.12.2020	Police Department	Review of draft design plan to solicit comments and concerns from residents regarding design.
03.03.2020	Warren Building	Recreation Commission meeting to present final concepts and solicit final comments prior to preparation of the Master Plan report.

The community engagement meetings were very productive with a great deal of spirited discussion. Between 20 and 30 residents attended each meeting, with nearly every attendee contributing his or her thoughts on a variety of matters.

In essence, the intention was to achieve common ground on the level of renovation to the property while attempting to retain and enhance the rustic and natural character of the beach and overall property while also satisfying the varying neighborhood and town-wide recreational and municipal needs.

Task 2B | Feasibility Study Public Meetings in 2022 and 2023

The design team conducted a further ten (10) virtual meetings when the feasibility study began after CPC funding approvals and the pandemic related break. These meetings are summarized in the table below.

Date	Venue	Meeting Purpose
01.07.2022	Online	Kick-off Meeting with Recreation Department to discuss timelines, and review current approved Morses Pond master plan.
02.11.2022	Online	Working Group Meeting #1. Project recap. Discuss updates to site, architecture, MEP.
03.07.2022	Online	Public Meeting #1. Project recap. Discuss updates to the master plan and the schedule.

Date	Venue	Meeting Purpose
03.25.2022	Online	Working Group Meeting #2. What we heard at the public meeting. Emergency vehicle egress. Site and architecture updates.
05.02.2022	Online	Select Board Meeting. Discuss current site plan and accessibility, architecture, project costs, and schedule.
05.26.2022	Online	Cost Estimate Meeting. Discuss TCi estimate. Review town proposed value engineered items, and design team revised site plan.
10.11.2022	Online	NRC Meeting #1. Discuss TCi estimate. Review town proposed value engineered items, and design team revised site plan.
03.21.2023	Online	NRC Meeting #2. Discuss current master plan with value engineered revisions to the site and architecture.
05.16.2023	Online	Recreation Committee Meeting. Discuss current master plan with value engineered revisions to the site and architecture.
07.31.2023	Online	Public Meeting #2. Discuss full build master plan with costs. Value engineered cost savings and current site master plan, site accessibility, and schedule.

Task 3A | DRAFT and FINAL Master Plan

After completing the third community meeting and receiving considerable input from the National Resources Commission, Recreation Department, Recreation Board, Department of Public Works, Engineering Department related to final recommendations for improving the Morses Pond Beach, a draft master plan was prepared and submitted to the Recreation Department for review and for posting on the town website.

Task 3B | Feasibility Study

After CPC approvals to begin the feasibility study were given, unfortunately due to the pandemic, the project was put on hold for a period of time. During this period geotechnical borings were completed and a report of the findings from those borings was issued to the Town. These results can be found in the appendix at the end of this report.

In January 2022, the feasibility study phase began with a kick-off meeting between the design team and Town staff from the Facilities Department and Recreation Department. Topics discussed were the approved master plan, geotechnical report, and the new bathhouse building architecture.

An opinion of probable construction costs was developed for the 2021 site master plan. Due to the rise in construction materials and labor rates related to the pandemic, the project costs had seen a significant increase. The design team analyzed the current site master plan design to determine areas where design scope could be removed to help reduce overall costs.

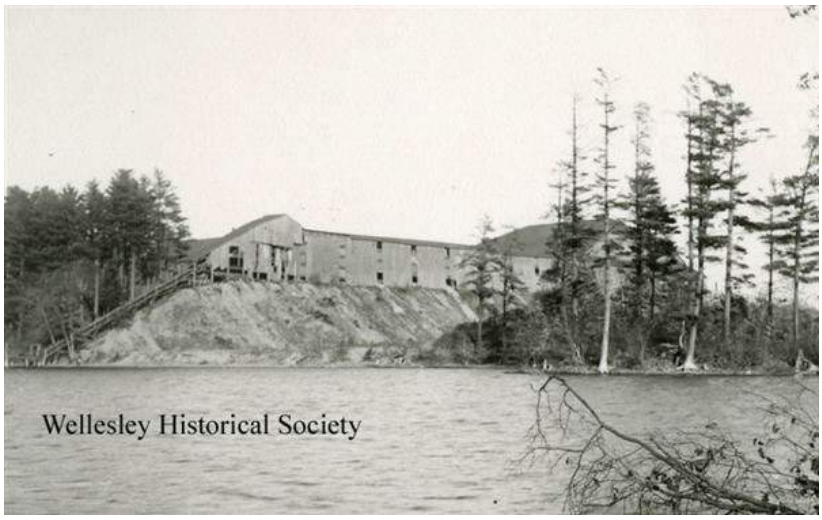
At a meeting on May 26, 2022 the design team presented these cost saving measures. Some of the recommended value engineering measures included removing the following scope items: kayak storage shed, parking lot, and the Ice House Pond boardwalk. The Town agreed to incorporate the design team recommendations into the preferred site master plan alternative.

Over the next 19-months the design team met multiple times with Town Agencies, stakeholders, and residents. From the feedback received at these meetings, the preferred alternative master plan for the buildings and site was developed and finalized.

History and Evolution of the Site

Morses Pond has a rich history dating back to 1738, when Edward Ward dammed his brook to create a small mill pond. The original Morses Pond was much smaller than the pond we enjoy today. During the following century, a string of owners from railroad companies to paint manufacturers built up the dam and used the impounded water as a source of hydropower.

Towards the end of the 1800's and into the early 1900's, the property was used as a location for ice harvesting in the winter.

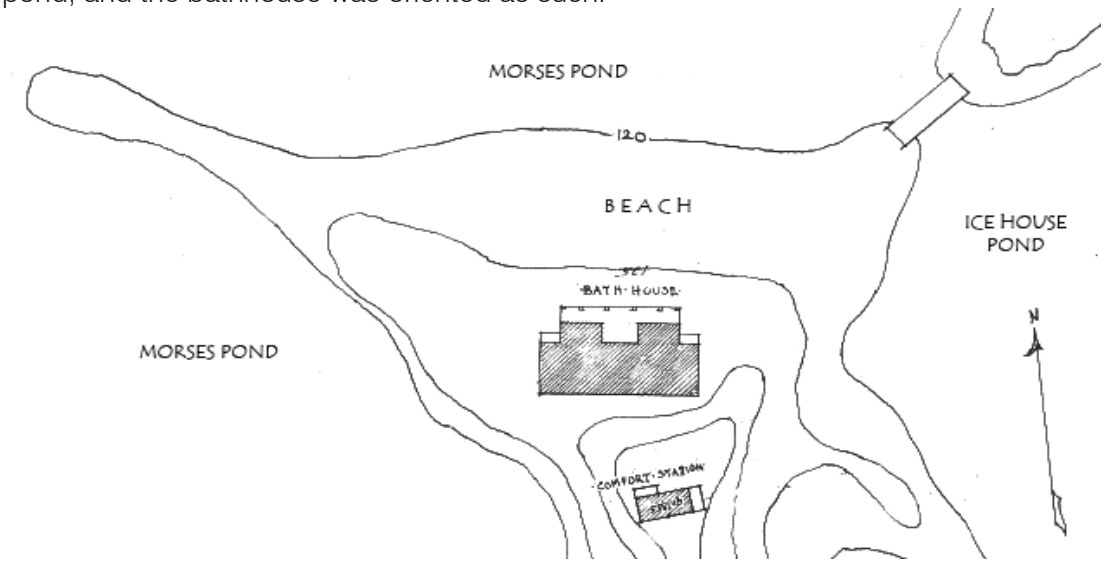


Ice making facility

Two different ice-making companies sequentially owned the pond, the Russell Ice Company in 1888 and the Boston Ice Company in 1902. Both companies built the pond up to the Morses Pond as it exists today. Icehouse workers carved blocks of ice out of the pond and loaded them onto a large conveyor belt which brought them to the warehouse atop the pond's bank, before being loaded onto rail cars as needed. The advent of refrigeration and the struggles of the Great Depression forced the Boston Ice Company to close. The property was then purchased by the Town in 1931 for $3,000 and opened as a public beach in 1935. It has been a community recreation resource since that time.

Existing Beach & Bathhouse Location

The 'old beach' as it is referred to now was on the north side of the peninsula that extends into the pond, and the bathhouse was oriented as such.



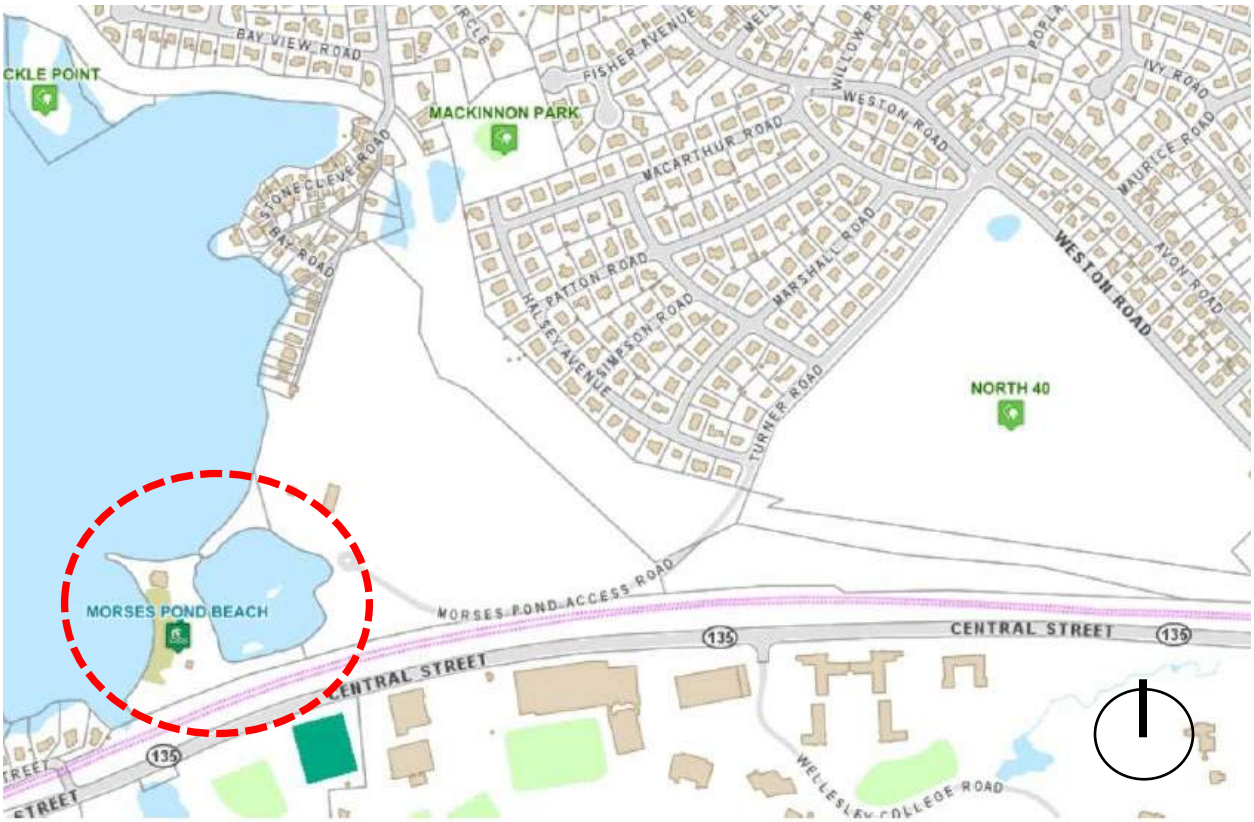
Plan of the original beach with bathhouse

Existing Site Conditions

Summary

Morses Pond covers about 100 acres of area between Central Street (Rt 135) and Worcester Street Rt 9) in the northwest corner of Wellesley. A large area of the pond is less than 10-feet deep; its average depth is about 8-feet, and its maximum depth is 23-feet. Water enters the north end of the pond from Bogle Brook, Boulder Brook, and Jennings Brook. Water exits the pond through the dam adjacent to Route 135 and continues south onto Paintshop Pond, Lake Waban, and eventually the Charles River. Water also exits via the groundwater wells that extract water for public consumption in both Natick and Wellesley.

The property is accessed off Weston Road via the Morse Pond Access Road which begins at the intersection of Turner Road and Halsey Avenue. The Wellesley College campus is located to the south of this property across the railroad tracks and Route 135.



Locus map of Morses Pond

Access & Circulation

Morses Pond entry sign

The site is accessed off Weston Road by Turner Road. At the corner of Turner Road and Halsey Avenue is the entry gate which is currently locked during the evenings and all but two weeks of the unprogrammed off season, marking the beginning of the Morses Pond Access Road. During the times when the gate is locked cars often park along Turner Road in order to access the site for trail and dog walking. We heard this is an issue for the abutters in this area.

The Morses Pond trails are popular and connect to the Crosstown Trail. Along with the North 40 property to the southwest of the site, there are many smaller walking trails through the woods. Within the project area is a portion of what is identified below as the Morses Pond Trail, a popular route for residents and guests both during and off-season.

Morses Pond Trail map

Vegetation & Wildlife Habitat

The site is comprised of a predominance of coarse to fine sand, which was mined over the years. This soil type also results in the vegetation of the site being primarily composed of white pine (Pinus strobus) and a combination of other deciduous trees including red oak, white oak, red maple, beech, birch, catalpa, and poplar. Certain invasive species have begun to populate the site, most notably oriental bittersweet and European buckthorn.

The site is populated by a wide variety of wildlife including birds, waterfowl (ducks, herons, swans, and Canada geese), squirrels, racoons, chipmunks, opossum, and the occasional fox and coyote and well as a wide variety of turtles, amphibians, and fish.

Local wildlife enjoying Morses Pond

Pond Ecology

Over the years as a result of residential development upstream and around Morses Pond, it has become eutrophic primarily from an excess of phosphorus, typically from lawn fertilizers.

Extra phosphorus reduces water clarity and supports the rampant growth of algae and other undesirable plants and weeds. While algae and undesirable plants and weeds thrive in a phosphorus-rich environment, they strangle fish and other aquatic animals by consuming the oxygen necessary for life.

Algal blooms kill fish and other animals, create unpleasant odors, and nurture vegetation that grows dense and thick enough to close large areas of the pond to swimmers and boaters for much of the summer.

Weed harvester in the pond

The Town has been managing this issue with the assistance of a weed harvester, which collects the weeds daily during the summer season and hauls the material off site to be composted. The Wellesley Department of Public Works manages and maintains a phosphorus inactivation system to help combat the weed growth in addition to the weed harvesting.

Shade Shelters

There are two shade shelters on the property with picnic tables, grills, and trash cans. These structures are fairly basic in their construction and the asphalt shingle roofs and in fair to poor shape.

Existing shelter with seating

One is ADA accessible, located directly of the main path that cuts along the back of the site, whereas the second is located in the lawn area, and therefore not ADA accessible. These are popular both for families and for day camps.

This smaller shade structure, with built in table and seats is located closer to the beach and is used by a variety of guests, lifeguards, and the park ranger.
There are no places directly at the beach to seek shelter from the elements. This makes it difficult for parents to supervise their children from the beach if they want to take a break from the sun.

Existing smaller shelter

The Recreation Department also uses a temporary seasonal canopy structure every summer at the south end of the beach, in the sand.

Retaining Wall

The site is divided between a lawn area and the sandy beach area by a pressure treated timber retaining wall which is starting to fail. Guests enjoy the ability to lay blankets on either the grass or the sand. The height of the wall varies from approximately 18” to 8” in height.

The walls make the transition from the lawn to the beach difficult for some users because of the step down. Small amounts of CCA can also leach into the surrounding areas over time which is not ideal for this natural resource environment utilized by people and wildlife.

Existing retaining wall looking toward the shelter

Storage

There exists an incongruous and haphazard collection of storage solutions on the site, that do not fully and adequately meet the current program requirements, such as lifeguard supplies, kayaks, paddles and life jackets, and miscellaneous maintenance equipment. This collection is both unsightly and inefficient.

Existing storge container

Existing dumpsters

Existing dumpsters

Play Equipment

There are two areas of 'dry play' play equipment. The first is a swing set located off the main path, while the second is a multi-feature slide and play area down on the sandy beach.

Although the play equipment location is convenient for parents who want to keep an eye on some kids who may be in the water and others on the play equipment, the current location and lack of walkways to the slide structure make this non-ADA accessible.

The wood chip surfacing in the playground area is not ideal for walking and it is not ADA accessible. The wood chips are also not the safest surface when dealing with trips and falls.

The playground also does not accommodate play for children with disabilities. The play structure is not accessible, and the swings do not have any seating that can be used by children with mobility difficulties.

Existing swings with wood chip surfacing

Existing play structure with wood chip surfacing

Aerial view of the beach area and playground

There is also a sand volleyball court located approximately in the middle of the beach front, within the grass area. This is used primarily by day campers, but only periodically.

Given its limited usage, and prime location roughly at the center of the beach, during the public engagement it was determined this area would be more useful as lawn area for sunbathers.

The sand volleyball court could be relocated to roughly the location of the existing play equipment which is typically a lesser populated portion of the beach.

Volleyball area adjacent to the beach

Ice House Pond

Ice House Pond is a wonderful natural resource within the Town of Wellesley. It is a place that is currently underutilized by town residents, but with some of the work listed below, this could become a year-round attraction. A place to be at one with nature.

In conjunction with dredging, invasive species removal, and other measures this small pond could have improved water clarity, and biodiversity, and create additional opportunities for recreation such as fishing, ice skating, and interacting with the wildlife that is drawn to this area.

Ice House Pond looking north

Boat Access

There is an ADA accessible kayak launch located at the north side of the beach was installed in the summer of 2014 and is recommended to remain. The grassed area to reach this boat launch is not ADA accessible and will be addressed. Kayaks and equipment are available for rental from the office in the bathhouse. Kayaks are stored in the green storage container and brought out by guards for rental.

The ADA accessible boat / kayak dock

Kayak storage facilities during the season

Shipping container used for storage

Access to this launch by residents bringing their own kayaks is difficult given the distance away from the parking lot.

A shipping container is utilized to store boating items.

Road to the boat launch

The existing boat launch is able to be accessed for public rooftop boats and kayaks, but it is fairly hidden from view and often busy with the operating weed harvesting equipment for the pond.

Signage to direct users to the boat launch is not easily recognizable for users of this amenity.

Turning movements for vehicles dropping boats off in this area are also restricted by the current road layout. The stone dust surfacing is also prone to damage from the effects of stormwater run-off, so maintenance is required.

Existing Parking

The existing parking area is located on the east side of Ice House Pond and the Water Department Building. The lot is approximately one and a half acres and has a compacted gravel surface. The western edge of the lot is adjacent to the Zone 1 wellhead protection area. There is no striping or

signage to help the organization of the lot, and this leads to inefficient parking congestion on busy days.

The existing entry drive to the main public parking lot

Other than the signage, the existing ADA parking adjacent to the beach areas is essentially non-conforming on multiple fronts.

Both the dirt parking and the slope from parking up to the main walkway, do not conform to the requirements set forth for accessible parking. As with the main public parking lot there are no delineated parking spaces.

Existing parking located closer to the beach area

Lawn Areas

One feature of the Morses Pond Beach area that is not seen at many other pond beaches is the lawn area that lies beyond the sandy beach. Current beach guests expressed a strong desire to maintain and enhance this feature, since it provides a softer and cooler place to lay out and enjoy the beach area without having to be directly on the sand. Additionally, maintaining and adding shade trees provides respite from the sun on the hottest days of summer.

View from the existing lawn area looking toward the pond

These lawn areas provide an opportunity for flexible gathering and the chance for visitors to run around and play in an open area but still within sight of the beach.

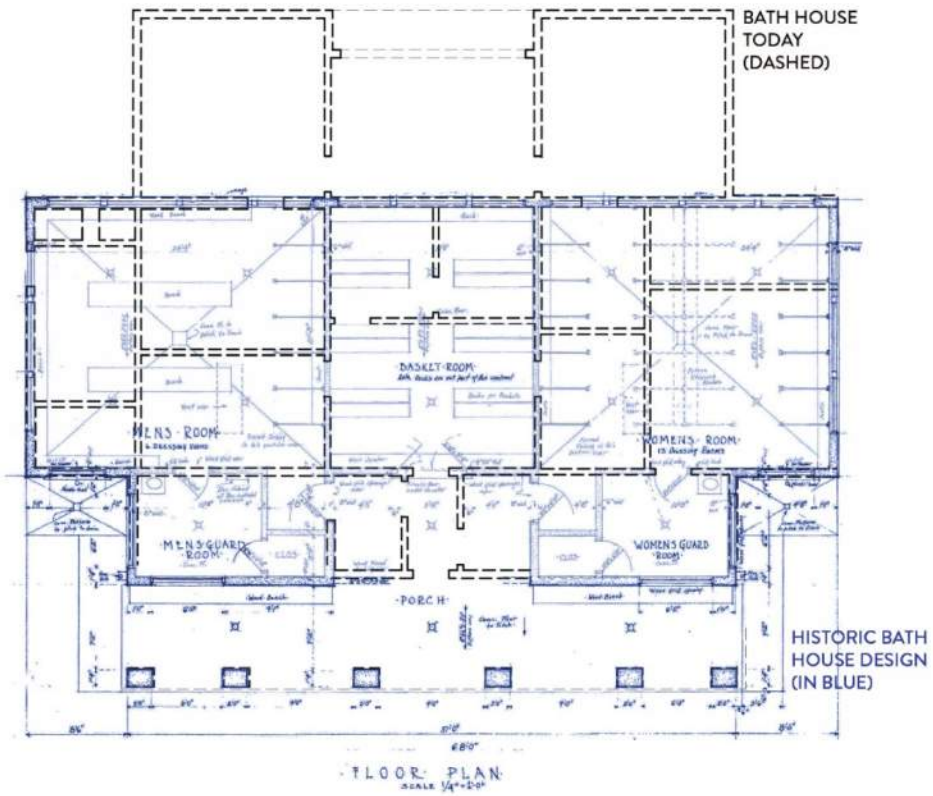
Existing Bathhouse Conditions

Summary

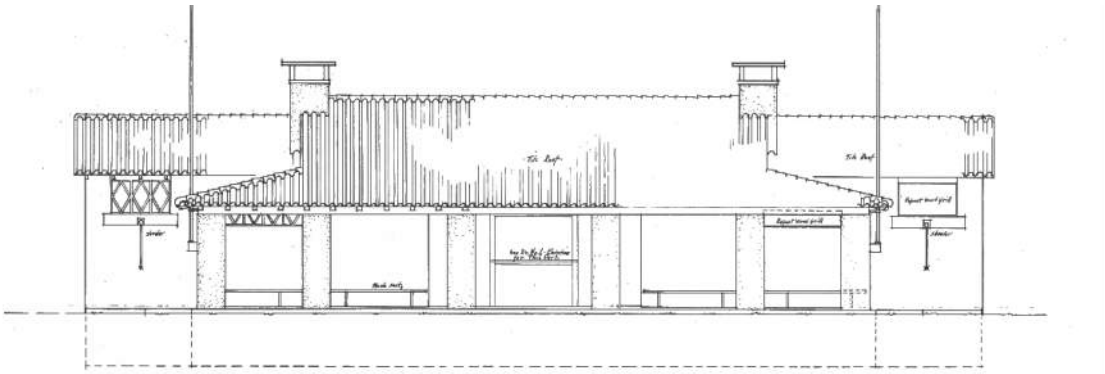
Maryann Thompson Architects along with the Weston & Sampson team and Wellesley Recreation Staff toured the existing bathhouse structure during the master plan phase and again in early 2022 to assess the current condition of the building. In general, the team agreed that the existing bathhouse structure contains dated systems beyond their useful life, is not currently configured to best meet the needs of visitors and staff and does not meet current accessibility standards. To meet the project goals, reuse of the existing structure was determined to not be feasible without major renovation and rebuilding and so the construction of a new bathhouse structure was determined to be the preferred approach to best meet the project goals.

Existing Bathhouse Description

The original bathhouse was a simple structure with a central 'basket room' where guests would leave their change of clothes after having put on bathing suits in either the men's or women's changing rooms. There were also a small room for each male and female lifeguards. The original design drawings for the structure show the building in the Mediterranean Revival architectural style with clay tile roof and a stucco finish, which was popular regionally during the time period that this was built, in the early 1930's.



Original Bathhouse with Current Floorplan Overlay illustrating additions and changes to the original floorplan



Original Bathhouse Elevation

Over the years this original structure underwent a series of renovations and additions which carved up the original spaces as the need for staff space, storage and bathroom facilities grew. The current building finishes also underwent changes as well with the primary materials being painted brick and an asphalt shingle roof. The roof is simple exposed wood framing with some small vents under the eaves which don't allow for adequate ventilation leading to issues with mold and mildew. As it stands now, the current facility configuration is poor and does not meet programmatic needs and code requirements, particularly as regards accessibility and storage.

Current bathhouse elevation

Single accessible bathroom

Small storage area

Roof structure

Bathroom ventilation

Storage area

Staff area

Community Needs Building Assessment

Existing Program Assessment

Through a collaborative process with town staff and community stakeholders the study team reviewed the existing bathhouse program and assessed the programmatic needs that weren't being met with the current facility. In general, the current bathhouse bathroom and changing facilities were seen as too small, dark, and not well ventilated. Staff areas were similarly seen as too small and not arranged to face the beach area. Storage areas are also spread around in several locations instead of a centralized space. The public also felt strongly that a portion of a redesigned bathhouse could be used in more seasons for visitors to the larger park area in the off-season.

Existing Bathhouse Program

Interior Spaces: 2,063gsf

Public Uses

- Women's Bathroom 426 nsf
  - Separate bathroom / changing areas
- Men's Bathroom 325 nsf
  - Separate bathroom / changing areas
- Accessible / Family Bathrooms 74 nsf
  - (1) provided
  - Accessed off corridor to staff area

Staff Uses

- Guardroom 206 nsf
  - Room for lockers / cubbies
  - Storage for equipment
  - Fridge / microwave for lunches
- Lifeguard changing rooms 242 nsf
  - (2): Women's/Men's
- First Aid 110 nsf
  - Room for first aid bed, supply cabinet and desk
  - Contains one hand sink
  - Not large enough for group training (approx. 10 ppl)
- Office/Gatekeeper 174 sf

Mechanical

- Mechanical spaces 62 nsf
  - Spread out in a few different areas plus overhead hot water tank in family bathroom

Storage

- General storage area 444 nsf
  - Spread out in three different building areas

Exterior Areas, Storage, and Elements: 868gsf

- Covered porch 180 sf
  - Vending Machine Location
  - Provides sheltered waiting area outside bathrooms
- Lifeguard break area 488 sf
  - Doesn't address beach area
- Water Fountain
  - Wall mounted model
  - Ability to drain down for winter
- Rinse station
- Storage container 200 sf

Proposed Program

Following the assessment of the existing bathhouse program the study team incorporated the comments received from town staff and the public to outline the program for the new facility. This program includes larger spaces for visitor use, adequately sized staff and storage areas. The new program also incorporates the ability to use the staff and family bathroom areas in the off-season. Below is the program developed through this process.

Proposed Bathhouse Program

Interior Spaces Total: 3,200 gsf

Unconditioned spaces: 1,837 gsf

Public Uses

- Women's Bathroom **465 nsf**
  - Separate bathroom / changing areas
- Men's Bathroom **465 nsf**
  - Separate bathroom / changing areas

Storage

- General storage area **740 nsf**
  - Consolidated in one space
  - Large enough for off-season storage

Grossing Factor (10%): 167 sf

Conditioned Spaces: 1,363 gsf

Public Uses

- Accessible / Family Bathrooms **140 nsf**
  - (2) provided
- Concession **130 nsf**
  - Walk up counter
  - Small kitchen

Staff Uses

- Gatekeeper office **165 nsf**
  - Adjacent to beach area entry
  - Visitor walk-up window
- Guardroom **265 nsf**
  - Room for lockers / cubbies
  - Storage for equipment
  - Fridge / microwave for lunches
  - Women's/Men's changing rooms
- First Aid **295 nsf**
  - Room for first aid bed, supply cabinet and desk
  - Contains one hand sink
  - Large enough for group training
- Town office **100 sf**
  - For full time staff use when on site

Mechanical / Storage

- General storage/mechanical areas **144 nsf**

Grossing Factor (10%): 124 sf

Exterior Elements: 3,450 gsf

- Covered porch **2,350 sf**
  - Picnic/BBQ area
  - Lifeguard break area
- Uncovered porch **1,100 sf**
  - Dogtrot area
  - Monitored entry to beach area
  - Views through from arrival to pond
  - Additional seating areas
- Rinse stations
  - Includes two to four sets of heads
  - Located on exterior wall of bathroom volume
- Water Fountain
  - Hi/low with bottle filler
  - Ability to drain down for winter

Building Code Review

Project Description

The Project involves the design and construction of a new bathhouse and administration building at Morses Pond. The building is proposed to have one level with an area of approximately 3,200 gsf split over two separate buildings.

Applicable Codes

The following primary codes are applicable to this project:

- Accessibility - Massachusetts Architectural Access Board, 521-CMR and the Americans with Disabilities Act Guidelines (ADAAG).
- Building - Massachusetts State Building Code (780 CMR) 9th Edition. 780 CMR is an amended version of the 2015 International Building Code.
- Electrical - Massachusetts Electrical Code, 527 CMR §12.00. The Massachusetts Electrical Code is an amended version of the 2017 National Electrical Code (NFPA 70).
- Fire Prevention - Massachusetts Fire Prevention Regulations, 527 CMR.
- Mechanical - International Mechanical Code, 2015, as adopted and amended by 780 CMR (IMC).
- Plumbing - Massachusetts Fuel Gas and Plumbing Codes, 248 CMR
- Building Energy – Massachusetts Specialized (Opt-in) Code, 225 CMR 23.00 including Appendix CC.

Assumptions

The code review and this report have been prepared based on the following specific assumptions:

1. The Building will not be equipped throughout with an automatic sprinkler system.
2. If any hazardous materials are to be located within the buildings now or in the future, the amounts will be limited to the exempt amounts permitted by 780 CMR §307.1.
3. There will be no Hydrogen Cutoff rooms, paint shops or similar incidental uses.

Use and Occupancy Classification

The following Uses are considered included in the Building:

1. Restroom Areas, breakroom and first aid room (Utility and Miscellaneous Group U per 780 CMR §312)
2. Moderate Hazard Storage (Storage Use S-1 per 780 CMR §311)

Mixed Use Approach

Because two or more occupancies are provided, compliance with Section 508.1 Mixed Use and Occupancy is required.

508.1 Mixed occupancies. Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy group, the portion thereof shall comply with the applicable provisions of Section 508.2, 508.3 or 508.4, or a combination of these sections.

Given the uses present and proposed total gsf, a non-separated mixed-use approach is recommended. The building is addressed as a non-separated mixed use with Utility and Miscellaneous Group (U) and Moderate Hazard Storage (S-1) areas present.

Construction Classification

Type V-B construction is proposed wherein the structural elements, exterior wall and interior walls can be of any material allowable by code. Occupancy classification U allows for a maximum one-story building with up to 5,500 gsf of area.

Means of Egress

At least one (1) accessible means of egress is provided from an accessible room or space. There are no spaces where more than one (1) means of egress or exit is required. Accessible means of egress must provide a continuous path of travel to a public way (780 CMR §1009.2).

Exits are located such that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed line of travel does not exceed 200-feet (780 CMR §1017.2).

Fire Protection Systems

- Sprinkler Systems - An NFPA 13 compliant sprinkler system is not required (780 CMR §903.2).
- Fire Extinguishers - Portable fire extinguishers are required in accordance with 780 CMR §906 and the 527 CMR. All fire extinguishers to be provided are to be in accordance with NFPA 10, Standard for the Installation of Portable Fire Extinguishers (780 CMR §906.0)
- Fire Alarm System - A fire alarm system is required to be provided per 780 CMR §907.2.

Fire Department Access

527 CMR addresses fire department access requirements and states that the head of the fire department shall require and designate public or private fire lanes as deemed necessary for the efficient and effective use of fire apparatus. The arrangement of fire department access to the project must be reviewed with the Wellesley Fire Department. Preliminary plans were reviewed with the Wellesley Fire Department and were found acceptable. Once the project reaches the Design Development phase an additional review will occur.

Plumbing Fixtures

Under the plumbing code (248 CMR), plumbing fixtures are required based on use and occupancy. Total fixtures supplied are to comply with Section 10.10 denoting minimum plumbing facilities as required by total occupant load. The proposed bathhouse design exceeds the minimum fixtures required and is based on maintaining the same quantities as the existing bathhouse.

Accessibility

The entire building must be designed to be accessible to, functional for and safe for use by persons with disabilities in accordance with 521 CMR and the Americans with Disabilities Act (ADA). This includes site access, entrances, bathrooms, and all public spaces within the building.

Preferred Site Master Plan Recommendations

The preferred site master plan was established in direct response to the ideas and preferences put forth by very engaged community members, Recreation Commission, and other key stakeholders. As previously noted, dialogue at the three public meetings was extremely spirited and thoughtful, with participants interested in striking just the right balance in the approach to refurbishing and enhancing this important property and recreational resource. To find that balance, project proponents kept returning to the central themes that community members continually gravitated toward, and these are summarized below:

- The site is very much loved as it is, so a master plan tenet should include preserving and enhancing all that is great.
- The bathhouse has outlived its practical and functional life and given the extent of repairs and upgrades required in order to bring the building into full code compliance and functionality, it is more cost effective and practical to demolish the existing building and create a new building.
- In order to improve universal access for all site amenities, walkways and paths must be graded in compliance with ADA guidelines.
- Designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.
- Through the establishment of meadows and native landscape plantings, wildlife habitat can be improved.
- New enhancements should be attractive, low-intensity, and supportive of neighborhood and town-wide use both during and outside of the summer swimming season.

The site master plan was designed to strike the right balance as it introduces a relatively modest array of improvements that are in keeping with the preferences of master planning participants. This plan also considers the Town of Wellesley's capacity to maintain and operate the property in good order, while protecting the public drinking water supply wells and systems.

Aerial view of the site

Preliminary Building Location Studies

The design team developed a series of three (3) preliminary beach area designs looking at three main building configurations and where was the best location for them to be placed on the site was.

Master Plan Scheme 1

Master plan scheme one first looked at creating a new building in roughly the same location as the existing building. The location of the buildings are a not conducive to the new drop-off and parking area. This would require visitors to navigate across the site from the drop-off to pay their entry fee to use the beach facilities.

This scheme was not pursued because the building did not function well with trying to squeeze all of the programming into a single footprint, and its position in the relation to the primary swim area was not advantageous.

Master plan scheme 1

Master Plan Scheme 2

Master plan scheme two created a new pair of buildings closer to the existing bridge on the northern portion of the site. Advantages of this scheme included the creation of a formal and highly visible gateway between the buildings and to create the sense of arrival, while the building locations help to open up more space for guests around the perimeter of the beach.

The location of the playground would require some extensive regrading of the site to accommodate this amenity. The location of the buildings are a not conducive to the new drop-off and parking area. This would require visitors to navigate across the site from the drop-off to pay their entry fee to use the beach facilities. For these reasons, this scheme was not selected.

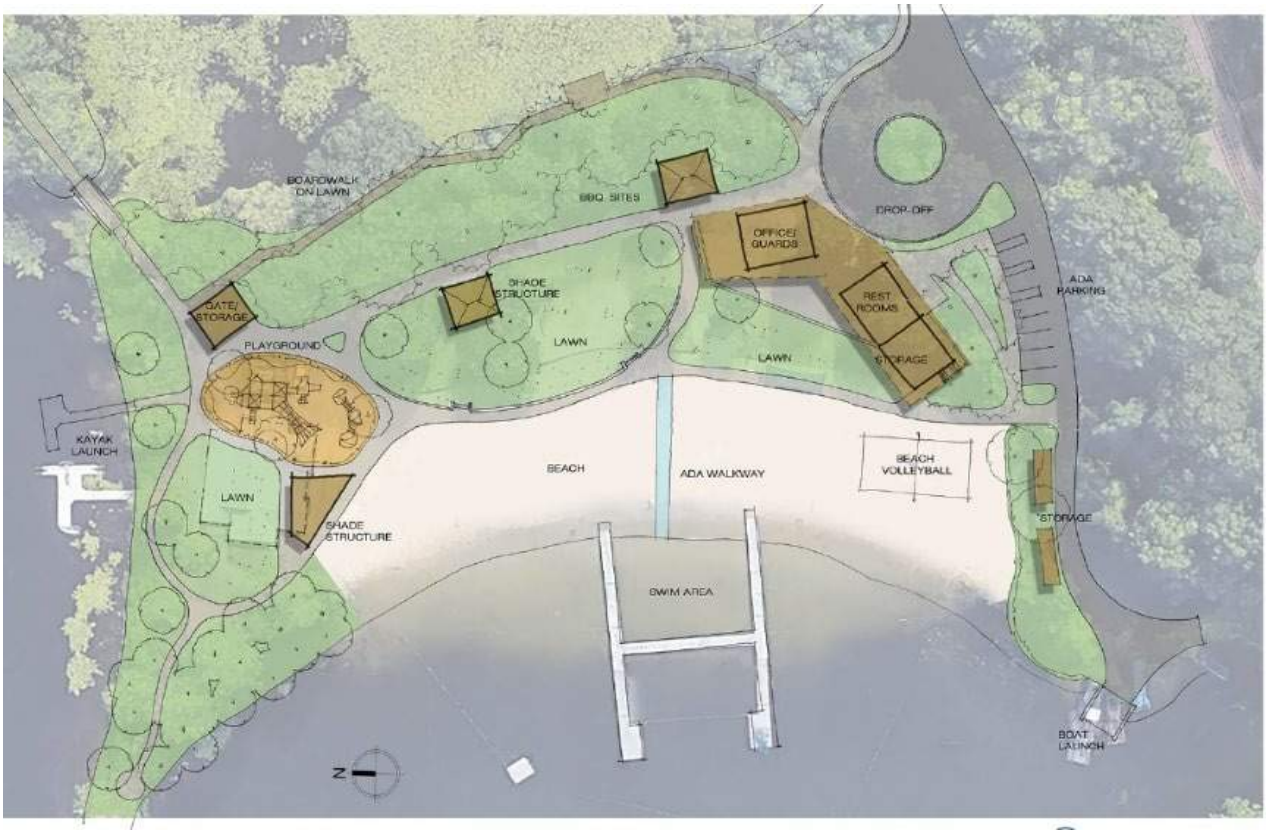
Master plan scheme 2

Master Plan Scheme 3

Master plan scheme three became the preferred scheme after receiving input from stakeholders. The building has been moved to the opposite side of the beach, closer to the drive on the southern edge of the site. This maintained the benefit of the second scheme in creating a gateway entrance while also opening up green space and view corridors by removing the existing structure from its current location.

With the buildings being located closer to the proposed drop-off and new parking area, it makes for a much simpler and quicker entry experience to the beach facilities. It also is advantageous for visitors who have mobility issues.

The location of the playground is also in an existing area that is relatively flat so extensive grading would not be required to make this a fully accessible and inclusive space.



Master plan scheme 3

Preferred Site Master Plan Design

This design reflects the full potential build out option that was derived from stakeholder feedback received after reviewing the first master plan developed in 2019 and 2020. The current proposed project scope within this study has components of this plan that are not included due to budget constraints.

Key Features of this Site Master Plan include:

Parking and Arrival

- Reconfigured and more efficient parking lot layout, with potential for future PV solar arrays.
- Reconfigured drop off.
- Open lawn area on east side of Ice House Pond.
- New wooden boardwalk along southern portion of Ice House Pond.
- New walkway along west edge of Ice House Pond, allowing guests without passes to have access to the new bathhouse building location.
- Walkway separated from Water Department driveway.

Bathhouse

- New bathhouse building's location closer to entrance drive/walkway.
- Bathhouse broken into two buildings, one which can be shut down during off-season.
- ADA parking brought into compliance.
- Increased and improved storage areas.

- One continuous roof connecting the two building footprints to create covered shaded outdoor space.

Open Space

- New children's playground along walkway.
- Volleyball relocated to beach area.
- Open lawn areas for flexible gathering opportunities.
- New kayak rental/storage which small check-in office.
- Adult outdoor exercise equipment areas.
- New tree plantings to frame the beach entry and important views of the pond.

Pedestrian Accessibility

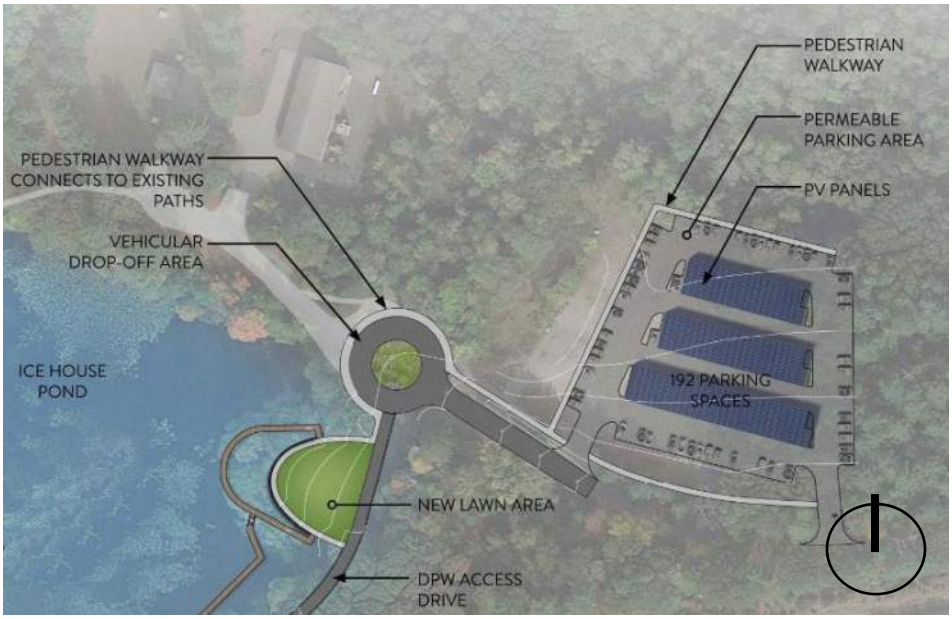
- New walkways at beach area including flush wooden walkway at beach.
- Site side ADA accessible walkways.
- ADA accessible mat across beach.
- Secondary path system through wooded area adjacent to Ice House Pond that allows visitors to use the site without entering the paid beach area.
- Peninsula walk with bench seating for pond views.

Ice House Pond

- Removal of invasive species.
- Dredging.
- Boardwalk with viewing and seating areas through Ice House Pond.

Parking Area /Drop-off Modifications

The current parking and drop off sequence is very unclear as to where exactly the entrance is, and how either vehicles or pedestrians are supposed to get to the beach area from their car.



Proposed entry drop-off and parking area

In order to clarify and remedy this issue the intent is to reconfigure the drop-off area, developing signage and visual clues to promote using what is currently the service and handicapped parking drive into the main pedestrian walkway. These changes will also create a more distinct vehicular access drive for the Water Department.

A total of 192 parking spaces have been created in this new more efficient layout, including six (6) ADA accessible stalls. A new sidewalk connection from the northern side of the parking lot will provide better pedestrian access to Morses Pond. The parking lot will be porous asphalt to help with stormwater run-off.

In an effort to help protect the town drinking wells, the parking lot, which currently abuts the Zone 1 wellhead protection area is proposed to be moved approximately 100' to the east in order to give a larger buffer to the wellheads.

Unless the lack of rebates and credits makes it cost prohibitive, there is the potential of adding solar array panels at the parking area. These solar array panels could possibly be purchased and installed under a separate contract when funds become available.

Image of canopy supported PV array

Pedestrian/ADA Parking Access at the Bathhouse

Reconfigured drive to boat launch and accessible parking stalls

In addition to expanding the width of the drive to allow for emergency vehicle access, the drive will have designated drive and walkway lanes in the infrequent event that both pedestrians and a vehicle are sharing the road.

Two (2) ADA accessible and seven (7) short-term/staff parking stalls are incorporated into the design. The roadway has also been slightly widened adjacent to the new boat launch dock to allow

for better maneuverability for vehicles in this area. A new sidewalk connects the parking area to bathhouse and main beach entrance.

The intent is that only the following vehicles would be allowed on roadway:

- Emergency vehicles.
- DPW vehicles in conjunction with the weed harvester.
- ADA/Accessible guest vehicles (with proper identification).
- Short-term/staff parking.
- Cartop boat vehicles utilizing boat launch.

Site-wide Pedestrian Access

Providing ADA access for the entire Morses Pond facility was an important goal of the design team when we began to think about existing and new pedestrian movements, and how they would navigate through the site.

The existing topography is challenging in certain areas with steep changes in grade. Through our design process and study of the existing topography we were able to make the whole site ADA accessible with all walkways graded with slopes less than 5%. The main building entry plaza is graded with cross slopes not to exceed 1.5% in any direction, again within the allowable limits for ADA accessibility. The accessible mat at the beach will allow for more people to access this area and the existing boat dock.

The plan includes two sets of stairs, one which leads from the lower Ice House Pond deck and a stair leading from the bathhouse gathering plaza to the beach front wooden deck pedestrian path. There are alternative accessible pedestrian routes, so these stairs are not the only means of egress in these areas. They can be used to gain a more direct route to connect these areas of the site.

A sidewalk is included on north and west perimeter side of the new parking lot. This will allow pedestrians to navigate through the parking lot in a much safer way and reduce the conflict with vehicles. The existing pedestrian route connection to Morses Pond from the parking lot along the northern side of Ice House Pond will remain in place.

The materials proposed for the site wide pedestrian sidewalks include bituminous concrete, concrete unit pavers, wood decking, and compacted stone dust. All of these surfaces are considered to be ADA compliant.

The diagram below indicates the accessible pedestrian routes from the parking lot to the bathhouse and other amenities throughout the site.

Site Master Plan Accessibility Diagram

LEGEND

- NEW PEDESTRIAN ACCESSIBLE ROUTE: SLOPE AT 5% OR LESS
- NEW PEDESTRIAN ROUTE WITH STAIR ACCESS
- SHARED ACCESS BETWEEN VEHICLES & PEDESTRIANS
- EXISTING PEDESTRIAN ACCESSIBLE ROUTE: SLOPE AT 5% OR LESS

Removal of Invasive Plant Species at Ice House Pond

There are several invasive species that affect the property, but oriental bittersweet (Celastrus orbiculatus) has had a particular impact on the aesthetics and openness of Ice House Pond. By eliminating this pervasive climbing vine, wide areas of currently inaccessible shoreline would be opened up and would prevent further damage to the surrounding landscape. Other invasive species to be controlled include buckthorn, multiflora rose, poison ivy, bush honeysuckle, autumn olive, and black locust.

Invasive species at Ice House Pond

Erosion Control Measures

At several locations throughout the site, measures should be taken to reduce soil erosion and siltation into the pond. A variety of solutions will likely be required including the use of riprap stabilization, groundcover plantings, and grading to redirect stormwater.

One location in particular need of attention is the woodland path on the north side of the 'Old Beach' near the Water Department property.

Erosion at Old Beach

Beach Area

Within the beach area itself there are minor modifications. The play structure will be moved in order to be in a more accessible location, while the volleyball area was moved from the hillside down onto the beach.

Additionally, an accessible mat system is proposed to allow guests with disabilities to get across the sand to the docks and water. These mats are easily to install and can be removed during the months when the beach area is closed to the public.

An accessible beach mat for wheelchair users

Lawn Areas

One feature of the Morses Pond Beach area that is not seen at many other pond beaches is the lawn area that lies beyond the sandy beach. Current beach guests expressed a strong desire to maintain and enhance this feature, since it provides a softer and cooler place to lay out and enjoy the beach area without having to be directly on the sand.

Programmed lawn activities

The new lawn areas are designed with flexibility in mind. Users can determine how they use these spaces. They can be used for programmed events like group yoga on the lawn, or something as simple as kicking the soccer ball with your child. Additionally, maintaining and adding shade trees that will provide respite from the sun on the hottest days of summer is an important inclusion to the master plan.

Maintenance of the lawn areas will be required, with weekly mowing and an organic pesticide program developed.

Playground

The existing play structure is located down on the sandy beach area which makes it inaccessible from an ADA point of view.

The new playground has been relocated to be accessible from the surrounding walkways. Its location is such that parents are still able to keep an eye on kids at both the beachfront and the play area simultaneously. It also makes accessing this facility much easier for users.

The playground has been graded to meet current ADA guidelines with cross slopes of less than 2%. Rubberized safety surfacing to help prevent serious injuries from trips and falls is proposed . A new main play equipment structure, swing set, and educational/sensory pieces are included in the design.

A fence surrounds the perimeter of the playground to help coral children in a safe environment while they play.

The proposed playground

Sensory play equipment

Exercise Equipment Areas

Three (3) locations for permanently installed adult exercise equipment have been incorporated into the plan. Health and fitness is becoming more important to people and part of their everyday lives.

Including these types of amenities within the overall design was well received during the stakeholder meetings. They offer visitors the opportunity to be active in a programmed way by using their own body weight.

These pieces of exercise equipment are designed to withstand regular daily uses by many people, potential vandalism, and the elements in this location. They will remain in-situ year-round so do not need any space for storage within the new buildings.

Outdoor exercise equipment

Site Furnishings

At the first public meeting the design team presented options for the proposed site furnishings. These included bike racks, trash and recycling receptacles, benches, and dining seating options.

The overall consensus was that furniture with color was preferred and that it should be able to withstand the elements, and also be made of sustainable materials.

Two (2) benches with arm rests would be placed on the lower secondary walk to provide a place of respite with views of Ice House Pond. Two (2) benches would also be placed on the main pedestrian path and one (1) adjacent to the playground.

The gathering plaza adjacent to the bathhouse will include furniture with options for communal gathering/dining. This furniture will be fixed in place so does not need any storage space within the new buildings.

Bike racks will be located directly adjacent to the bathhouse for convenience. Trash and recycling receptacles will be placed in key locations throughout Morses Pond.

Colorful dining furniture

Fixed communal dining furniture

Boardwalk at Ice House Pond

In order to provide greater access to and through Ice House Pond the design team has proposed a boardwalk that would cross along the southern edge of the pond. This would both allow access closer to the water but also provide a second walkway for pedestrians moving between the parking area and beach front in the event of vehicular traffic along the access drive.

An overlook area with seating would provide an area of respite for visitors using this connection, or a perfect place to fish.

Plan of the Ice House Pond boardwalk

Tropical hardwood decking and steel guardrails

Accessible fishing area

The material recommended for the decking and guardrails would either be Trex or a tropical hardwood. Trex is a sustainable product constucted of recyclable materials that requires no maintenance. Ipe or similar tropical hardwoods also require no maintenance and come from sustainable sources. Using these materials would prolong the lifespan of this amenity within Ice House Pond.

Conceptual Building Design

Overview

As described in the site master plan, the preferred bathhouse scheme was determined to be a two-building solution. One building footprint contains bathrooms with changing areas and a large storage space. This volume will be unconditioned and shut down after the summer beach season. The other volume contains staff spaces, first aid room, family bathrooms and concession spaces.

This volume will be conditioned and could be used year-round if desired. This approach would give the facility flexibility for use beyond the peak summer season. During the summer season, the two building volumes create a gateway to the beach area which visitors walk through and where a staffed walk-up window serves as a checkpoint where passes and entry fees are collected.

Both structures are proposed to have large overhang/canopies, to provide both shade from the sun and shelter from passing rain showers. Additionally, a larger roofed area adjacent to the concession space would allow for seating/dining in the shade during the summer and protection from snow and rain in the colder seasons.

Finish Materials / Design Character

During the course of the study, a series of images were presented to stakeholders as a way to discuss and select a preferred design character for the buildings. Through this process a general consensus was formed on the design character that the new buildings for the facility should exhibit. Below is a summary of the characteristics that were requested by both Town residents and Town staff members.

- Simple, modest appearance (not fancy or ornate).
- Natural material palette (i.e., wood) was preferred to man-made materials.
- Durable materials for ease of maintenance and longevity.
- Bathrooms and staff spaces opening toward the beach area.
- Lots of natural light for interior spaces.
- Blending of landscape and building through the use of building siting or layering of architecture and landscape elements.
- Roof with overhangs for covered gathering areas to provide areas of shade.

System and Material Narratives

Maryann Thompson Architects worked with project Mechanical, Electrical, Plumbing and Fire Protection engineers to develop a basis of design for building systems. A brief summary of these systems and the building structural system can be found below, for full design narratives refer to the appendix.

Structural Systems

Structural foundation systems will include concrete slab on grade foundation system with either concrete footing or helical piles. Geotechnical investigation would need to be performed early in the next phase to determine the best approach for the site. The wall structure will consist of typical wood framing. The roof structure is proposed to be timber beams supported by steel columns or wood framed bearing walls.

HVAC

The primary mechanical system of the proposed facility will be central exhaust fan ducted to all occupiable spaces. This system will be complemented with natural ventilation through louvers and operable windows. For the staff areas an air-source heat pump (VRF) system will be installed to provide heating and cooling. Supplemental electric heating will be installed in spaces desired to be used through colder seasons.

Electrical Systems

Electrical systems shall be designed to provide the lowest level of base energy use achievable. Lighting will be provided with all LED fixtures and controlled through daylight and occupancy sensors where practical. Any site lighting that will be provided that complies with dark-sky friendly products to minimize light pollution. A fire alarm system will be provided to meet all current codes and safety standards.

Plumbing Systems

Plumbing systems will be designed with water conserving low or no flow fixtures. Electric point of use water heaters will be used over a centralized water heating system to conserve energy.

Sustainability

As supported by town and stakeholder input, including the Climate Action Committee's Sustainability Guidelines for Municipal Buildings, the study team approached the design of the new bathhouse facility with sustainability as a key consideration. The bathhouse will feature a range of sustainability features and strategies such as:

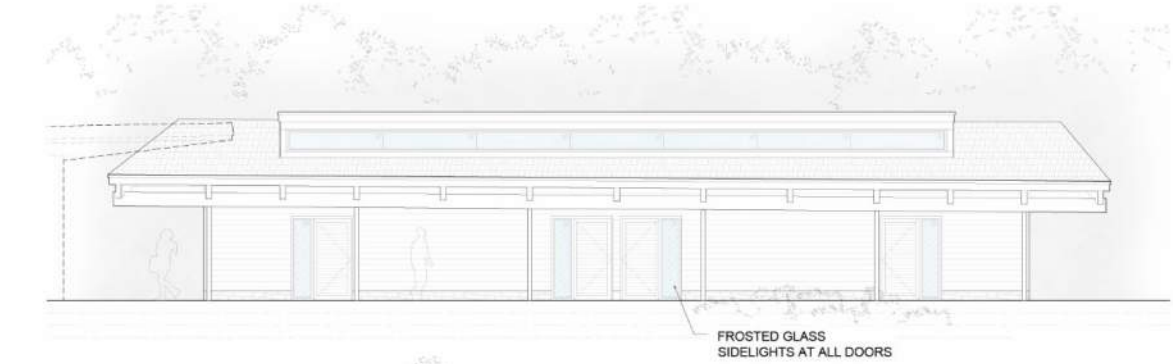
- Daylighting: Large windows allow interior spaces to be lit during the day by natural sunlight rather than electric light.
- Cross Ventilation: The building will be designed to be cooled down by natural breezes through the use of operable windows. This will reduce the use of AC systems in any conditioned spaces.
- Roof Overhangs: Large overhangs shade the exterior envelope to keep the building cooler in the summer but will allow low winter light in.
- Exterior envelope: Conditioned spaces to be super-insulated (approx. R-40 walls and R-60 roof). This will keep the building warmer in the winter and cooler in the summer. Windows for these spaces to be triple-paned.
- Materials: Specify wherever possible the use of locally available and environmentally friendly materials
- LED lighting: All lighting to be highly efficient LED lighting, lowering the energy consumption of the building.
- Electric Building Systems: HVAC and hot water systems to be all electric, eliminating the use of fossil fuels.
- PV system: a PV system located in the parking area or elsewhere could be installed to offset building energy use.

Administration and Bathhouse Buildings

The following images highlight the proposed plans and elevations for the new bathhouse and administration building. These plans and elevations include the feedback received from multiple sources during the public engagement and stakeholder's meetings.

Floor plans of Bathhouse and Administration Building

Elevations – Bathroom and Changing Room Building



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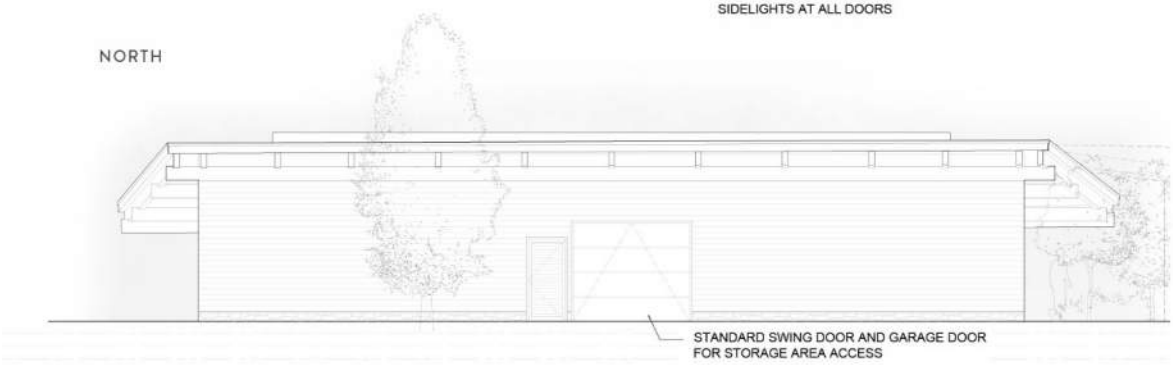
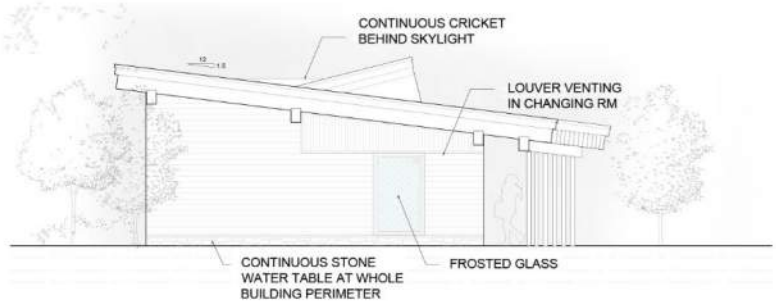


SOUTH



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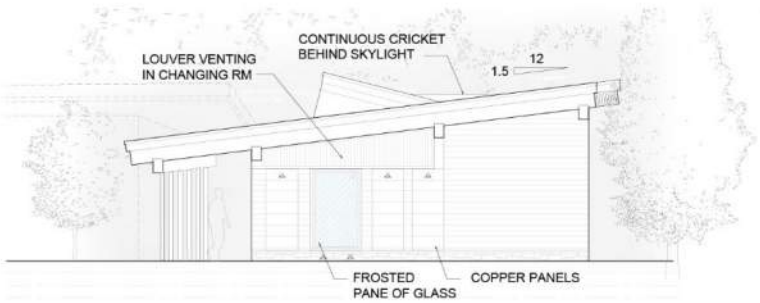
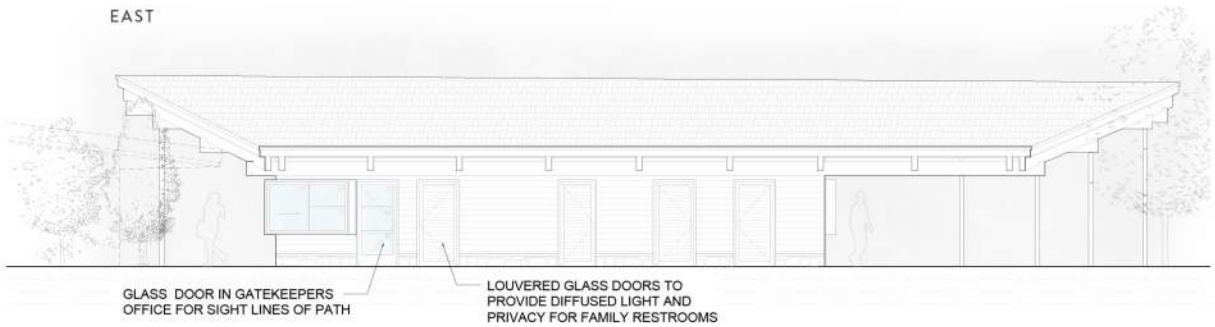


EAST

Elevations - Administration Building

EAST



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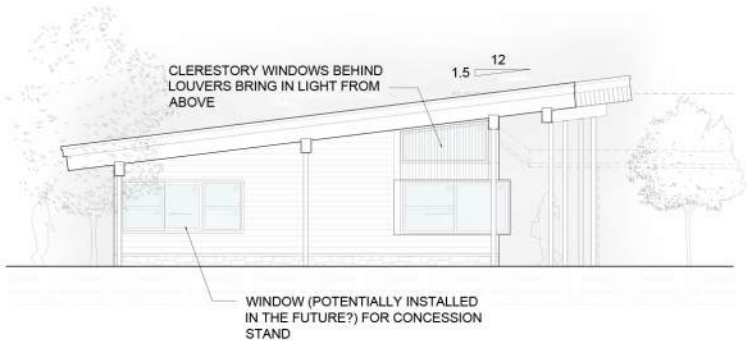
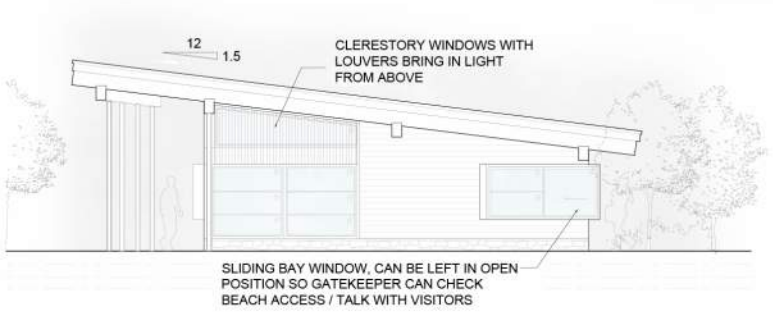
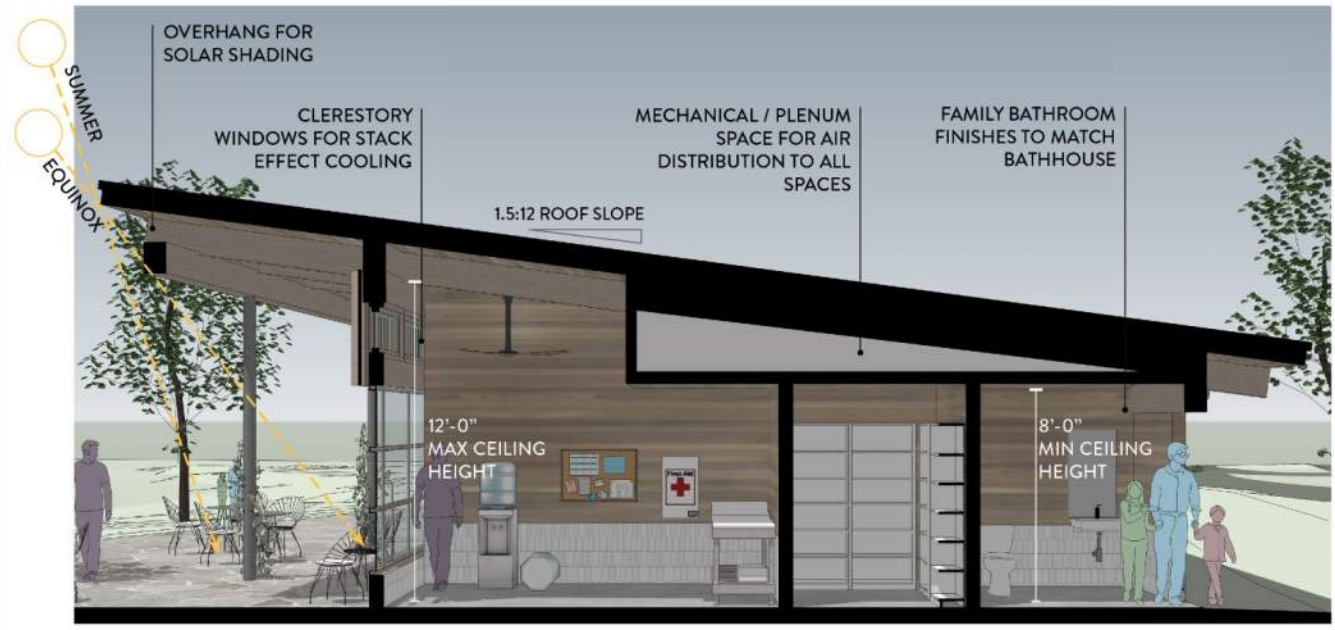


NORTH

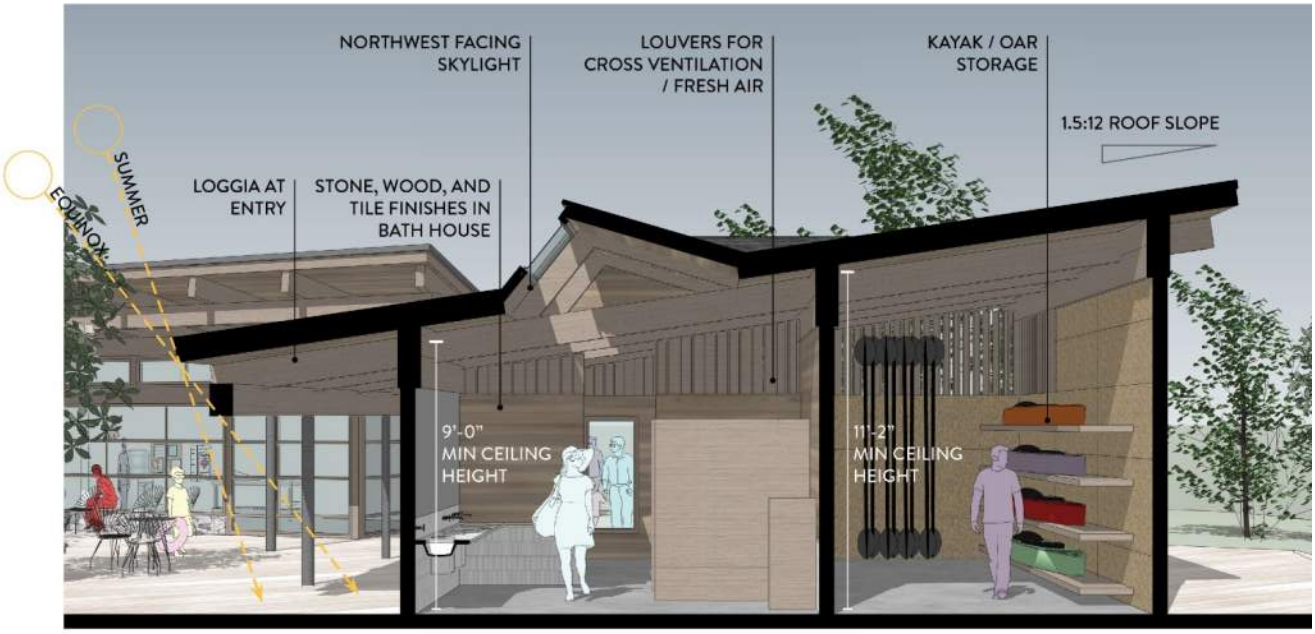


SOUTH

Proposed Interior Building Sections



Section through the Administration Building



Section through the Bathhouse Building

Proposed Site Renderings

Pedestrian entry approach from the accessible parking area

Framed view of the pond from the approach to the administration building

Proposed Site Renderings

First view of the pond as you enter the past the administration building

View of the pond from the dining plaza

Proposed Site Renderings

View of the pond from beneath the administration building canopy

View from the open lawn of the dining plaza with moveable furniture

Proposed Site Renderings

Aerial view of the two building volumes

Aerial view from above the pond looking east

Estimated Construction Cost for Preferred Option

The improvements can be accomplished by phasing one at a time or in groups or all at once, based on funding availability. The Friends of Morses Pond Beach group has also expressed a strong willingness to participate in the funding of capital improvements at the site and their continued support should be further encouraged and understood.

The estimated construction costs (or opoinion of probable construction costs) for the Full Build Site Master Plan identified above within this report is outlined below.

Improvement Area	Estimated Probable Cost
Building Improvements	$ 2,554,472
Site Improvements	$ 2,751,179
Sub Total	**$ 5,305,651**
General Conditions, Mobilization, Bonds, Overhead & Profit @ 18%	$ 955,017
Construction Contingency @ 10%	$ 530,565
Escalation/Market conditions to 2026 (7.5% per year) 22.5%	$ 1,193,769
Sub Total	**$ 2,679,351**
Grand Total	**$ 7,985,002**

Site Value Engineering Exercise

After reviewing the opinion of costs document for the overall site master plan, including buildings, with the Town on May 26, 2023, it was determined that some value engineering of scope items was required to bring the overall budget more into line with the Town's expectations.

The pandemic had a big impact on the cost of both materials and labor and this was reflected in the opinion of probable cost document.

The list below includes the cost reduction measures approved by the Town:

- Removal of all work associated with the new parking lot.
- Removal of lawn area overlook by the drop-off.
- Removal of Ice House Pond boardwalk.
- Removal of adult exercise equipment areas.
- Removal of secondary path at northwest peninsula.
- Removal of path and stair connection from Ice House Pond boardwalk.
- Removal of wooden boardwalk between the beach and lawn area.
- Reduce size of paved area at the gathering plaza.
- Reduce retaining walls.
- Relocate accessible dock to location of the existing boat launch.
- Remove the kayak storage building from the scope.

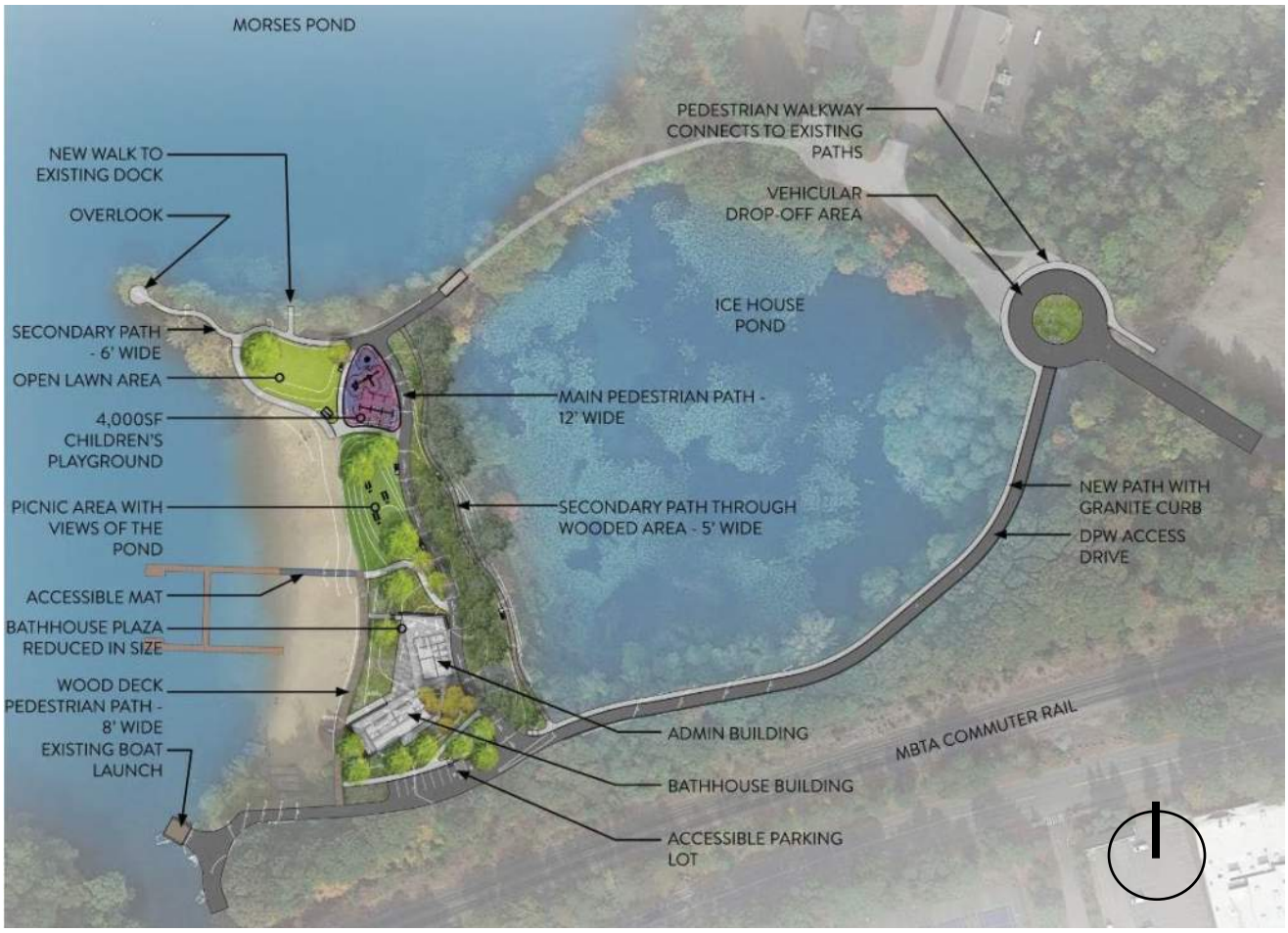
Estimated Construction Costs for Value Engineered Concept

As previously discussed, the design team, along with input from the town, developed the preferred alternative site master plan that included the agreed upon value engineered scope removal. Below is the summarized budget for construction improvements for the site, bathhouse, and administration building. The scope removal resulted in total construction cost savings of $ 1,925,970.

It should be understood that significant soft costs, including designer fees, contingencies, Owner's Project Manager services and other related project costs must be added to the construction cost for a total project cost, which would be the basis for funding request.

Improvement Area	Estimated Probable Cost
Building Improvements	$ 2,173,850
Site Improvements	$ 1,852,087
Subtotal	**$ 4,025,937**
General Conditions, Mobilization, Bonds, Overhead & Profit @ 18%	$ 724,668
Construction Contingency @ 10%	$ 402,593
Escalation/Market conditions to 2026 (7.5% per year) 22.5%	$ 905,834
Subtotal	**$ 2,033,096**
Grand Total	**$ 6,059,032**

Value Engineered Concept Site Master Plan



The beauty of this master plan design is that the scope items removed during the value engineering exercise can easily be designed, and built under separate contracts, even after the construction of this master plan has been completed. This value engineered master plan still delivers major improvements to Morses Pond for Wellesley residents to enjoy for years to come.

Permitting

Based on the current site and building design, we anticipate having to file and obtain the following permits. We will also complete a Wildlife Habitat Report.

- Notice of Intent – for work within and adjacent to wetlands resource areas
- Army Corps of Engineers Pre-Construction Notification – for new structure to provide access in waters of the US
- Wellesley Building Department

Estimated Designer Services Fee

As part of this report, the design team was requested to provide fees to produce a bid ready document package for the preferred alternative site plan, and to assist the town with construction administration services. These fees are a good indication of the budget required to turn this site plan into a set of bid ready documents, but with the understanding they are based on completing these tasks in 2025, with construction administration services extending into 2026. Expenses will be billed separately to the design fees at cost.

The fees related to construction administration have assumed an 18-month construction period. We are carrying the following services to deliver the production of these documents and to supervise the on-site construction:

- Landscape Architecture
- Architecture
- Civil Engineering
- Structural Engineering
- Mechanical Electrical and Plumbing (MEP)
- Permitting
- Opinion of Probable Construction Costs Estimate
- Environmental Support

Below is a table that indicates the estimated design fees by phase.

Task / Design Discipline	Fees
Task 1: Landscape Architecture	
Schematic Design	$ 27,000
Design Development	$ 48,000
Construction Documents	$ 69,000
Bidding	$ 4,000
Construction Administration	$ 62,000
10-month Warranty Review	$3,000
Sub Total	**$ 213,000**

Task / Design Discipline	Fees
Task 2: Architecture, Structural Engineering, MEP	
Schematic Design	$ 69,600
Design Development	$ 82,000
Construction Documents	$ 133,600
Bidding	$ 15,200
Construction Administration	$ 65,000
10-month Warranty Review	$ 6,600
Sub Total	**$ 372,000**
Task 3: Civil Engineering	
Schematic Design	$ 25,000
Design Development	$ 45,000
Construction Documents	$ 29,000
Bidding	$ 2,000
Construction Administration	$ 19,000
10-month Warranty Review	$2,000
Sub Total	**$ 122,000**
Task 4: Permitting	
Notice of Intent	$ 10,600
Design and Stormwater Report	$ 25,000
USEPA NPDES and SWPPP	$ 9,400
Wildlife Habitat Report	$ 5,000
Sub Total	**$ 50,000**

Task / Design Discipline	Fees
Task 5: Opinion of Probable Construction Costs Estimate	
Submissions at 100% SD, 100% DD, and 65% CD	$ 19,000
Sub Total	**$ 19,000**
Task 6: Environmental Support	
Phase 1 Environmental Review	$ 6,000
Design Phase Soil and Groundwater Management Evaluation	$ 22,000
Design Specifications, Soil and Groundwater Management	$ 5,500
Construction Administration	$ 15,000
Sub Total	**$ 48,500**
Grand Total	**$ 824,500**

Conclusion

In laying out the range of potential improvements to the Morses Pond Beach property, an attempt has been made to strike a balance between updating the functionality of the site amenities and maintaining the charming character that has existed at this property for years.

Given the age and condition of the existing bathhouse, it is necessary to develop a new bathhouse solution. This situation gives the Town of Wellesley the opportunity to not just repair or replace the building in its current location but to look at the property more holistically and develop a scheme that works better for both staff and patrons, while at the same time enhancing the overall natural and aesthetic qualities of the site.

Providing accommodations for residents to access the site during the shoulder seasons was a request we heard from the Recreation Department and through our public engagement. The new buildings will provide residents with the opportunity to do this. The architecture and placement of the two new buildings blend seamlessly into the existing fabric of the site, but at the same time help to create a new gateway to the beach area.

This new master plan also transforms a topographically challenged site into a fully ADA accessible inclusive amenity. It allows all Wellesley residents, regardless of mobility constraints, the opportunity to enjoy this wonderful natural resource. It includes a safe system of pathways at varying scales for site users to navigate in groups or alone. Strategically placed benches allow users moments of respite and stunning views of the pond throughout this enhanced site. A new children's playground and flexible lawn areas provide additional areas for gathering and play.

In summary, the production of this master plan is the result of many interested parties coming together in a collaborative way to help deliver a new and improved Morses Pond Beach and Bathhouse facility that will serve the Town of Wellesley for many future generations to come.

Appendices

Appendix A: Opinion of Probable Construction Costs

Appendix B: Site Survey

Appendix C: Geotechnical Report

Appendix D: Wetlands Delineation Report

Appendix E: Electrical System Narrative

Appendix F: HVAC System Narrative

Appendix G: Plumbing System Narrative

Appendix A: Opinion of Probable Construction Costs

Construction Cost Estimate

Morses Pond Beach & Bathhouse Improvements

Wellesley, Ma

Prepared by:

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Prepared for:
Weston & Sampson

April 21, 2022

Morses Pond Beach & Bathhouse Improvements
Wellesley, Ma

Construction Cost Estimate

April 21, 2022

MAIN CONSTRUCTION COST SUMMARY

	Building GSF	$/sf	Estimated Construction Cost
Sitework			$3,690,582
Admin Building	1,330	$1,343.28	$1,786,560
Bathhouse Building	1,840	$1,002.90	$1,845,341
Storage Shed/Kayak Rental Building	600	$1,050.96	$630,576
TOTAL ESTIMATED CONSTRUCTION COSTS	**3,770**	**$2,109.56**	**$7,953,059**

PV add costs

Allowance to add for PV panels and supports over parking	$800,000
Allowance to add for PV panels on buildings	$600,000

QUALIFICATIONS

This cost estimate was produced from study drawings and narratives prepared by Weston & Sampson and their design team received April 2022.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumes 2024 bidding and construction.

Bidding conditions are expected to be Chapter 149 public bidding to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

All professional fees and insurance
All Furnishings, Fixtures and Equipment not identified
Items identified in the design as Not In Contract (NIC)
Items identified in the design as by others
Special foundations (unless indicated by design engineers)
Utility company back charges, including work required off-site
Work to City streets and sidewalks, (except as noted in this estimate)
Construction or occupancy phasing or off hours' work, (except as noted in this estimate)
Construction contingency
All Furnishings, Fixtures and Equipment not identified in estimate
Design fees
Building Permit

Morses Pond Beach & Bathhouse Improvements
Wellesley, Ma

Construction Cost Estimate

April 21, 2022

CONSTRUCTION COST SUMMARY IN CSI FORMAT	Sitework	1,330 Admin Building	$/SF	1,840 Bathhouse Building	$/SF	600 Storage Shed/Kayak Rental Building	$/SF	3,770 Total	$/SF
033000 Cast-in-Place Concrete	$7,500	$73,731	*$55.44*	$85,500	*$46.47*	$45,385	*$75.64*	$212,116	*$56.26*
042000 Unit Masonry (part of 040001 FSB)		$7,800	*$5.86*	$9,000	*$4.89*	$11,000	*$18.33*	$27,800	*$7.37*
								$0	
								$0	
051200 Structural Steel Framing		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
053100 Steel Decking		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
055000 Metal Fabrications (part of 050001 FSB)	$15,950	$42,000	*$31.58*	$24,500	*$13.32*	$7,000	*$11.67*	$89,450	*$23.73*
061000 Rough Carpentry		$350,492	*$263.53*	$307,594	*$167.17*	$100,312	*$167.19*	$758,398	*$201.17*
064020 Interior Architectural Woodwork		$45,700	*$34.36*	$24,800	*$13.48*	$4,500	*$7.50*	$75,000	*$19.89*
072100 Thermal Insulation		$15,665	*$11.78*	$920	*$0.50*	$300	*$0.50*	$16,885	*$4.48*
072700 Air Barriers (part of 070001 FSB)		$5,540	*$4.17*	$0	*$0.00*	$46,240	*$77.07*	$51,780	*$13.73*
074600 Wood Siding and Trim		$18,390	*$13.83*	$55,550	*$30.19*	$47,190	*$78.65*	$121,130	*$32.13*
075400 Thermoplastic Membrane Roofing		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
075450 Roofing System		$118,440	*$89.05*	$114,000	*$61.96*	$0	*$0.00*	$232,440	*$61.66*
077200 Roof Accessories		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
078410 Penetration Firestopping		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
079200 Joint Sealants (part of 070001 FSB)		$4,200	*$3.16*	$3,000	*$1.63*	$6,600	*$11.00*	$13,800	*$3.66*
081110 Hollow Metal Doors and Frames		$17,900	*$13.46*	$25,500	*$13.86*	$25,000	*$41.67*	$68,400	*$18.14*
081400 Flush Wood Doors		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
083110 Access Doors and Frames		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
083310 Overhead Doors		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
084110 Wood Windows		$67,500	*$50.75*	$17,630	*$9.58*	$12,500	*$20.83*	$97,630	*$25.90*
084500 Aluminum-Framed Entrances and Storefronts		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
084650 Skylights		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
084660 Sunshades		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
087100 Door Hardware		$8,500	*$6.39*	$5,950	*$3.23*	$6,800	*$11.33*	$21,250	*$5.64*
088000 Glazing		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
089000 Louvers and Vents		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
092110 Gypsum Board Assemblies		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
093000 Tiling		$10,000	*$7.52*	$19,000	*$10.33*	$0	*$0.00*	$29,000	*$7.69*
095100 Acoustical Ceilings		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
096510 Resilient Flooring and Accessories		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
096550 Carpet		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
097300 Resinous flooring and base		$23,000	*$17.29*	$36,800	*$20.00*	$0	*$0.00*	$59,800	*$15.86*
099000 Painting and Coating (part of 090007 FSB)		$13,000	*$9.77*	$6,000	*$3.26*	$2,480	*$4.13*	$21,480	*$5.70*
101400 Signage		$1,500	*$1.13*	$2,000	*$1.09*	$1,200	*$2.00*	$4,700	*$1.25*
102800 Toilet Accessories		$1,860	*$1.40*	$4,635	*$2.52*	$2,247	*$3.75*	$8,742	*$2.32*
104400 Fire Protection Specialties		$600	*$0.45*	$600	*$0.33*	$600	*$1.00*	$1,800	*$0.48*
106500 Toilet Partitions		$0	*$0.00*	$24,900	*$13.53*	$0	*$0.00*	$24,900	*$6.60*
108500 Lockers		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*

Morses Pond Beach & Bathhouse Improvements
Wellesley, Ma

Construction Cost Estimate

April 21, 2022

CONSTRUCTION COST SUMMARY IN CSI FORMAT		*Sitework*	*1,330* *Admin Building*	*$/SF*	*1,840* *Bathhouse Building*	*$/SF*	*600* *Storage Shed/Kayak Rental Building*	*$/SF*	*3,770* *Total*	*$/SF*
113100 Appliances			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
118100 Concessions Equipment			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
									$0	
122110 Horizontal Louver Blinds			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
122510 Walk-Off Mats			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
									$0	
210000 Fire Suppression			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
220000 Plumbing - FSB			$63,345	*$47.63*	$223,401	*$121.41*	$0	*$0.00*	$286,746	*$76.06*
220000 HVAC - FSB			$110,390	*$83.00*	$32,031	*$17.41*	$0	*$0.00*	$142,421	*$37.78*
260000 Electrical - FSB		$150,000	$68,995	*$51.88*	$79,560	*$43.24*	$30,300	*$50.50*	$328,855	*$87.23*
311000 Site Clearing		$141,750	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$141,750	*$37.60*
312000 Earthwork		$355,032	$15,835	*$11.91*	$17,190	*$9.34*	$9,085	*$15.14*	$397,142	*$105.34*
312500 Erosion and Sedimentation Controls		$48,000	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$48,000	*$12.73*
315000 Ground Improvements		$0	$0	*$0.00*	$0	*$0.00*	$24,000	*$40.00*	$24,000	*$6.37*
321216 Asphalt Paving		$490,120	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$490,120	*$130.01*
321213 Portland Cement Concrete Paving		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
321613 Curbs and Gutters		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
323100 Site Improvements		$806,410	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$806,410	*$213.90*
329000 Landscaping		$150,000	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$150,000	*$39.79*
331000 Site Water Distribution		$30,800	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$30,800	*$8.17*
333000 Sanitary Sewerage Utilities		$44,500	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$44,500	*$11.80*
334000 Storm Drainage		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
335000 Gas		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
		$2,240,062	***$1,084,383***	*$815.33*	***$1,120,061***	*$608.73*	***$382,739***	*$637.90*	***$4,827,245***	*$1,280.44*
GENERAL CONDITIONS & REQUIREMENTS	15%	$336,009	$162,657		$168,009		$57,411		$724,086	
GL INSURANCE	1.4%	$31,361	$15,181		$15,681		$5,358		$67,581	
BONDS	2%	$44,801	$21,688		$22,401		$7,655		$96,545	
OVERHEAD & PROFIT	6%	$159,134	$77,035		$79,569		$27,190		$342,928	
DESIGN AND PRICING CONTINGENCY	15%	$397,835	$192,586		$198,923		$67,974		$857,318	
ESCALATION/MARKET CONDITIONS to 2024	15%	$481,380	$233,030		$240,697		$82,249		$1,037,356	
TOTAL ESTIMATED CONSTRUCTION COSTS		**$3,690,582**	**$1,786,560**	***$1,343.28***	**$1,845,341**	***$1,002.90***	**$630,576**	***$1,050.96***	**$7,953,059**	***$2,109.56***

Sitework

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	A SITEWORK						
	Site Contractor general conditions						
312000	Mobilization	**2**	ea	6,500.00	13,000		
311000	Site fencing, protection, barricades	**1**	ls	15,000.00	15,000		
	Site prep and removals						
311000	Stabilized Construction Entrance	**2**	ea	6,500.00	13,000		
312500	Compost filer tubes	**4,000**	lf	12.00	48,000		
311000	Site removals	**125,000**	sf	0.75	93,750		
311000	Building removals	**1**	ls	20,000.00	20,000		
	Earthwork						
312000	Cut, fill, shape & compact subgrade for new grades and all utilities	**10,000**	cy	12.00	120,000		
312000	Import fill for new grades	**1,500**	cy	40.00	60,000		
	SUBTOTAL					382,750	
	Paving and walks prep						
312000	Bitum. Paving 12" Dense Grade	**4,264**	cy	38.00	162,032		
	Paving						
321216	Pedestrian Bitum conc	**14,712**	sf	3.85	56,641		
321216	Vehicular Bitum conc	**36,679**	sf	4.00	146,716		
321216	Permeable parking bitum conc	**63,725**	sf	4.50	286,763		
	SUBTOTAL					652,152	
	Electrical						
260000	Allowance for secondary services to buildings	**3**	ea	50,000.00	150,000		
	Storm						
334000	No storm systems included						
	Water						
331000	Water lines to bathhouse and admin	**300**	lf	80.00	24,000		
331000	Gates & valves	**4**	ea	950.00	3,800		
331000	Water CTE	**2**	ea	1,500.00	3,000		
	Sanitary						
333000	Sewer lines to bathhouse and admin	**300**	lf	95.00	28,500		
333000	SMH	**2**	ea	5,500.00	11,000		
333000	Connection to existing SMH	**2**	ea	2,500.00	5,000		
	SUBTOTAL					225,300	
	Site Improvements						
323100	On grade wood deck walkway - beach	**4,868**	sf	50.00	243,400		
323100	On grade wood deck walkway - Pond	**4,808**	sf	50.00	240,400		
323100	Accessible Mat	**723**	sf	10.00	7,230		
323100	Concrete pavers around buildings	**6,269**	sf	20.00	125,380		
323100	Stone faced CIP Retaining walls around buildings	**200**	lf	550.00	110,000		
03300	Site stairs	**1**	ea	7,500.00	7,500		
05500	Free standing railings at ramp and stairs	**50**	lf	175.00	8,750		
05500	Bollards	**12**	ea	600.00	7,200		
323100	Relocated docks	**1**	ls	10,000.00	10,000		
323100	Play ground equipment	**1**	ls	50,000.00	50,000		
323100	Benches, tables and misc site equipment	**1**	ls	20,000.00	20,000		
	SUBTOTAL					829,860	
	Landscaping						
329000	Allow for plantings and lawns	**1**	ls	150,000.00	150,000		
	SUBTOTAL					150,000	
	TOTAL - SITEWORK						***2,240,062***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Admin Building							
	GROSS FLOOR AREA CALCULATION						
	First Floor			**1,330**			
	TOTAL GROSS FLOOR AREA				**1,330** ***GSF***		
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings						
03300	Formwork	**310**	sf	16.00	4,960		
03300	Re-bar	**1,080**	lbs	2.50	2,700		
03300	Concrete material	**18**	cy	160.00	2,880		
03300	Placing concrete	**18**	cy	40.00	720		
312000	Excavate and backfill	**207**	cy	30.00	6,210		
312000	Import structural fill	**46**	cy	45.00	2,070		
	Foundation walls						
03300	Formwork	**1,860**	sf	16.00	29,760		
03300	Re-bar	**2,340**	lbs	2.50	5,850		
03300	Concrete material	**36**	cy	160.00	5,760		
03300	Placing concrete	**36**	cy	40.00	1,440		
	Column footings/Piers						
03300	Formwork	**288**	sf	16.00	4,608		
03300	Re-bar	**630.0**	lbs	3.00	1,890		
03300	Concrete material	**8.4**	cy	160.00	1,344		
03300	Placing concrete	**8.4**	cy	45.00	378		
	SUBTOTAL					70,570	
	A1030 LOWEST FLOOR CONSTRUCTION						
	SOG						
07210	Vapor barrier	**1,330**	sf	0.50	665		
03300	Reinforcing	**1,530**	sf	1.50	2,295		
03300	Concrete - 5" thick	**23**	cy	160.00	3,680		
03300	Placing concrete	**23**	cy	35.00	805		
03300	Finishing and curing concrete	**1,330**	sf	1.50	1,995		
03300	Control joints - saw cut	**1,330**	sf	0.20	266		
	Miscellaneous						
312000	Excavate and backfill	**108**	cy	45.00	4,860		
07210	Rigid insulation	**1,240**	sf	5.00	6,200		
312000	Slab subbase	**49**	cy	55.00	2,695		
03300	Misc pads and curbs	**8**	cy	300.00	2,400		
	SUBTOTAL					25,861	
	TOTAL - FOUNDATIONS						***$96,431***
	B10 SUPERSTRUCTURE						
	B1020 ROOF CONSTRUCTION						
	Roof system (materials)						
06100	Roof framing: Doug-Fir 10x14 with 6x14 Doug-Fir purlins. All material to be FSC and kiln	**3,140**	sf	25.00	78,500		
06100	Roof sheathing: 2" T&G Doug-Fir structural decking	**3,140**	sf	10.00	31,400		
06100	Fasteners, hold down and tie hardware	**1**	ls	3,297.00	3,297		
06100	10% potential material increase allowance	**1**	ls	10,990.00	10,990		
05500	Steel Columns: 4" dia. (.25" wall) galvanized steel post	**12**	ea	3,500.00	42,000		
	Roof system (labor)						
06100	Boom crew, install and fasten	**8**	cd	2,560.00	20,480		
	SUBTOTAL					186,667	
	TOTAL - SUPERSTRUCTURE						***$186,667***

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	B20	***EXTERIOR CLOSURE***						
	B2010	**EXTERIOR WALLS**						
		Wall Framing (materials)						
06100		Building framing: 2x6 SPF infill walls with PSL posts for roof support where concealed in walls. ½" Plywood sheathing	**2,200**	sf	18.00	39,600		
06100		10% potential material increase allowance	**1**	ls	3,960.00	3,960		
06100		Fasteners, hold down and tie hardware	**1**	ls	1,306.80	1,307		
		Framing (labor)						
06100		Install exterior walls and misc framing	**3**	cd	2,640.00	7,920		
		SUBTOTAL					52,787	
		Insulation & AB						
07210		R-21 batt insulation	**2,200**	sf	4.00	8,800		
07270		Tyvek or similar air barrier - wrap up to roof edge	**2,200**	sf	1.50	3,300		
		SUBTOTAL					12,100	
		Finish						
07460		Exterior siding and trim - Maple	**613**	sf	30.00	18,390		
04200		Stone water table	**156**	sf	50.00	7,800		
06100		Wood louver system - Maple	**262**	sf	45.00	11,790		
		SUBTOTAL					37,980	
	B2020	**WINDOWS**						
84110		Clerestory windws	**140**	sf	125.00	17,500		
84110		Sliding and awning windows	**400**	sf	125.00	50,000		
		SUBTOTAL					67,500	
	B2030	**EXTERIOR DOORS**						
		Doors						
08111		Ext 3x7 glass doors	**3**	ea	1,800.00	5,400		
08111		Ext 3x7 louvered glass doors	**4**	ea	2,000.00	8,000		
08710		Hardware	**7**	lvs	850.00	5,950		
		Misc						
07920		Backer rod & double sealant	**280**	lf	15.00	4,200		
		SUBTOTAL					23,550	
		TOTAL - EXTERIOR CLOSURE						***$193,917***
	B30	***ROOFING***						
	B3010	**ROOF COVERINGS**						
07545		Ice and water shield	**3,140**	sf	5.00	15,700		
07545		Underlayment	**3,140**	sf	3.00	9,420		
07545		Insulation	**3,140**	sf	8.00	25,120		
07545		Cedar shake roof and metal trims	**31**	sq	2,200.00	68,200		
		SUBTOTAL					118,440	
	B3020	**ROOF OPENINGS**						
07720		N/A						
		SUBTOTAL					-	
		TOTAL - ROOFING						**$118,440**

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	C10	***INTERIOR CONSTRUCTION***						
	C1010	**PARTITIONS**						
		Interior Wall Framing (materials)						
06100		2x framing	**2,240**	sf	8.00	17,920		
06100		Plywood each side	**4,480**	sf	5.00	22,400		
06100		Maple finish each side	**4,480**	sf	15.00	67,200		
06100		20% potential material increase allowance	**1**	ls	10,752.00	10,752		
06100		Fasteners & hardware	**1**	ls	5,376.00	5,376		
		Interior Wall Framing (labor)						
06100		Install exterior walls and misc framing	**10**	cd	1,760.00	17,600		
		SUBTOTAL					141,248	
		Insulation & AB						
07270		Acoustical batt	**2,240**	sf	1.00	2,240		
		SUBTOTAL					2,240	
	C1020	**INTERIOR DOORS**						
		Doors						
08111		Int 3x7 doors	**3**	ea	1,500.00	4,500		
08710		Hardware	**3**	lvs	850.00	2,550		
		SUBTOTAL					7,050	
	C1030	**SPECIALTIES / MILLWORK**						
10440		Fire extinguisher cabinets	**2**	ea	300.00	600		
10140		Interior and exterior code signage	**1**	ls	1,500.00	1,500		
06402		Storage closet shelving	**26**	lf	100.00	2,600		
06402		Office counters/shelving	**16**	lf	400.00	6,400		
06402		Gatekeeper counters/shelving	**14**	lf	400.00	5,600		
06402		Dressing benches	**13**	lf	350.00	4,550		
06402		First aid millwork	**13**	lf	600.00	7,800		
06402		Guard area millwork	**5**	lf	600.00	3,000		
06402		Concessions/storage counters/shelving	**35**	lf	450.00	15,750		
10280		TP dispenser	**2**	ea	85.00	170		
10280		Soap disp	**2**	ea	45.00	90		
10280		HC Mirror	**2**	ea	265.00	530		
10280		GB	**4**	ea	125.00	500		
10280		Changing station	**2**	ea	285.00	570		
		SUBTOTAL					49,660	
		TOTAL - INTERIOR CONSTRUCTION						***$200,198***
	C30	***INTERIOR FINISHES***						
	C3010	**WALL FINISHES**						
09900		Finish interior wood	**4,480**	sf	1.50	6,720		
09300		Tile to wet walls	**400**	sf	25.00	10,000		
		SUBTOTAL					16,720	
	C3020	**FLOOR FINISHES**						
09730		Epoxy floor/base	**1,150**	sf	20.00	23,000		
		SUBTOTAL					23,000	
	C3030	**CEILING FINISHES**						
09900		Finish exposed exposed framing and T&G	**3,140**	sf	2.00	6,280		
		SUBTOTAL					6,280	
		TOTAL - INTERIOR FINISHES						***$46,000***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
	Equipment						
220000	Instantaneous Electric Water Heater	**1**	ea	1,250.00	1,250		
220000	Back flow	**1**	ls	800.00	800		
	Fixtures						
220000	Water Closets	**2**	ea	1,285.00	2,570		
220000	Lavatory	**2**	ea	1,175.00	2,350		
220000	Concession	**2**	ea	1,175.00	2,350		
220000	Non Freeze Wall Hydrants	**2**	ea	385.00	770		
220000	Hose Bibb	**1**	ea	235.00	235		
220000	Floor Drain	**2**	ea	565.00	1,130		
220000	Clean Out	**2**	ea	250.00	500		
220000	Fixture Connections	**6**	ea	350.00	2,100		
	Piping						
220000	Water	**480**	lf	32.00	15,360		
220000	Waste	**240**	lf	68.00	16,320		
220000	Vent	**260**	lf	44.00	11,440		
220000	Insulation	**480**	lf	9.00	4,320		
	Trade Requirements						
220000	Rigging	**1**	ls	500.00	500		
220000	Coordination	**10**	hrs	135.00	1,350		
	SUBTOTAL					63,345	
	TOTAL - PLUMBING						***$63,345***
	D30 HVAC						
	D30 HVAC						
230000	Central inline energy recovery ventilator would be ducted to outdoor air intake and exhaust louvers to provide fresh air to the building and remove code required exhaust air. A duct-mounted DX coil in series with a duct-mounted electric resistance heating coil would provide tempered and de-humidified air to the building occupiable areas.	**1,330**	sf	15.00	19,950		
230000	Variable Refrigerant Flow (VRF) heat pump system shall provide heating and cooling to the regularly occupied areas of the building; a combination of wall and ceiling mounted indoor fan coil units would be installed within the spaces to be served and connected to an outdoor-mounted heat pump condenser unit	**1,330**	sf	60.00	79,800		
230000	Electric radiant ceiling/wall panels shall be provided to heat the non-occupied building spaces (storage/ toilet/ concessions) that are not provided with VRF indoor units	**1,330**	sf	8.00	10,640		
	SUBTOTAL					110,390	
	TOTAL - HVAC						***$110,390***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION						
210000	N/A						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						***$0***
	D50 ELECTRICAL						
	D50 ELECTRICAL						
	Light Fixtures						
260000	Interior lighting	**1,330**	sf	10.00	13,300		
260000	Exterior lighting	**1,810**	sf	10.00	18,100		
	Branch Circuitry						
260000	Branch Circuitry	**1,330**	sf	2.50	3,325		
	Power Circuitry						
260000	Power Circuitry	**1,330**	sf	3.00	3,990		
	Power Equipment						
260000	Power Equipment	**1,330**	sf	6.00	7,980		
	Fire Alarm						
260000	Fire Alarm	**1,330**	sf	5.00	6,650		
	Security						
260000	Security	**1,330**	sf	5.00	6,650		
	Lightning Protection						
260000	Lightning Protection	**1**	ls	6,500.00	6,500		
	Misc						
260000	Temp Power and Lighting	**1**	ls	2,500.00	2,500		
	SUBTOTAL					68,995	
	TOTAL - ELECTRICAL						***$68,995***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	GROSS FLOOR AREA CALCULATION						
	First Floor			**1,840**			
	TOTAL GROSS FLOOR AREA				**1,840**	***GSF***	
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings						
03300	Formwork	**376**	sf	16.00	6,016		
03300	Re-bar	**1,320**	lbs	2.50	3,300		
03300	Concrete material	**22**	cy	160.00	3,520		
03300	Placing concrete	**22**	cy	40.00	880		
312000	Excavate and backfill	**251**	cy	30.00	7,530		
312000	Import structural fill	**56**	cy	45.00	2,520		
	Foundation walls						
03300	Formwork	**2,256**	sf	16.00	36,096		
03300	Re-bar	**2,860**	lbs	2.50	7,150		
03300	Concrete material	**44**	cy	160.00	7,040		
03300	Placing concrete	**44**	cy	40.00	1,760		
	Column footings/Piers						
03300	Formwork	**168**	sf	16.00	2,688		
03300	Re-bar	**367.5**	lbs	3.00	1,103		
03300	Concrete material	**4.9**	cy	160.00	784		
03300	Placing concrete	**4.9**	cy	45.00	221		
	SUBTOTAL					80,608	
	A1030 LOWEST FLOOR CONSTRUCTION						
	SOG						
07210	Vapor barrier	**1,840**	sf	0.50	920		
03300	Reinforcing	**2,116**	sf	1.50	3,174		
03300	Concrete - 5" thick	**32**	cy	160.00	5,120		
03300	Placing concrete	**32**	cy	35.00	1,120		
03300	Finishing and curing concrete	**1,840**	sf	1.50	2,760		
03300	Control joints - saw cut	**1,840**	sf	0.20	368		
	Miscellaneous						
312000	Excavate and backfill	**136**	cy	30.00	4,080		
312000	Slab subbase	**68**	cy	45.00	3,060		
03300	Misc pads and curbs	**8**	cy	300.00	2,400		
	SUBTOTAL					23,002	
	TOTAL - FOUNDATIONS						***$103,610***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	B10 SUPERSTRUCTURE						
	B1020 ROOF CONSTRUCTION						
	Roof system (materials)						
06100	Roof framing: Doug-Fir 10x14 with 6x14 Doug-Fir purlins. All material to be FSC and kiln	**3,000**	sf	25.00	75,000		
06100	Roof sheathing: 2" T&G Doug-Fir structural decking	**3,000**	sf	10.00	30,000		
06100	Fasteners, hold down and tie hardware	**1**	ls	3,150.00	3,150		
06100	10% potential material increase allowance	**1**	ls	10,500.00	10,500		
05500	Steel Columns: 4" dia. (.25" wall) galvanized steel post	**7**	ea	3,500.00	24,500		
	Roof system (labor)						
06100	Boom crew, install and fasten	**8**	cd	2,560.00	20,480		
	SUBTOTAL					163,630	
	TOTAL - SUPERSTRUCTURE						***$163,630***
	B20 EXTERIOR CLOSURE						
	B2010 EXTERIOR WALLS						
	Wall Framing (materials)						
06100	Building framing: 2x6 SPF infill walls with PSL posts for roof support where concealed in walls. ½" Plywood sheathing	**2,604**	sf	18.00	46,872		
06100	10% potential material increase allowance	**1**	ls	4,687.20	4,687		
06100	Fasteners, hold down and tie hardware	**1**	ls	1,546.77	1,547		
	Framing (labor)						
06100	Install exterior walls and misc framing	**3**	cd	2,640.00	7,920		
	SUBTOTAL					61,026	
	Finish						
07460	Exterior siding and trim - Maple	**1,565**	sf	30.00	46,950		
04200	Stone water table	**180**	sf	50.00	9,000		
07460	Wood louver system - Maple	**80**	sf	45.00	3,600		
07460	Copper panels at showers	**50**	sf	100.00	5,000		
	SUBTOTAL					64,550	
	B2020 WINDOWS						
84110	Skylight windows	**88**	sf	125.00	11,000		
84110	Frosted glass windows	**51**	sf	130.00	6,630		
	SUBTOTAL					17,630	
	B2030 EXTERIOR DOORS						
	Doors						
08111	Swing door 10x8	**1**	ea	6,500.00	6,500		
08111	Ext 3x7 door with frosted glass sidelight	**4**	ea	3,500.00	14,000		
08111	Ext 3x7 door and frame	**1**	ea	2,000.00	2,000		
08710	Hardware	**5**	lvs	850.00	4,250		
	Misc						
07920	Backer rod & double sealant	**200**	lf	15.00	3,000		
	SUBTOTAL					29,750	
	TOTAL - EXTERIOR CLOSURE						***$172,956***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	B30 ROOFING						
	B3010 ROOF COVERINGS						
07545	Ice and water shield	**3,000**	sf	5.00	15,000		
07545	Underlayment	**3,000**	sf	3.00	9,000		
07545	Insulation	**3,000**	sf	8.00	24,000		
07545	Cedar shake roof and metal trims	**30**	sq	2,200.00	66,000		
	SUBTOTAL					114,000	
	B3020 ROOF OPENINGS						
07720	N/A						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$114,000**
	C10 INTERIOR CONSTRUCTION						
	C1010 PARTITIONS						
	Interior Wall Framing (materials)						
06100	2x framing	**1,176**	sf	8.00	9,408		
06100	2x framing - 2 rows	**602**	sf	16.00	9,632		
06100	Plywood each side	**2,954**	sf	5.00	14,770		
06100	Maple finish each side	**2,954**	sf	15.00	44,310		
06100	20% potential material increase allowance	**1**	ls	7,812.00	7,812		
06100	Fasteners & hardware	**1**	ls	3,906.00	3,906		
	Interior Wall Framing (labor)						
06100	Install exterior walls and misc framing	**10**	cd	1,760.00	17,600		
	SUBTOTAL					107,438	
	C1020 INTERIOR DOORS						
	Doors						
08111	Int 3x7 doors	**2**	ea	1,500.00	3,000		
08710	Hardware	**2**	lvs	850.00	1,700		
	SUBTOTAL					4,700	
	C1030 SPECIALTIES / MILLWORK						
10440	Fire extinguisher cabinets	**2**	ea	300.00	600		
10140	Interior and exterior code signage	**1**	ls	2,000.00	2,000		
06402	Vanity counter	**22**	lf	400.00	8,800		
10650	Toilet partitions - HC	**4**	ea	1,800.00	7,200		
10650	Toilet partitions - reg	**11**	ea	1,500.00	16,500		
10650	Toilet partitions - screens	**2**	ea	600.00	1,200		
06402	Large storage shelving	**2**	ea	2,000.00	4,000		
06402	Kayak storage	**2**	ea	3,500.00	7,000		
06402	Chaning room benches	**2**	ea	2,500.00	5,000		
10280	TP dispenser	**9**	ea	85.00	765		
10280	Soap disp	**8**	ea	45.00	360		
10280	Mirror	**8**	ea	265.00	2,120		
10280	GB	**4**	ea	125.00	500		
10280	Jan closet MB	**2**	ea	160.00	320		
10280	Changing station	**2**	ea	285.00	570		
	SUBTOTAL					56,935	
	TOTAL - INTERIOR CONSTRUCTION						***$169,073***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	C30 INTERIOR FINISHES						
	C3010 WALL FINISHES						
230000	Finish interior wood	**2,954**	sf	1.50	4,431		
09300	Tile to wet walls	**760**	sf	25.00	19,000		
	SUBTOTAL					23,431	
	C3020 FLOOR FINISHES						
09730	Epoxy floor/base	**1,840**	sf	20.00	36,800		
	SUBTOTAL					36,800	
	C3030 CEILING FINISHES						
09900	Finish exposed exposed framing and T&G	**3,000**	sf	2.00	6,000		
	SUBTOTAL					6,000	
	TOTAL - INTERIOR FINISHES						***$66,231***
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
	Equipment						
220000	Water Meter	**1**	ea	1,200.00	1,200		
220000	Back flow	**1**	ls	800.00	800		
220000	Instantaneous Electric Water Heater	**2**	ea	1,250.00	2,500		
220000	Plumbing Specialties	**1**	ls	1,500.00	1,500		
	Fixtures						
220000	Water Closets	**9**	ea	1,285.00	11,565		
220000	Lavatory	**8**	ea	1,175.00	9,400		
220000	Urinals	**3**	ea	1,150.00	3,450		
220000	Showers - Outdoor	**3**	ea	1,062.50	3,188		
220000	Mop Sink	**2**	ea	1,185.00	2,370		
220000	Electric Water Cooler	**1**	ea	2,437.50	2,438		
220000	Non Freeze Wall Hydrants	**4**	ea	385.00	1,540		
220000	Hose Bibbs	**2**	ea	235.00	470		
220000	Floor Drains	**6**	ea	565.00	3,390		
220000	Clean Outs	**6**	ea	250.00	1,500		
220000	Fixture Connections	**25**	ea	350.00	8,750		
	Piping						
220000	Water	**2,000**	lf	32.00	64,000		
220000	Waste	**1,000**	lf	68.00	68,000		
220000	Vent	**260**	lf	44.00	11,440		
220000	Insulation	**2,000**	lf	9.00	18,000		
	Trade Requirements						
220000	Rigging	**1**	ls	2,500.00	2,500		
220000	Coordination	**40**	hrs	135.00	5,400		
	SUBTOTAL					223,401	
	TOTAL - PLUMBING						***$223,401***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	D30 HVAC						
	D30 HVAC						
230000	HVAC system - central inline exhaust fan shall be ducted to all regularly occupiable spaces to provide code-required ventilation. Make-up air for the exhaust system shall be provided through the use of operable windows and/or louvered intakes	**1,840**	sf	15.00	27,600		
	SUBTOTAL					27,600	
	TOTAL - HVAC						***$27,600***
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION						
210000	N/A						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						***$0***
	D50 ELECTRICAL						
	D50 ELECTRICAL						
	Light Fixtures						
260000	Interior lighting	**1,840**	sf	10.00	18,400		
260000	Exterior lighting	**1,160**	sf	10.00	11,600		
	Branch Circuitry						
260000	Branch Circuitry	**1,840**	sf	2.50	4,600		
	Power Circuitry						
260000	Power Circuitry	**1,840**	sf	3.00	5,520		
	Power Equipment						
260000	Power Equipment	**1,840**	sf	6.00	11,040		
	Fire Alarm						
260000	Fire Alarm	**1,840**	sf	5.00	9,200		
	Security						
260000	Security	**1,840**	sf	5.00	9,200		
	Lightning Protection						
260000	Lightning Protection	**1**	ls	7,500.00	7,500		
	Misc						
260000	Temp Power and Lighting	**1**	ls	2,500.00	2,500		
	SUBTOTAL					79,560	
	TOTAL - ELECTRICAL						***$79,560***

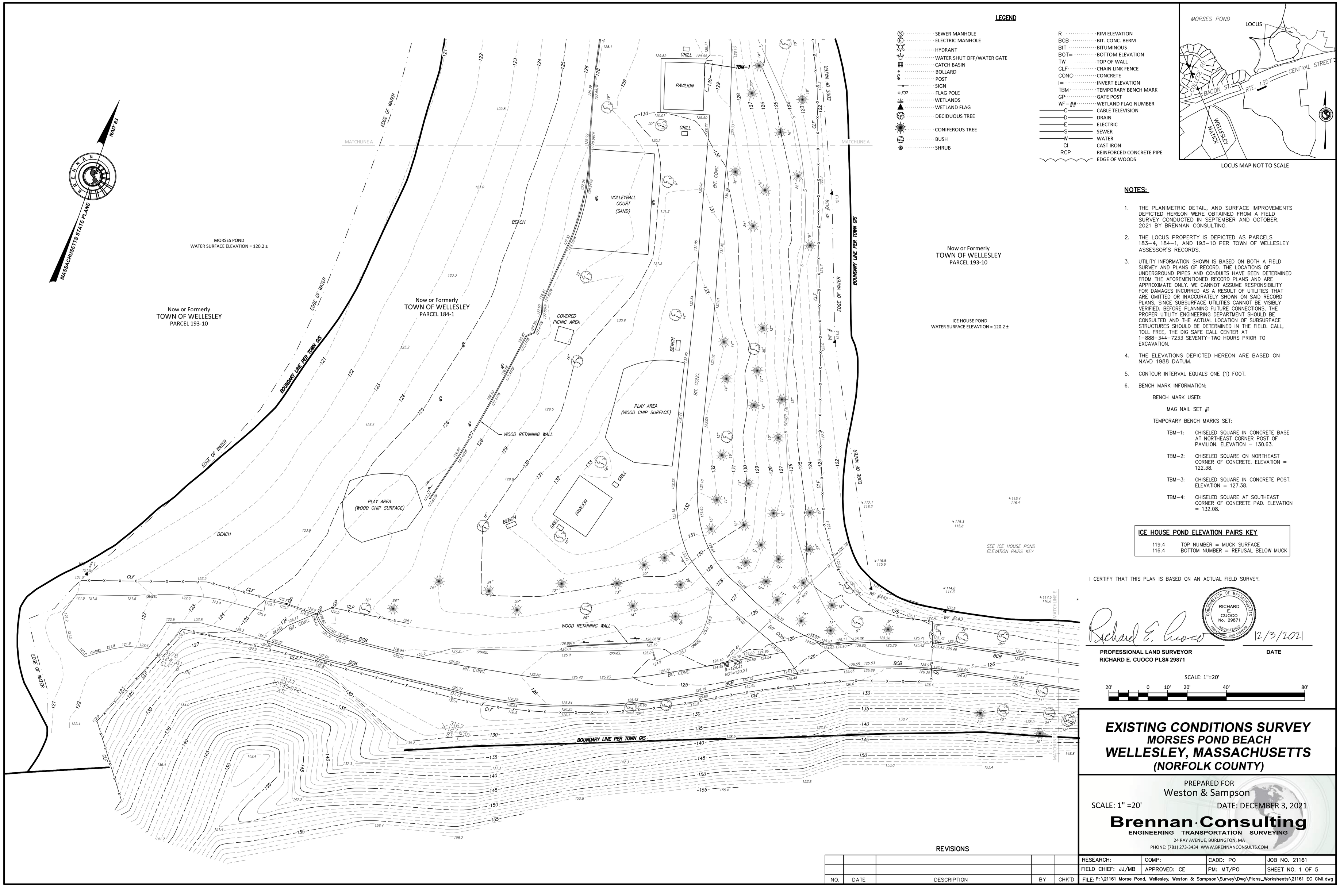
CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Storage Shed/Kayak Rental Building							
	GROSS FLOOR AREA CALCULATION						
	First Floor			**600**			
	TOTAL GROSS FLOOR AREA				**600**	***GSF***	
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings						
03300	Formwork	**220**	sf	16.00	3,520		
03300	Re-bar	**780**	lbs	2.50	1,950		
03300	Concrete material	**13**	cy	160.00	2,080		
03300	Placing concrete	**13**	cy	40.00	520		
312000	Excavate and backfill	**147**	cy	30.00	4,410		
312000	Import structural fill	**33**	cy	45.00	1,485		
	Foundation walls						
03300	Formwork	**1,320**	sf	16.00	21,120		
03300	Re-bar	**1,690**	lbs	2.50	4,225		
03300	Concrete material	**26**	cy	160.00	4,160		
03300	Placing concrete	**26**	cy	40.00	1,040		
	Column footings/Piers						
03300	Formwork	**48**	sf	16.00	768		
03300	Re-bar	**105.0**	lbs	3.00	315		
03300	Concrete material	**1.4**	cy	160.00	224		
03300	Placing concrete	**1.4**	cy	45.00	63		
	SUBTOTAL					45,880	
	A1030 LOWEST FLOOR CONSTRUCTION						
	SOG						
07210	Vapor barrier	**600**	sf	0.50	300		
03300	Reinforcing	**690**	sf	1.50	1,035		
03300	Concrete - 5" thick	**11**	cy	160.00	1,760		
03300	Placing concrete	**11**	cy	35.00	385		
03300	Finishing and curing concrete	**600**	sf	1.50	900		
03300	Control joints - saw cut	**600**	sf	0.20	120		
	Miscellaneous						
315000	Helical Piers	**20**	ea	1,200.00	24,000		
312000	Excavate and backfill	**44**	cy	50.00	2,200		
312000	Slab subbase	**22**	cy	45.00	990		
03300	Misc pads and curbs	**4**	cy	300.00	1,200		
	SUBTOTAL					32,890	
	TOTAL - FOUNDATIONS						***$78,770***
	B10 SUPERSTRUCTURE						
	B1020 ROOF CONSTRUCTION						
	Roof system (materials)						
06100	Roof framing: Doug-Fir 10x14 with 6x14 Doug-Fir purlins. All material to be FSC and kiln	**1,240**	sf	25.00	31,000		
06100	Roof sheathing: 2" T&G Doug-Fir structural decking	**1,240**	sf	10.00	12,400		
06100	Fasteners, hold down and tie hardware	**1**	ls	1,302.00	1,302		
06100	10% potential material increase allowance	**1**	ls	4,340.00	4,340		
05500	Steel Columns: 4" dia. (.25" wall) galvanized steel post	**2**	ea	3,500.00	7,000		
	Roof system (labor)						
06100	Boom crew, install and fasten	**5**	cd	2,560.00	12,800		
	SUBTOTAL					68,842	
	TOTAL - SUPERSTRUCTURE						***$68,842***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	Storage Shed/Kayak Rental Building						
	B20 EXTERIOR CLOSURE						
	B2010 EXTERIOR WALLS						
	Wall Framing (materials)						
06100	Building framing: 2x6 SPF infill walls with PSL posts for roof support where concealed in walls. ½" Plywood sheathing	**1,498**	sf	18.00	26,964		
06100	10% potential material increase allowance	**1**	ls	2,696.40	2,696		
06100	Fasteners, hold down and tie hardware	**1**	ls	889.80	890		
	Framing (labor)						
06100	Install exterior walls and misc framing	**3**	cd	2,640.00	7,920		
	SUBTOTAL					38,470	
	Finish						
07460	Exterior siding and trim - Maple	**1,498**	sf	30.00	44,940		
04200	Stone water table	**220**	sf	50.00	11,000		
07460	Wood louver system - Maple	**50**	sf	45.00	2,250		
	SUBTOTAL					58,190	
	B2020 WINDOWS						
84110	Wood windows	**100**	sf	125.00	12,500		
	SUBTOTAL					12,500	
	B2030 EXTERIOR DOORS						
	Doors						
08111	Ext 6x7 door with frame	**6**	ea	3,500.00	21,000		
08111	Ext 3x7 door and frame	**2**	ea	2,000.00	4,000		
08710	Hardware	**8**	lvs	850.00	6,800		
	Misc						
07920	Backer rod & double sealant	**320**	lf	15.00	4,800		
	SUBTOTAL					36,600	
	TOTAL - EXTERIOR CLOSURE						***$145,760***
	B30 ROOFING						
	B3010 ROOF COVERINGS						
07270	Ice and water shield	**1,240**	sf	5.00	6,200		
07270	Underlayment	**1,240**	sf	3.00	3,720		
07270	Insulation	**1,240**	sf	8.00	9,920		
07270	Cedar shake roof and metal trims	**12**	sq	2,200.00	26,400		
	SUBTOTAL					46,240	
	B3020 ROOF OPENINGS						
07720	N/A						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$46,240**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Storage Shed/Kayak Rental Building							
	C10 INTERIOR CONSTRUCTION						
	C1010 PARTITIONS						
	N/A						
	SUBTOTAL					-	
	C1020 INTERIOR DOORS						
	N/A						
	SUBTOTAL					-	
	C1030 SPECIALTIES / MILLWORK						
10440	Fire extinguisher cabinets	**2**	ea	300.00	600		
10140	Interior and exterior code signage	**1**	ls	1,200.00	1,200		
06402	Gatekeeper counters/shelving	**15**	lf	300.00	4,500		
	SUBTOTAL					6,300	
	TOTAL - INTERIOR CONSTRUCTION						***$6,300***
	C30 INTERIOR FINISHES						
	C3010 WALL FINISHES						
10280	Finish interior wood	**1,498**	sf	1.50	2,247		
	SUBTOTAL					2,247	
	C3020 FLOOR FINISHES						
07920	Sealed concrete	**600**	sf	3.00	1,800		
	SUBTOTAL					1,800	
	C3030 CEILING FINISHES						
09900	Finish exposed exposed framing and T&G	**1,240**	sf	2.00	2,480		
	SUBTOTAL					2,480	
	TOTAL - INTERIOR FINISHES						***$6,527***
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
	N/A						
	SUBTOTAL					-	
	TOTAL - PLUMBING						***$0***
	D30 HVAC						
	D30 HVAC						
	N/A						
	SUBTOTAL					-	
	TOTAL - HVAC						***$0***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Storage Shed/Kayak Rental Building							
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION						
210000	N/A						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						***$0***
	D50 ELECTRICAL						
	D50 ELECTRICAL						
	Light Fixtures						
260000	Interior lighting	**600**	sf	10.00	6,000		
260000	Exterior lighting	**640**	sf	10.00	6,400		
	Branch Circuitry						
260000	Branch Circuitry	**600**	sf	2.50	1,500		
	Power Circuitry						
260000	Power Circuitry	**600**	sf	3.00	1,800		
	Power Equipment						
260000	Power Equipment	**600**	sf	6.00	3,600		
	Fire Alarm						
260000	Fire Alarm	**600**	sf	5.00	3,000		
	Security						
260000	Security	**600**	sf	5.00	3,000		
	Lightning Protection						
260000	Lightning Protection	**1**	ls	3,500.00	3,500		
	Misc						
260000	Temp Power and Lighting	**1**	ls	1,500.00	1,500		
	SUBTOTAL					30,300	
	TOTAL - ELECTRICAL						***$30,300***

Appendix B: Site Survey



LEGEND

- SEWER MANHOLE
- ELECTRIC MANHOLE
- HYDRANT
- WATER SHUT OFF/WATER GATE
- CATCH BASIN
- BOLLARD
- POST
- SIGN
- FP FLAG POLE
- WETLANDS
- WETLAND FLAG
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH
- SHRUB

R	RIM ELEVATION
BCB	BIT. CONC. BERM
BIT	BITUMINOUS
BOT=	BOTTOM ELEVATION
TW	TOP OF WALL
CLF	CHAIN LINK FENCE
CONC	CONCRETE
I=	INVERT ELEVATION
TBM	TEMPORARY BENCH MARK
GP	GATE POST
WF-##	WETLAND FLAG NUMBER
C	CABLE TELEVISION
D	DRAIN
E	ELECTRIC
S	SEWER
W	WATER
CI	CAST IRON
RCP	REINFORCED CONCRETE PIPE
	EDGE OF WOODS

LOCUS MAP NOT TO SCALE

NOTES:

1. THE PLANIMETRIC DETAIL, AND SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM A FIELD SURVEY CONDUCTED IN SEPTEMBER AND OCTOBER, 2021 BY BRENNAN CONSULTING.
2. THE LOCUS PROPERTY IS DEPICTED AS PARCELS 183-4, 184-1, AND 193-10 PER TOWN OF WELLESLEY ASSESSOR'S RECORDS.
3. UTILITY INFORMATION SHOWN IS BASED ON BOTH A FIELD SURVEY AND PLANS OF RECORD. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFOREMENTIONED RECORD PLANS AND ARE APPROXIMATE ONLY. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLANS, SINCE SUBSURFACE UTILITIES CANNOT BE VISIBLY VERIFIED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL, TOLL FREE, THE DIG SAFE CALL CENTER AT 1-888-344-7233 SEVENTY-TWO HOURS PRIOR TO EXCAVATION.
4. THE ELEVATIONS DEPICTED HEREON ARE BASED ON NAVD 1988 DATUM.
5. CONTOUR INTERVAL EQUALS ONE (1) FOOT.
6. BENCH MARK INFORMATION:

BENCH MARK USED:

MAG NAIL SET #1

TEMPORARY BENCH MARKS SET:

TBM-1: CHISELED SQUARE IN CONCRETE BASE AT NORTHEAST CORNER POST OF PAVILION. ELEVATION = 130.63.

TBM-2: CHISELED SQUARE ON NORTHEAST CORNER OF CONCRETE. ELEVATION = 122.38.

TBM-3: CHISELED SQUARE IN CONCRETE POST. ELEVATION = 127.38.

TBM-4: CHISELED SQUARE AT SOUTHEAST CORNER OF CONCRETE PAD. ELEVATION = 132.08.

ICE HOUSE POND ELEVATION PAIRS KEY

119.4	TOP NUMBER = MUCK SURFACE
116.4	BOTTOM NUMBER = REFUSAL BELOW MUCK

I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY.

COMMONWEALTH OF MASSACHUSETTS
RICHARD E. CUOCO No. 29871 REGISTERED PROFESSIONAL LAND SURVEYOR

Richard E. Cuoco 12/3/2021

PROFESSIONAL LAND SURVEYOR **DATE**
RICHARD E. CUOCO PLS# 29871

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20' DATE: DECEMBER 3, 2021

Brennan·Consulting
ENGINEERING TRANSPORTATION SURVEYING
24 RAY AVENUE, BURLINGTON, MA
PHONE: (781) 273-3434 WWW.BRENNANCONSULTS.COM

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 1 OF 5
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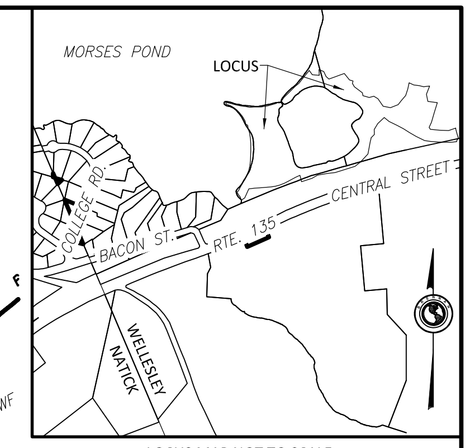

LOCUS MAP NOT TO SCALE

NAD 83

MASSACHUSETTS STATE PLANE

BRENNAN

Now or Formerly
TOWN OF WELLESLEY
PARCEL 193-10

Now or Formerly
TOWN OF WELLESLEY
PARCEL 184-1

MORSES POND
WATER SURFACE ELEVATION = 120.2 ±

CANOE/KAYAK LAUNCH
COMPOSITE LLDPE DOCK
113.3 = ELEV. OF MUCK SURFACE
113.1 = ELEV. OF REFUSAL BELOW MUCK

BOUNDARY LINE PER TOWN GIS

EDGE OF WATER

WF #13 WF #14 WF #15 WF #16 WF #17 WF #18 WF #19 WF #20 WF #21 WF #22 WF #23 WF #24 WF #25 WF #26 WF #27 WF #29 WF #30 WF #31 WF #33 WF #34 WF #35 WF #36 WF #37 WF #38 WF #39 WF #40 WF #41 WF #42 WF #43 WF #44 WF #45 WF #46 WF #47 WF #48 WF #49 WF #50 WF #51 WF #52 WF #53 WF #54 WF #55 WF #56 WF #57 WF #58 WF #59 WF #60 WF #61 WF #62 WF #63 WF #64 WF #65 WF #66 WF #67 WF #68 WF #69 WF #70 WF #71 WF #72 WF #73 WF #74 WF #75 WF #76 WF #77 WF #78 WF #79 WF #80 WF #81

EXISTING BATH HOUSE
POST WITH LOUD SPEAKER
BRICK COLUMN
BRICK BACK
BENCH
WOOD RETAINING WALL
PAVILION
VOLLEYBALL
BEACH
GRILL
HANDRAIL
12" HDPE INV=119.68
6" SEWER FM
SMH
1 a=131.44 6" CI
1 b=123.41 2" STEEL
1 c=117.64 6" CI
1 d=117.49 6" CI
TBM-1
TBM-2
BIT. CONC.
CONC.
CLF
2" WATER
MATCHLINE A
MATCHLINE B

MORSES POND
WATER SURFACE ELEVATION = 120.2 ±

Now or Formerly
TOWN OF WELLESLEY
PARCEL 193-10

ICE HOUSE POND
WATER SURFACE ELEVATION = 120.2 ±

Now or Formerly
TOWN OF WELLESLEY
PARCEL 193-10

Now or Formerly
TOWN OF WELLESLEY
PARCEL 184-1

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
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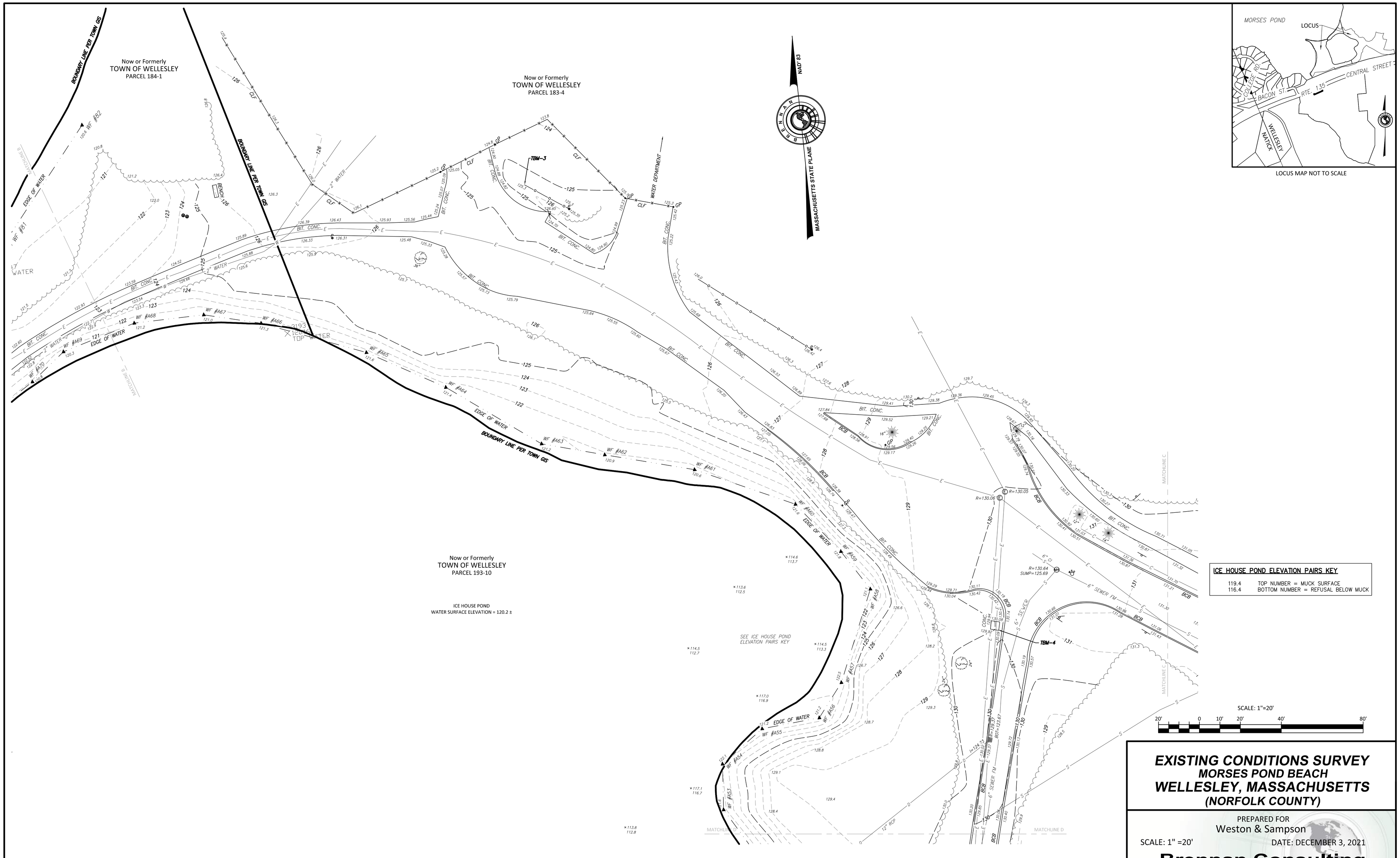

ICE HOUSE POND ELEVATION PAIRS KEY

119.4 TOP NUMBER = MUCK SURFACE
116.4 BOTTOM NUMBER = REFUSAL BELOW MUCK

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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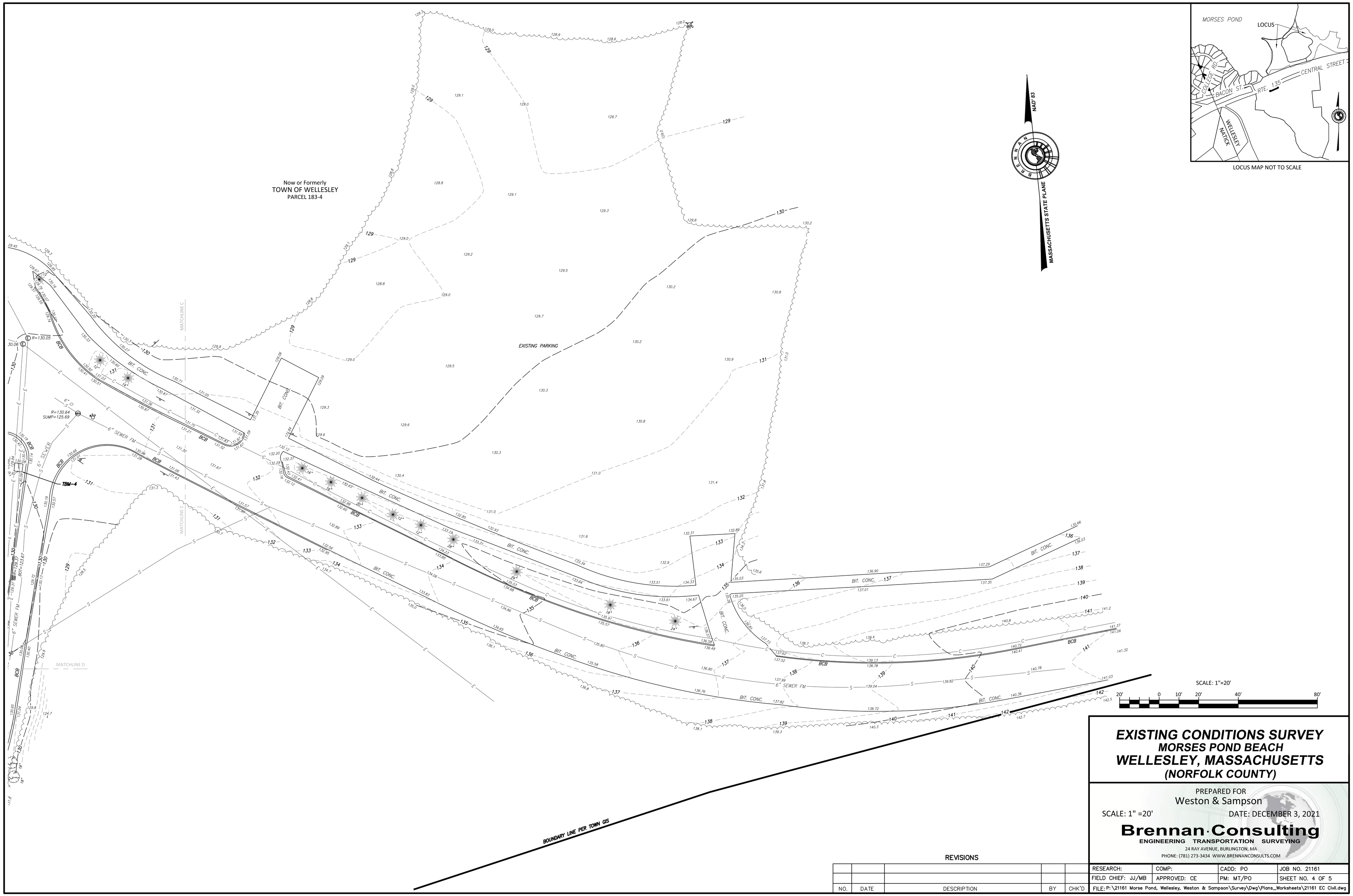

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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REVISIONS

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RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 4 OF 5
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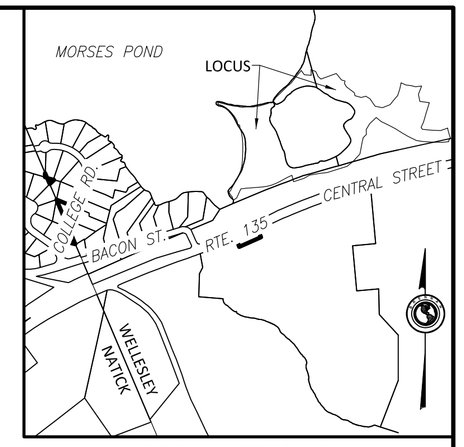
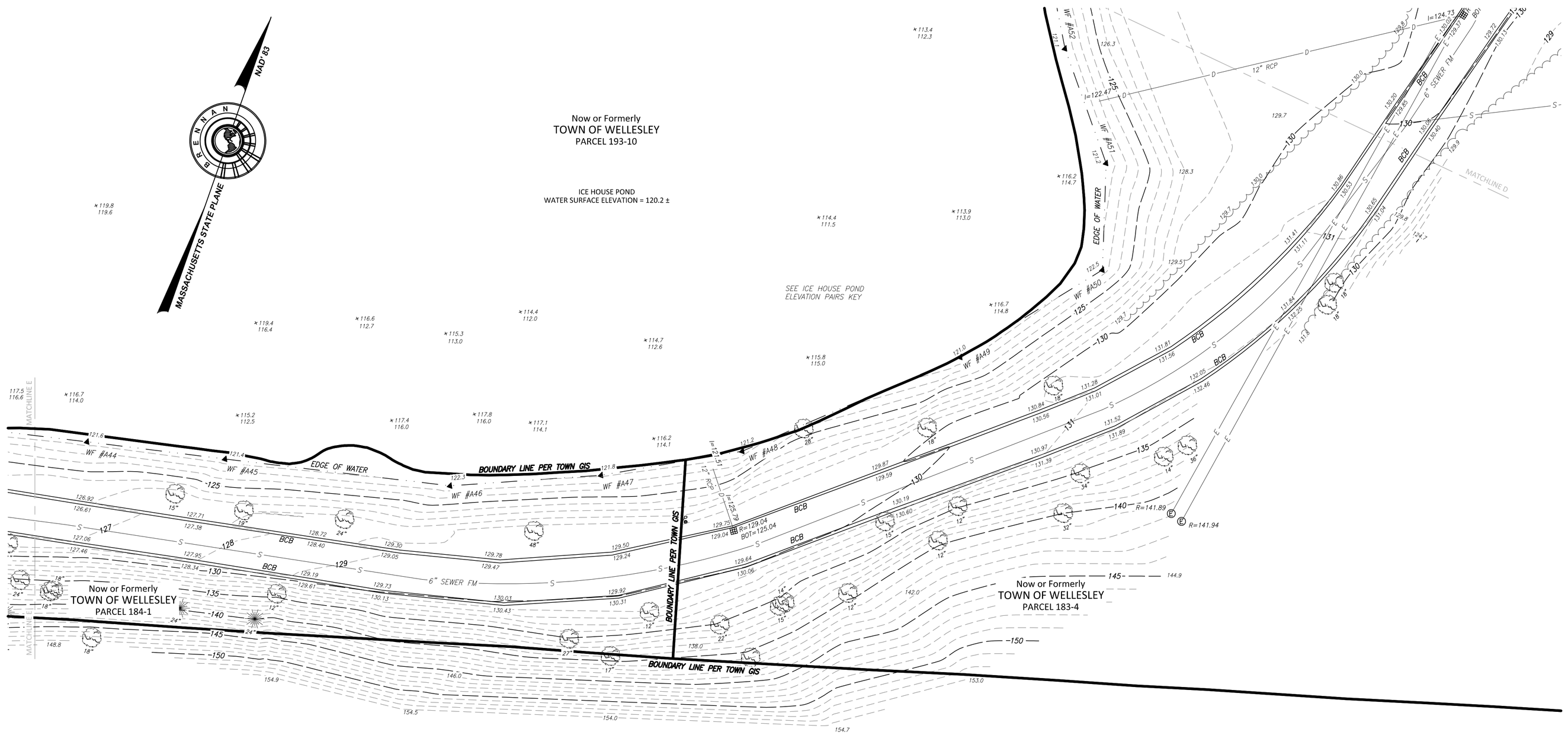


LOCUS MAP NOT TO SCALE



ICE HOUSE POND ELEVATION PAIRS KEY

119.4 TOP NUMBER = MUCK SURFACE
116.4 BOTTOM NUMBER = REFUSAL BELOW MUCK

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 5 OF 5
FILE: P:\21161 Morse Pond, Wellesley, Weston & Sampson\Survey\Dwg\Plans_Worksheets\21161 EC Civil.dwg			

Appendix C: Geotechnical Report

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

November 23, 2021

Town of Wellesley
c/o Johnathan Law, RLA
Weston & Sampson
85 Devonshire Street, 3rd Floor
Boston, MA 02109

RE: Preliminary Geotechnical Report
Proposed Morses Pond Improvements
Wellesley, Massachusetts

INTRODUCTION

Weston & Sampson Engineers, Inc. (Weston & Sampson) is pleased to present this letter report summarizing our geotechnical evaluation and feasibility-level study for the proposed improvements at the Morses Pond Beach Area located along Morses Pond Access Road in Wellesley, Massachusetts. The purpose of our feasibility study was to identify preliminary geotechnical considerations for the proposed project. Our understanding of the proposed project is based on our correspondence with the project team and an August 2021 conceptual plan titled "Morses Pond Beach Area Improvements" prepared by Weston & Sampson and Maryann Thompson Architects.

EXISTING CONDITIONS

The Morses Pond Beach Area (the "site") is an approximately 11-acre parcel bound by Morses Pond to the north and west, Morses Pond Access Road to the east, and the Massachusetts Bay Transportation Authority (MBTA) Framingham/Worcester Line commuter rail right-of-way to the south, as shown on *Figure 1 – Project Locus* and *Figures 2A and 2B – Site Plan – West* and *Site Plan - East*. The site has served as a Wellesley Town Beach since approximately 1935 and includes the approximately 4.5-acre Ice House Pond on the eastern part of the site, the main beach area on the west side of Ice House Pond extending westward to Morses Pond, and an approximately 25 to 50 ft. wide strip of land supporting an asphalt-paved walking path between the north side of Ice House Pond and Morses Pond. A portion of this path is supported by a pedestrian bridge where Ice House Pond and Morses Pond are connected by a small waterway. Handicapped and maintenance vehicle access is via an asphalt-paved access drive along the south side of Ice House Pond. The Town of Wellesley Morses Pond Pump Station and Water Treatment Facility is present to the northeast of the site and is encompassed by a drinking water protection area.

The main beach area contains an approximately 70 ft. by 60 ft. single-story brick bathhouse building to the north, a swimming area along the western border with Morses Pond, a playground structure and boat ramp south of the swimming area, two approximately 27 ft. by 23 ft. canopy shade structures east of the swimming area and several benches and asphalt-paved walking paths. A swim dock is present within the swimming area and a similar boat dock is present to the north of the existing bathhouse building.

Known utilities at the site include water and electric below the walking path and strip of land to the north of Ice House Pond and force-main sewer below the access drive and beach area to the south and west of Ice House Pond. The three known utilities connect to the existing bathhouse.

Our understanding of existing grades at the site is based on our site visits and an October 2021 Existing Conditions Survey Plan prepared by Brennan Consulting. Water surface elevations in Morses and Ice House Ponds are generally between about El. 120 to El. 121. The ground surface between these two ponds rises to approximately El. 133 near the south shade structure and grass-covered area. The site is generally gently sloping downwards towards Morses Pond to the west with slopes up to about 9H:1V along the swimming area. To the east side of the beach area, the site generally slopes down to Ice House Pond at about 5H:1V. Grades increase steeply along the southern edge of Ice House Pond (generally up to 1.8H:1V) and between the access drive and MBTA ROW (generally up to about 1.4H:1V). Elevations described herein are in feet (ft.) and reference the North American Vertical Datum of 1988 (NAVD88).

PROPOSED PROJECT

Based on the conceptual plan included as *Figure 3*, we understand the proposed project includes improvements to the main beach area including new bathhouse (30 ft. by 65 ft.) and administration (40 ft. by 30 ft.) buildings connected by an overhead canopy and ADA parking areas at the southern end; a new playground area and kayak storage shed at the north end; a flush wood walkway along the existing beach area, and new landscaped areas and walking paths. The project also includes a new boardwalk crossing the southern area of Ice House Pond. The existing single-story brick bathhouse and shade canopies will be demolished.

The new administration and bathhouse buildings are proposed at the apparent high point of the site based on the existing site grades depicted in *Figures 2A* and *2B*.

Based on our experience with similar projects, we assume the proposed boardwalk will be supported on helical piers or driven timber piles and will be designed for typical pedestrian traffic loads.

Proposed grading was not made available to us at the time of this report however we assume that grade changes will generally be limited to within approximately 2 ft. of existing grades. Structural loading information was not made available to us at the time of this report.

SUBSURFACE CONDITIONS

Geologic Setting

Based on the United States Geological Survey (USGS) 2018 “Surficial Materials Map of the Natick Quadrangle, Massachusetts” compiled by Janet R. Stone and Byron D. Stone, surficial soils are anticipated to consist of coarse sand and gravel deposits. According to the Massachusetts Office of Geographic Information (MassGIS) OLIVER system, bedrock at the site is mapped as Granite at depths between approximately 50 ft. and 100 ft. The nearest bedrock outcrops to the site are mapped

approximately ½-mile to the northeast. No outcrops were observed at the site during our site reconnaissance.

Subsurface Explorations

Subsurface conditions at the site were explored on September 1, 2021, by advancing five borings (B-1 through B-5) to depths ranging from 6 to 21 ft. Approximate boring locations are shown in *Figure 2*. Weston & Sampson geotechnical engineering staff monitored explorations in the field and prepared logs for each exploration.

The borings were completed by Technical Drilling Services of Sterling, MA. Standard penetration tests (SPTs) were conducted in each boring at two- to five-foot intervals by driving a split spoon sampler with an automatic hammer in general accordance with ASTM D1586. Additional details are provided on the Guide to Subsurface Exploration Logs included in *Attachment A*. Each of the borings were backfilled with cuttings upon completion.

Subsurface conditions encountered in the explorations are described in the following section and included in *Attachment A – Boring Logs*.

Subsurface Conditions

Subsurface conditions encountered in the borings below surficial topsoil generally consisted of native sand, silty sand or undocumented fill over variable sand and gravel. The subsurface conditions encountered in the borings were generally consistent with mapped surficial geology.

Subsurface soil and groundwater conditions described below have been interpreted based on a limited number of explorations that were observed by Weston & Sampson. Variations may occur and should be expected between locations. The strata boundaries shown in our boring logs are based on our interpretations and the actual transitions may be gradual. Refer to the boring logs included in *Attachment A* for detailed descriptions of the soil samples collected. The general Unified Soil Classification System (USCS) designation(s) for each stratum is included in the descriptions below in parentheses. Depths provided below are relative to the existing ground surface at the time of drilling.

Topsoil – Approximately 3 to 6 inches of topsoil was encountered at the ground surface in each of the borings.

Undocumented Fill – Undocumented Fill was encountered below the topsoil in B-2 and B-5 and extended to depths of approximately 4 ft. and 10 ft., respectively. The undocumented fill encountered in B-2 generally consisted of medium dense fine to coarse sand with some fine gravel and little silt (SM). The undocumented fill encountered in B-5 generally consisted of soft to very stiff, dark brown, organic silt with some sand and trace gravel (OL) with trace debris including wood chips, glass, and plastic.

Review of existing information including historic imagery and maps of the site indicate previous land areas within the current bounds of Ice House Pond that no longer appear to be present. Additionally, Morses Pond dredging efforts were completed in 2012 and the Morse Pond Beach was used as a staging and dewatering area. Based on the observed organics and debris, it is possible that the thick organic fill deposit encountered in B-5 may be redistributed and graded dredge spoils sourced either from Ice House Pond or Morses Pond.

Buried Topsoil – Medium stiff, organic, buried topsoil was encountered below the fill in B-2 and extended to a depth of approximately 7.5 ft. The buried topsoil was approximately 3.5 ft. thick and generally consisted of dark brown, organic silt with some sand and little gravel (OL). An organic odor and occasional plant fibers were noted within the buried topsoil.

Native Sand and Gravel – Medium dense to very dense interbedded native sand and gravel was encountered below the surficial topsoil in B-1, B-3, and B-4; below the buried topsoil in B-2, and below the undocumented fill in B-5. The gravel layers generally consisted of mostly gravel with few to some sand and few to little silt. (GM, GP-GM, GW-GM). The sand layers generally consisted of mostly fine to coarse sand with few to some silt and trace to some fine gravel (SM, SP-SM, SW-SM). The native sand was generally siltier at shallower depths. Each of the borings were terminated in this stratum at depths between approximately 4 and 21 feet.

Groundwater – Depth to water was measured in each boring at the end of drilling and ranged from approximately 4 to 12.5 ft. below ground surface which corresponds to approximately El. 118.5 to El. 119.5. Groundwater was not encountered in B-4 (terminated at 6 ft.). We anticipate that groundwater levels at the site will fluctuate with water levels of Morses Pond and Ice House Pond and with season, variations in precipitation, construction in the area, and other factors. Perched groundwater conditions could exist close to the ground surface, especially during and after extended periods of wet weather.

Geotechnical Laboratory Testing

Select samples were submitted for geotechnical laboratory testing to confirm field descriptions and determine engineering properties of the encountered soils. Geotechnical laboratory testing was completed on two samples from the borings to confirm field descriptions and determine engineering properties of the soil. One grain size analysis (ASTM D6913) was performed on the silty sand from B-1. One moisture, ash, and organic content test (ASTM D2974) was performed on the undocumented fill from B-5. The laboratory test results are presented on the boring logs and in *Attachment B – Geotechnical Laboratory Test Results.*

PRELIMINARY GEOTECHNICAL DESIGN RECOMMENDATIONS

General

As indicated above, our project understanding and recommendations are based upon the April 2018 conceptual level plans. We understand some of the proposed design features described above are subject to change and may be modified or removed in final design. Our recommendations included herein are based on our current understanding of the project as described above and depicted in *Figure 3*. Design of proposed improvements should be in accordance with the International Building Code (IBC) as adapted by the Massachusetts State Building Code (MSBC) including supplemental Massachusetts requirements.

The proposed improvements include three buildings: administration, bathhouse, and storage shed. The administration and bathhouse buildings can be supported on shallow spread footings bearing on the natural sand encountered below the surficial topsoil. Boring B-2 completed in the vicinity of the proposed storage shed encountered undocumented granular fill overlying buried topsoil extending to about 7.5 feet below existing grade; these materials are not suitable (or allowed by the MSBC) for support of foundations, slabs, or other rigid structural site improvements that could be adversely affected by differential settlement. Therefore, we recommend

supporting storage shed on shallow spread footings following removal and replacement of these materials, or on deep foundations.

The proposed improvements also include a new boardwalk across the southern side of Ice House Pond. Boring B-5 completed in the vicinity of the proposed west boardwalk landing encountered soft to very stiff, organic, undocumented fill extending to about 10 feet below existing grade. We anticipate thick organic deposits on the bottom of Ice House Pond. We recommend supporting the boardwalk on deep foundations bearing in the natural sand below the fill and organic deposits.

These geotechnical considerations are further discussed in the following sections. Additional geotechnical explorations, analyses, and laboratory testing may be required to provide design level geotechnical recommendations once site grading has been determined and building locations and structural loadings have been finalized.

Shallow Foundations

Based on the encountered subsurface conditions and our analysis, the proposed administration and bathhouse buildings, and storage shed can be supported by shallow foundations bearing on undisturbed, medium dense (or denser) native sand or gravel or on properly constructed Structural Fill overlying such soils.

Existing undocumented fill and buried topsoil should be completely removed from within the zone-of-influence (ZOI) beneath proposed foundations and other structural elements. The ZOI is defined by planes extending horizontally away from the bottom outside edges of footings and other structural site improvements a distance of 2 ft. in all directions, then down and away at 1H:1V (horizontal: vertical) slopes to the intersection with undisturbed, native soils. Excavation to remove the fill and buried topsoil below the proposed storage shed are anticipated to extend several feet below the water level.

Footings bearing on these materials can be designed using an allowable bearing pressure of 4,000 psf. The allowable bearing pressure can be increased to 6,000 psf to resist temporary wind and seismic loads provided load eccentricities are within the middle third of the footing. Resistance to lateral loads can be obtained by a passive equivalent fluid unit weight of 250 pcf, ignoring the top 12 inches of embedment, and by a footing base friction coefficient of 0.45.

Footings should be embedded at least 4 ft. below the nearest proposed adjacent ground surface exposed to freezing. Interior footings not exposed to freezing should be embedded at least 18 inches below the lowest overlying floor slab elevation. These footings may require special frost protection measures if constructed during freezing conditions. Shallow foundations constructed as recommended herein are anticipated to undergo total and differential settlements of less than 1 inch and ½ inch, respectively.

Slabs On-Grade

Slabs for the proposed administration, bathhouse buildings, and storage buildings can be designed and constructed as slabs-on-grade supported by the undisturbed, medium dense (or denser) native sand or gravel or on properly constructed Structural Fill overlying such soils. The building slabs on-grade should be designed and constructed in accordance with recommendations contained in the latest editions of ACI Committee Reports 360R

and 302.1R. Based on subgrade preparation procedures recommended herein and the existing soil conditions, a subgrade modulus (k) of 200 pounds per cubic inch (pci) is recommended for slab-on-grade design.

Concrete slabs on-grade should be supported on a minimum of 6 inches of clean, well graded, angular crushed stone with no more than 10 percent passing a #200 sieve placed between the prepared subgrade and concrete. If the underslab stone is saturated or trapping water, the water should be removed prior to slab placement.

Some flooring manufacturers require specific slab moisture levels and/or vapor barriers to validate the warranties on their products. A properly installed and protected vapor flow retardant can reduce slab moistures. If a vapor flow retardant is used, care should be taken not to trap moisture within the overlying crushed stone and floor slab concrete.

Building slabs on-grade supporting loads up to 250 psf and bearing on the materials discussed above are expected to induce less than one inch of total settlement.

Helical Pier Foundations

As discussed above, the proposed storage shed and boardwalk can be supported on helical piers as currently sited. Up to approximately 7.5 feet of fill and buried topsoil was encountered below the proposed storage shed and up to approximately 10 ft. of existing organic fill was encountered in B-5, located at the west end of the proposed boardwalk. No borings were completed within the limits of Ice House Pond however, soft, organic pond-bottom sediment should be expected. Helical piers supporting the storage shed or boardwalk sections should extend through fill and loose, soft, or organic soils and derive support in the underlying medium dense or denser native sand or native gravel. Due to the variable nature of the site soils, actual pier lengths should be expected to vary.

We expect a helical pier design to support the storage shed and boardwalk structures will consist of vertical helical piers to resist axial loads and cross bracing or battered (angled) piers to resist lateral loads. Where sections of the boardwalk are not within Ice House Pond, buried foundation elements such as pier caps and grade beams may be viable options for resistance to lateral loads.

We can provide additional recommendations for helical piers, including minimum embedment depths and torque requirements, recommended pile design, and corresponding allowable axial capacities during final design. Ultimately, the helical pier installation contractor should provide a helical pier design for capacities required by the structural engineer. The helical pier design should be stamped by a Professional Engineer licensed in the Commonwealth of Massachusetts and include calculations that demonstrate adequate geotechnical and structural capacities including resistance to buckling.

Seismic Site Class

Seismic site class is determined in accordance with the IBC as adapted by the MSBC using a weighted average of SPT blow counts in the upper 100 ft. of soil at a site. Based on the results of explorations and analyses and depths of proposed structures, we recommend that the subject project be evaluated using parameters associated with Site Class D.

Liquefaction can occur in loose, saturated, granular soils. Strong shaking, such as that experienced during earthquakes, can cause a sudden loss of shear strength, densification, and subsequent settlement of these soils. We evaluated the potential for liquefaction in accordance with the latest provisions of the MSBC using the soil types and consistencies encountered in our explorations and interpretation of the existing subsurface information referenced above. Based on our evaluation, the risk of structurally damaging ground deformations due to liquefaction is low.

CONSTRUCTION RECOMMENDATIONS

Site Preparation

The Site should be prepared by removing all vegetation, topsoil, and existing unsuitable (e.g. soft, disturbed, or organic) soils from the ZOI beneath shallow foundations, slabs-on-grade, pavement, and fill areas as described above. Deeper stripping depths and removal of loose surficial organic soil should be anticipated in areas of trees and brush.

Root balls from trees and brush may extend several feet and grubbing operations can cause considerable subgrade disturbance. In general, roots greater than one inch in diameter should be removed as well as areas of concentrated smaller roots. All disturbed material should be removed to undisturbed subgrades.

Excavations required for site preparation and grubbing should be brought back to grade with Structural Fill as recommended below. In general, the sides of these excavations should be sloped back flatter than 1.5H:1V to allow proper compaction of the interface between existing soil and new fill.

Excavation Considerations

Excavation will be required for site preparation, foundation construction, utility construction, site grading, etc. Groundwater and surface water should be controlled during construction and prevented from eroding slopes and disturbing excavation and subgrade materials. Groundwater was observed in some of the borings at depths ranging from about 4 to 12.5 feet below existing grades. Some excavations may encounter groundwater and moderate to severe caving and possible flowing conditions should be expected where seepage is present.

Surface water should be controlled during construction and prevented from eroding temporary slopes and disturbing excavation and subgrade materials. If excavations encounter groundwater, moderate to severe caving should be expected where seepage is present. Flowing conditions are likely where granular soils and groundwater seepage are present.

Depending on excavation depths and amount of groundwater seepage, dewatering may be necessary. Flow rates for dewatering are likely to vary depending on location, soil type, and the season during which the excavation occurs. The dewatering system should be capable of lowering the groundwater table at least 2 ft. below the anticipated excavation depths and be kept operational until fill placement and compaction and concrete installation have been completed to at least 2 ft. above the groundwater table elevation. The dewatering system should be capable of handling variable flow rates and should be the responsibility of the Contractor.

All excavations should be made in accordance with applicable OSHA safety regulations. Temporary excavation support may be required depending on depths of excavations and if excavations need to approach the ZOI

beneath existing structures or other site features. Excavation support systems, if necessary, should be the responsibility of the Contractor and designed by a Professional Engineer licensed in the Commonwealth of Massachusetts. Foundations and utilities should be designed and constructed so that excavations into ZOIs below and adjacent to footings are not required.

Subgrade Preparation and Protection

Following site preparation and excavation to the required subgrade elevations, the native sand or native gravel subgrades should be proof compacted with at least four (4) complete passes of a 10-ton vibratory roller, or equivalent effort. Footing subgrades and other areas with limited access should be proof compacted with at least four (4) complete passes of a 700-pound vibratory plate compactor, or equivalent effort. Weston & Sampson should be contacted to evaluate the exposed subgrades prior to placement of foundation forms, rebar, or overlying materials.

Soft and/or disturbed areas will require re-compaction or over-excavation and backfilling with compacted angular crushed stone or compacted Structural Fill. A geosynthetic separation layer between the excavation subgrade and crushed stone backfill may also be required. We recommend that a geosynthetic used for stabilization consist of a woven geosynthetic with an AOS of #70 to #100 sieve, and a minimum puncture resistance of at least 120 pounds (such as Mirafi FW700 or equivalent).

Soils containing more than trace amounts of silt are highly susceptible to softening and disturbance by construction activity during wet or freezing weather. Subgrade protection should be the responsibility of the Contractor and special precautions and protective measures appropriate for the weather and traffic conditions during construction should be used during earthwork and foundation construction to preserve the integrity of subgrades. Construction traffic should not operate directly on prepared subgrades.

A few inches of crushed stone can be placed and compacted at the base of footing excavations to protect subgrades from disturbance during construction, particularly if footing construction occurs during wet weather conditions. If footing construction occurs during freezing conditions, insulating blankets, heaters, or other suitable measures should be employed to prevent foundation subgrades from freezing until the foundations are backfilled sufficiently to prevent frost from reaching the footing subgrade.

Fill

Imported well-graded sand and gravel with less than approximately 10 percent passing the No. 200 sieve and a maximum particle size of 3-inches (such as MassDOT M1.03.0 Gravel Borrow, type b or M2.01.7 Dense Graded Crushed Stone for Subbase) is recommended for use as Structural Fill within the ZOI beneath new foundations and slabs. Structural Fill should be placed in maximum 10-inch-thick lifts (uncompacted thickness), with each lift compacted to at least 95 percent of the materials maximum dry density as determined by ASTM D1557.

Crushed Stone may also be acceptable for use as Structural Fill with prior approval of the geotechnical engineer. Crushed stone should be compacted until dense and well-keyed with several passes of a vibratory plate compactor.

On-site granular soil meeting the grain size requirements of Structural Fill can be used as such provided they are free of organics, contamination (including metals, VOCs, SVOCs, etc.), and other deleterious materials. On-site

granular soils with less than approximately 20 percent passing the No. 200 sieve may be re-used in landscaped areas (Common Fill). Common Fill should be placed in maximum 10-inch-thick lifts (uncompacted thickness), with each lift compacted to at least 92 percent of the materials maximum dry density as determined by ASTM D1557.

Trenches

Open utility trench excavations should be completed as recommended above. Pipe bedding should be installed in accordance with the pipe manufacturers' recommendations. If groundwater seepage or standing water is present in the base of utility trench excavations, we recommend over-excavating the trench by 12 to 18 inches and placing trench stabilization material in the base. Trench stabilization material should consist of well-graded, angular crushed stone with a maximum particle size of 4 inches and free of deleterious materials. The percent passing the No. 200 Sieve should be less than 5 percent by weight when testing in accordance with ASTM C117.

Trench backfill above the pipe zone should consist of imported granular sand and gravel with less than approximately 10 percent fines such as Structural Fill or granular soils from on-site excavations meeting the above requirements. Trench backfill should be placed in 6-inch maximum loose lifts with each lift compacted to 92 percent of ASTM D1557 and to 95 percent of ASTM D1557 within 2 ft. of finished grades. Construction of overlying hard surfaces, such as pavement, should not occur before at least one week after backfilling.

Additional Explorations and Analyses

Our explorations were completed at widely spaced locations and located based on conceptual-level design layouts. Design plans are still being evaluated and the locations of structures and other site features have not been finalized. Additional explorations and geotechnical analyses may be required to develop final design recommendations for foundation support and earthwork design. We should be contacted prior to final design to review design plans and revise and/or supplement our recommendations as necessary.

LIMITATIONS

Observation of Construction

Satisfactory earthwork and foundation performance depends to a large degree on the quality of construction. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions often requires experience; therefore, qualified personnel should visit the site with sufficient frequency to evaluate whether actual subsurface conditions differ from those anticipated. In addition, full-time construction observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications.

The recommendations in this report are preliminary as actual subsurface conditions may differ from those interpreted based on our subsurface explorations. In order for our recommendations to be considered final, we must be retained to observe the actual subsurface conditions encountered during construction. Our observations will allow us to interpret the actual conditions present during construction and adapt our recommendations if needed.

Variations of Subsurface Conditions and Use of Report

We have prepared this report for use by the owner, members of the design and construction team for the subject project and site, only. The data and report can be used for estimating purposes, but our report, conclusions, and interpretations should not be construed as a warranty of the subsurface conditions and are not applicable to other sites.

Explorations indicate soil conditions only at specific locations and only to the depths penetrated. They do not necessarily reflect subsurface conditions that may exist outside or between exploration locations. If subsurface conditions differing from those described are noted during the course of excavation and construction, reevaluation will be necessary and we should be consulted.

Site development plans and design details were considered preliminary at the time this report was prepared. If changes are made in site grades, configuration, design loads, or type of construction for the structure, the conclusions and recommendations may not be applicable. We should be consulted to review final design drawings and specifications to see that our recommendations are suitably followed. If design changes are made, we should be retained to review our conclusions and recommendations and provide a written evaluation or modification. Additional geotechnical engineering analyses and explorations may be necessary.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices in this area at the time this report was prepared. No warranty or other conditions, expressed or implied, is given. For additional information on the use of this report, please refer to the document titled “Important Information about This Geotechnical-Engineering Report” included in *Attachment C*.

It has been a pleasure assisting you with this project and we look forward to our continued involvement. Please call if you have any questions.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

Matthew J. Zanchi, PE
Project Engineer

Jennifer MacGregor, PE
Technical Leader

Attachments:
Figure 1 – Project Locus
Figure 2A – Site Plan - West

Figure 2B – Site Plan - East
Figure 3 – Site Concept Plan
Attachment A – Boring Logs
Attachment B – Geotechnical Laboratory Test Results
Attachment C – Important Information about This Geotechnical-Engineering Report

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FIGURES

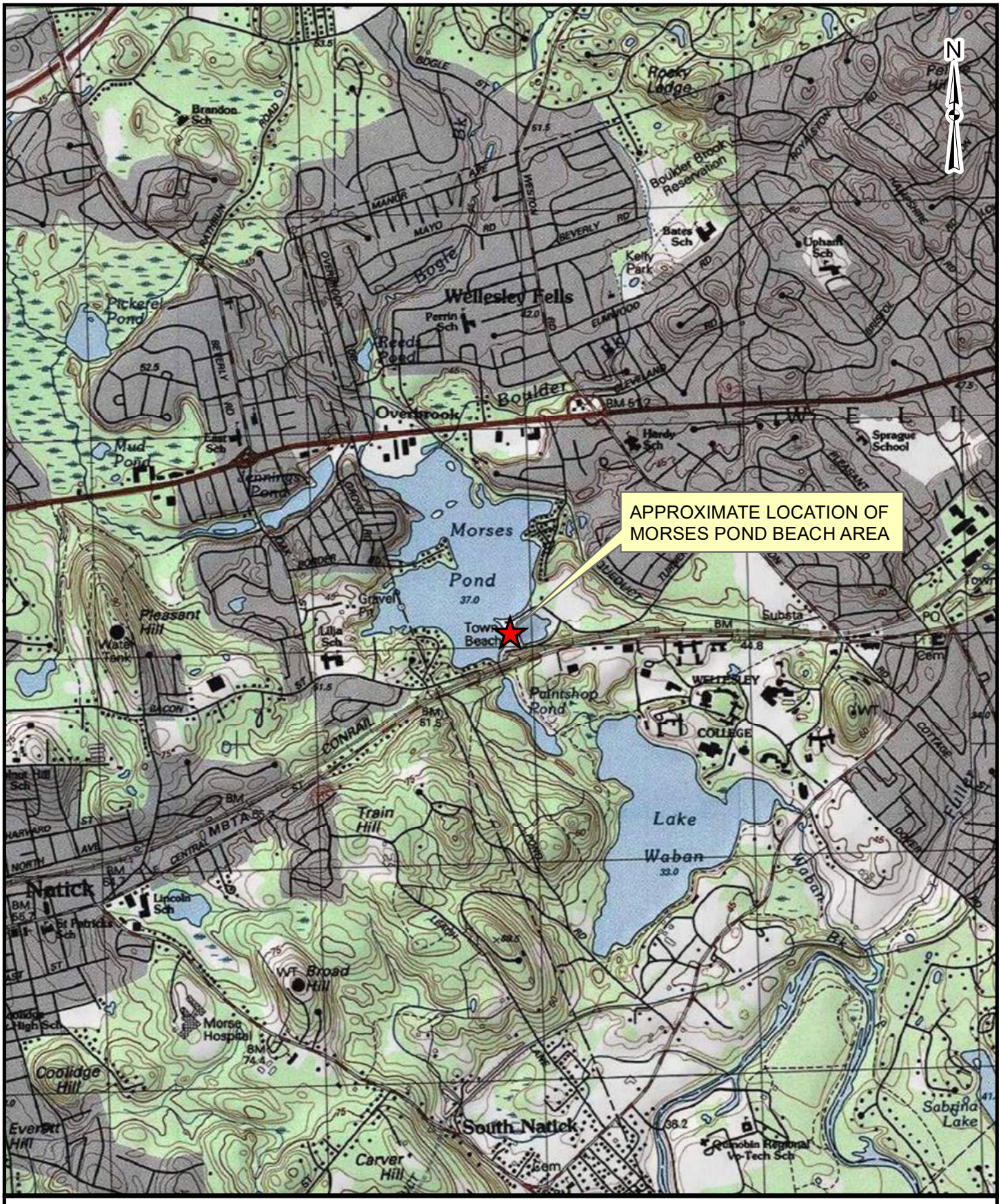


FIGURE 1
PROJECT LOCUS

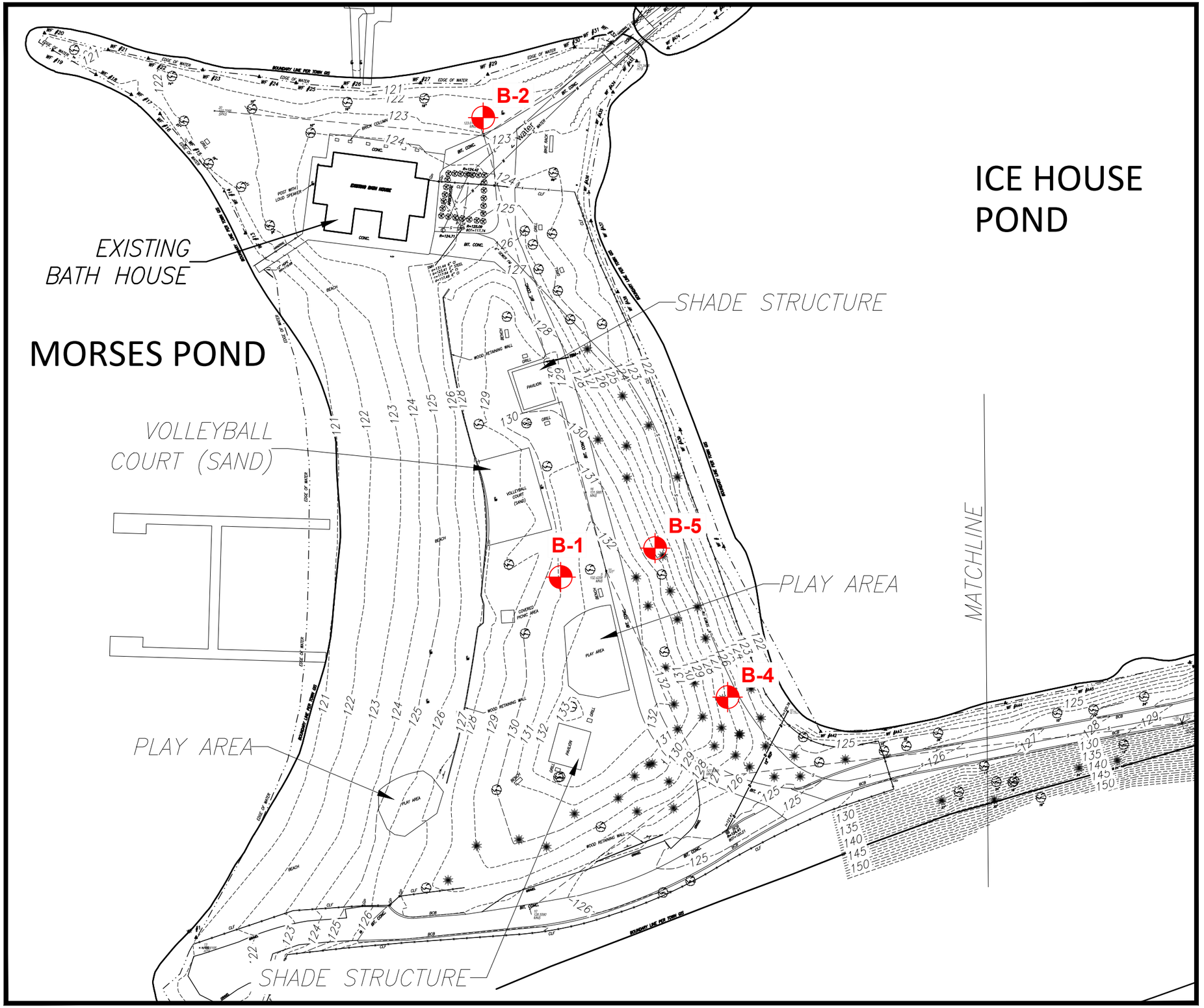
MORSES POND BEACH AREA FEASIBILITY STUDY
WELLESLEY, MASSACHUSETTS

2,000 0 2,000

Scale In Feet

Weston & Sampson

Path: P:\MA\Wellesley MA\Morses Pond Beach Area Feasibility Study\Geotech\Plans\GIS\Figure 1. Project Locus.mxd **User:** ZanchiM **Saved:** 8/26/2021 4:39:12 PM **Opened:** 8/26/2021 4:39:50 PM



Weston & Sampson℠

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978.532.1900 800.SAMPSON
www.westonandsampson.com

NOTES

1. THIS PLAN IS BASED ON AN EXISTING CONDITIONS SURVEY OF MORSES POND BEACH PREPARED BY BRENNAN CONSULTING DATED OCTOBER 2021.
2. BORINGS WERE COMPLETED BY TECHNICAL DRILLING SERVICES, INC. OF STERLING, MA ON SEPTEMBER 1, 2021.
3. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON ENGINEER.
4. BORING LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-1 DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – WEST
	PROJECT: MORSES POND BEACH AND BATH HOUSE, WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	WZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2A

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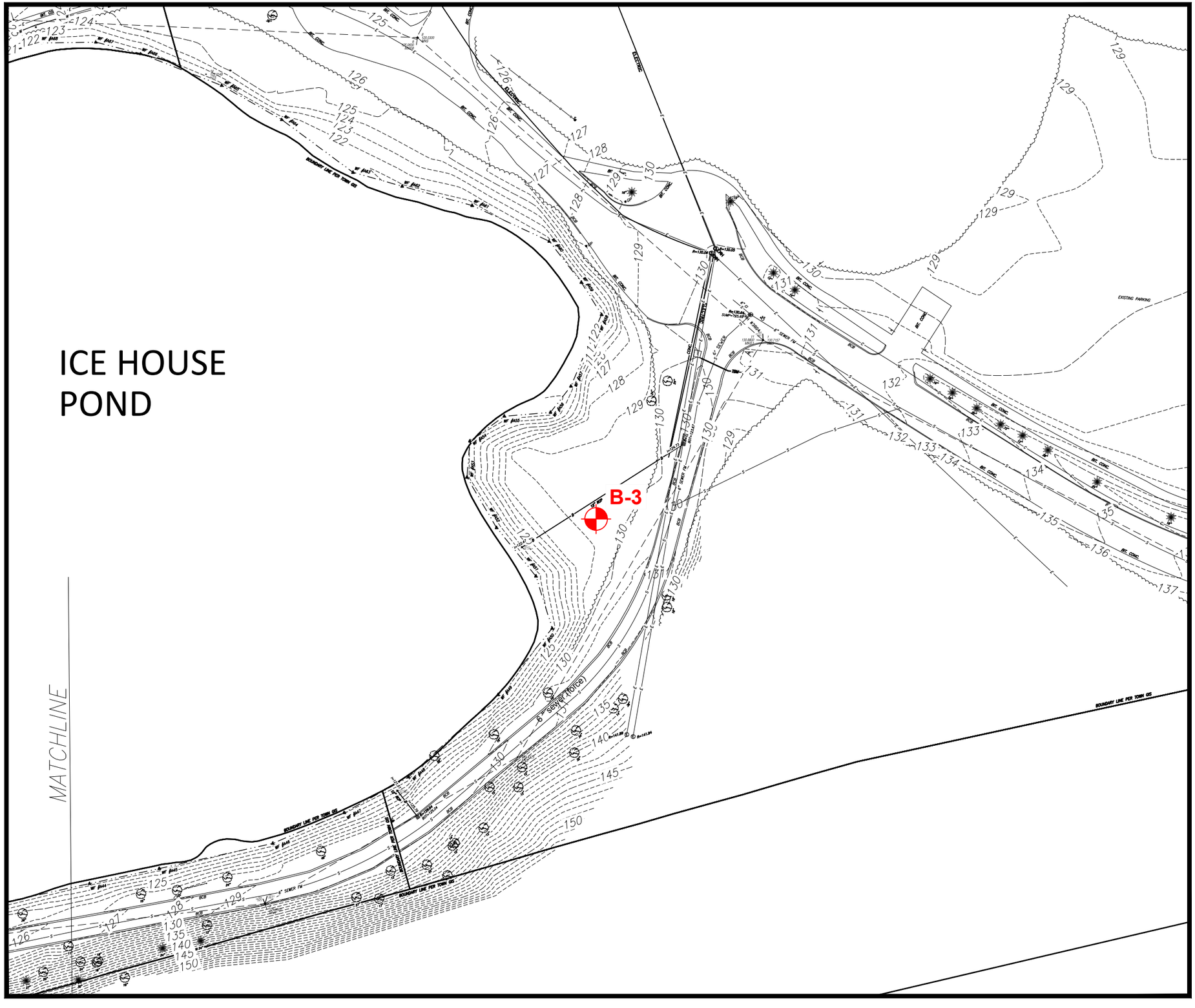

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3. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON ENGINEER.
4. BORING LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-3 — DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – EAST
	PROJECT
	MORSES POND BEACH AND BATH HOUSE
	WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	MZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2B

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NOTES:

1. THIS FIGURE IS BASED ON A SITE CONCEPT PLAN PREPARED BY WESTON AND SAMPSON ENGINEERS, INC. DATED MARCH 2020.
2. FIGURE IS NOT DRAWN TO SCALE.

NOT TO SCALE

FIGURE 3
CONCEPTUAL SITE PLAN

MORSES POND BEACH AND BATHHOUSE
WELLESLEY, MASSACHUSETTS

DESIGNED BY: MJZ	CHECKED BY: JACM	DATE: NOVEMBER 2021

Weston & Sampson℠

Attachment A
Boring Logs

Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-1

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
			● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
	S-1 12/24	9 17 16 17	33		Topsoil- 4 inches thick. Well graded gravel with silt and sand (GW-GM) - Medium dense to dense; light brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines.	
	S-2 6/24	8 10 9 8	19			[2.0 - 21.0] Intermittent auger grinding.
5	S-3 10/24	11 6 6 11	12		Silty sand (SM) - Medium dense; brown; moist; mostly fine to coarse SAND, little non plastic fines, few fine gravel. 2-inch seam of fine sand	[4.0] GC: 9%, SC: 74%, FC: 17%
					Silty sand with gravel (SM) - Dense; brown; moist; mostly fine to coarse SAND, some fine gravel, little non plastic fines.	
10	S-4 6/24	21 23 20 16	43			
					Poorly graded gravel with silt (GP-GM) - Very dense; brown; wet; mostly coarse GRAVEL, few fine to coarse sand, few non plastic fines.	[12.5] Estimated water level at time of drilling based on changes in sample moisture.
15	S-5 6/24	20 24 32 46	>> 56		Sample is primarily gravel-sized rock fragments	
	S-6 12/12				Silty sand (SM) - Brown; wet; mostly fine to medium SAND, some non plastic fines, few fine gravel.	[16.0] Split spoon advanced 12 inches to obtain sample but blow counts not recorded.
20	S-7 9/24	19 17 19 33	36		Silty gravel with sand (GM) - Dense; brown; wet; mostly fine to coarse GRAVEL, some medium to coarse sand, little non plastic fines.	
						Exploration ended at 21.0 ft.

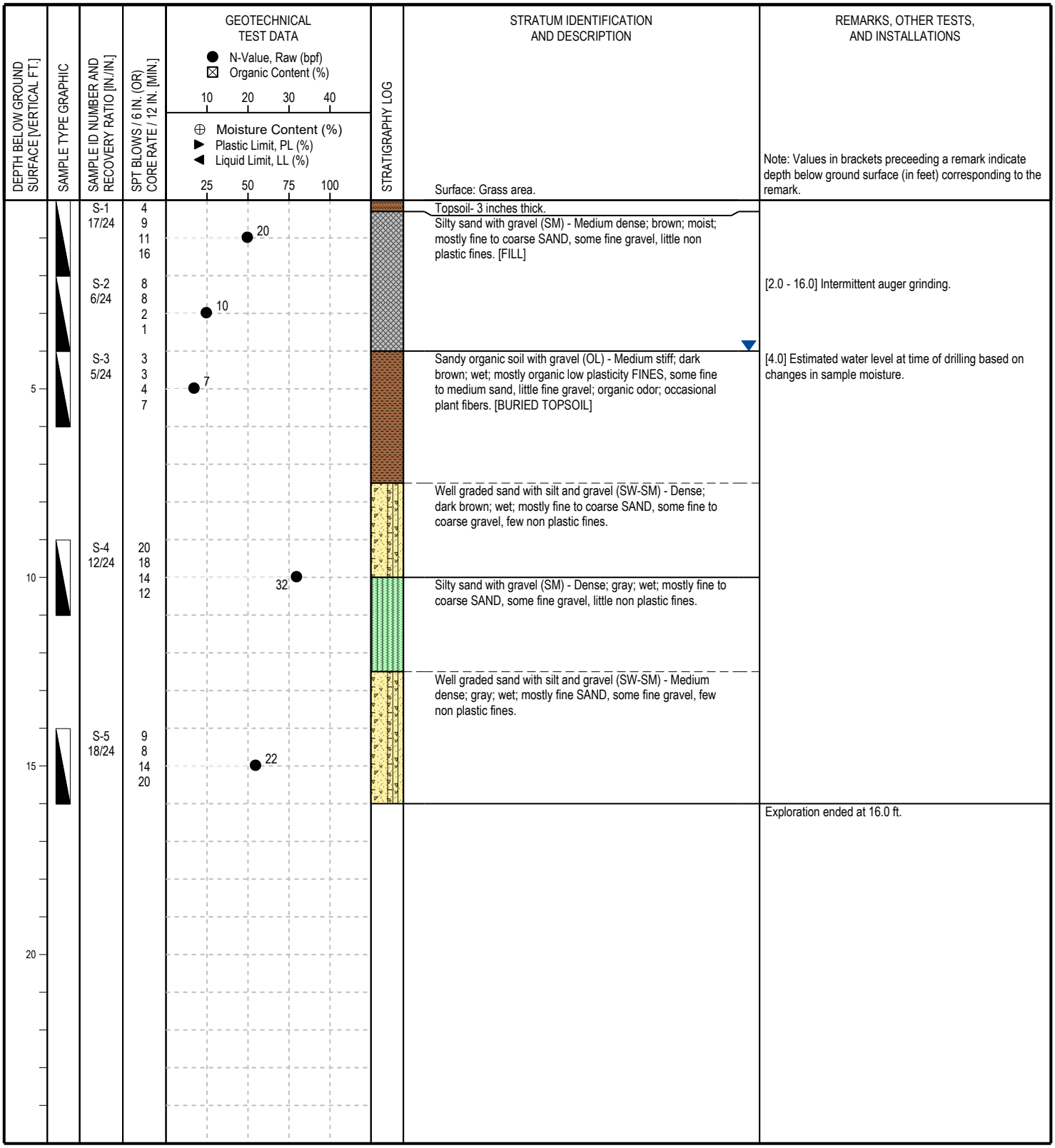
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-2

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-3

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
				N-Value, Raw (bpf); Organic Content (%); 10 20 30 40; Moisture Content (%); Plastic Limit, PL (%); Liquid Limit, LL (%); 25 50 75 100		Surface: Forest debris.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 8/24	3 9 6 6	15		Topsoil- 5 inches thick.	
						Silty sand with gravel (SM) - Loose to medium dense; brown; moist; mostly fine SAND, some fine to coarse gravel, little non plastic fines.	
		S-2 10/24	5 4 5 5	9			[2.0 - 16.0] Intermittent auger grinding.
5		S-3 9/24	8 10 14 12	24		Well graded sand with silt and gravel (SW-SM) - Medium dense; light brown; moist to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines.	
10		S-4 8/24	14 14 12 9	26		▼	[10.0] Estimated water level at time of drilling based on changes in sample moisture.
15		S-5 15/24	8 8 11 22	19			
							Exploration ended at 16.0 ft.
20							

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

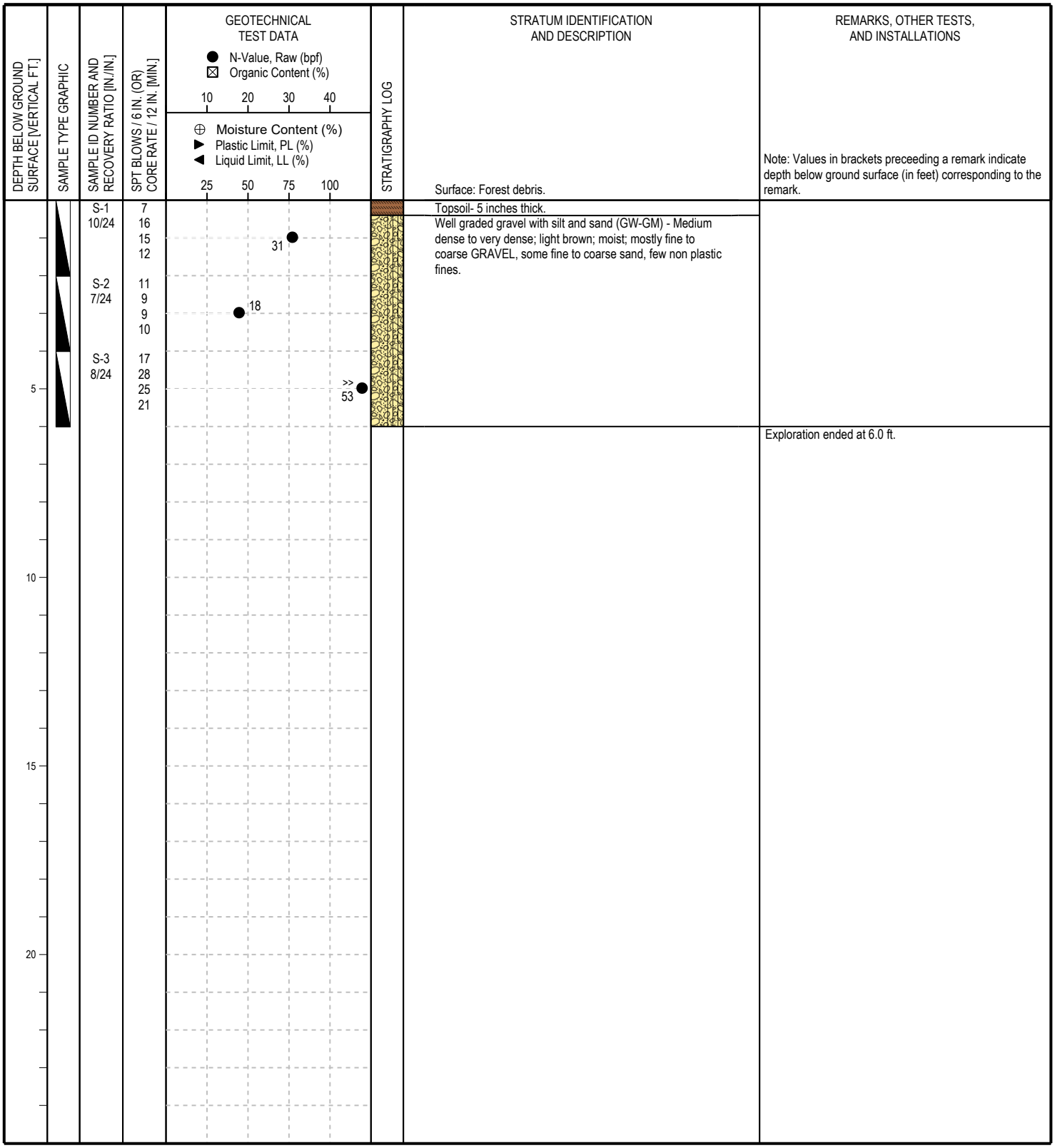
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-4

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	6.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



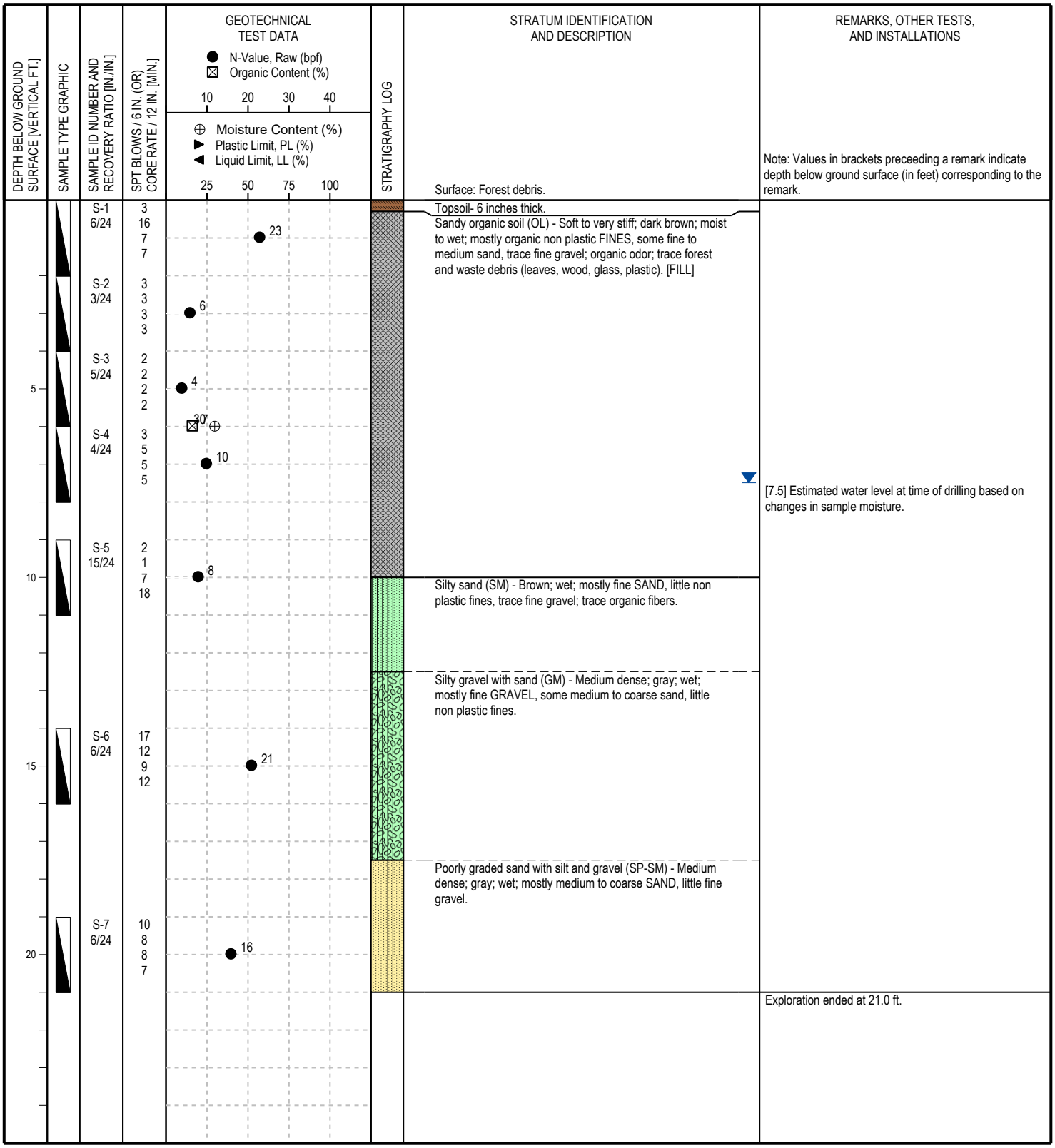
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-5

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 1 GENERAL INFORMATION

GENERAL NOTES AND USE OF LOGS

1.) Explorations were made by ordinary and conventional methods and with care adequate for Weston & Sampson's study and/or design purposes. The exploration logs are part of a specific report prepared by Weston & Sampson for the referenced project and client, and are an integral part of that report. Information and interpretations are subject to the explanations and limitations stated in the report. Weston & Sampson is not responsible for any interpretations, assumptions, projections, or interpolations made by others.

2.) Exploration logs represent general conditions observed at the point of exploration on the date(s) stated. Boundary lines separating soil and rock layers (strata) represent approximate boundaries only and are shown as solid lines where observed and dashed lines where inferred based on drilling action. Actual transitions may be gradual and changes may occur over time.

3.) Soil and rock descriptions are based on visual-manual examination of recovered samples, direct observation in test pits (when permissible), and laboratory testing (when conducted).

4.) Water level observations were made at the times and under the conditions stated. Fluctuations should be be expected to vary with seasons and other factors. Use of fluids during drilling may affect water level observations. The absence of water level observations does not necessarily mean the exploration was dry or that subsurface water will not be encountered during construction.

5.) Standard split spoon samplers may not recover particles with any dimension larger than 1-3/8 inches. Reported gravel conditions or poor sample recovery may not reflect actual in-situ conditions.

6.) Sections of this guide provide a general overview of Weston & Sampson's practices and procedures for *identifying* and *describing* soil and rock. These procedures are predominantly based on ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)*, the International Society of Rock Mechanics (ISRM) standards, and the *Engineering Geology Field Manual* published by the Bureau of Reclamation. Not all aspects of this guide relating to description and identification procedures of soil and rock may be applicable in all circumstances.

SAMPLER GRAPHICS

- Split Spoon (Standard) 2" OD, 1-3/8" ID
- Split Spoon (Oversize) 3" OD, 2-3/8" ID
- Shelby or Piston Tube 3" OD, 2-7/8" ID
- Double-Tube Rock Core Barrel 2" Core Diameter
- Direct Push with Acetate Liner Various Liner Sizes
- A — Auger Sample *(from cuttings or hand auger)*
- G — Grab Sample *(manual, from discrete point)*
- C — Composite Sample *(multiple grab samples)*

WELL GRAPHICS

- Cement concrete seal around casing or riser pipe
- Bentonite seal around casing or riser pipe
- Cement grout seal around casing or riser pipe
- Soil backfill around riser pipe or beneath screen
- Gravel backfill around screen or riser pipe
- Sand backfill around screen or riser pipe (filter sand)
- Solid-wall riser; Sch. 40 PVC, 1" ID unless noted otherwise
- Slotted screen; Sch. 40 PVC, 1" ID with machined slots

CAVING / SEEPAGE TERMS

The following caving and/or seepage terms may appear on a test pit log.

Caving Term	Criteria
Minor	less than 1 cubic ft.
Moderate	1 to 3 cubic ft.
Severe	greater than 3 cubic ft.

Seepage Term	Criteria
Slow	less than 1 gpm
Moderate	1 to 3 gpm
Fast	greater than 3 gpm

KEY TO WATER LEVELS

- Observed in exploration during advancement.
- Measured in exploration at completion, prior to backfilling or well installation.
- Measured in exploration after the stated stabilization period, prior to backfilling, or in well installation if noted.

DEFINITIONS OF COMMON TERMS

Sample Recovery Ratio - The length of material recovered in a drive or push type sampler over the length of sampler penetration, in inches (e.g. 18/24).

Standard Penetration Test (*SPT*) - An in-situ test where a standard split-spoon sampler is driven a distance of 12 or 18 inches (after an initial 6-inch seating interval) using a 140-lb. hammer falling 30 inches for each blow.

SPT Blows - The number of hammer blows required to drive a split-spoon sampler each consecutive 6-inch interval during a *Standard Penetration Test*. If no discernable advancement of a split spoon sampler is made after 50 consecutive hammer blows, 50/X indicates *sampler refusal* and is the number of blows required to drive the sampler X inches.

SPT N-Value (*N*) - The uncorrected blow count representation of a soil's penetration resistance over a 12-inch interval after an initial 6-in. seating interval, reported in blows per foot (bpf). The N-value is correlated to soil engineering properties.

Auger Refusal - No discernable advancement of the auger over a period of 5 minutes with full rig down pressure applied.

Casing Refusal (Driven) - Casing penetration of less than 6 inches after a minimum 50 blows of a drop hammer weighing 300 lbs. or a minimum 100 blows of a drop hammer weighing 140 lbs.

PID Measurement - A measurement (electronic reading) taken in the field using a photoionization detector (PID) to detect the presence of volatile organic compounds in a soil sample. Values are reported as benzene equivalent units in parts per million (ppm) unless noted otherwise.

Rock Quality Designation (RQD) - A qualitative index measure of the degree of jointing and fracture of a rock core taken from a borehole. The RQD is defined as the sum length of solid core pieces 4 inches or longer divided by the run (cored) length, expressed as a percentage. Higher RQD values may indicate fewer joints and fractures in the rock mass.

Fill (Made Ground) - A deposit of soil and/or artificial waste materials that has been placed or altered by human processes.

LABORATORY TESTS AND FIELD MEASUREMENTS

MC	Moisture Content	IC	1D Incremental Consolidation
OC	Organic Content	VS	Laboratory Vane Shear
PL	Plastic Limit	US	Unconfined Compression
LL	Liquid Limit	TC	Triaxial Compression
GC	Gravel Content	PP	Pocket (Hand) Penetrometer
SC	Sand Content	TV	Torvane (Hand Vane)
FC	Fines Content	PID	Photoionization Detector
DS	Direct Shear	FID	Flame Ionization Detector

BORING ADVANCEMENT METHODS

Hollow-Stem Auger Drilling - Utilizes continuous flight auger sections with hollow stems to advance the borehole. Drill rods and a plug are inserted into the auger stem to prevent the entrance of soil cuttings into the augers.

Rotary Wash Drilling - Utilizes downward pressure and rotary action applied to a non-coring bit while washing the cuttings to the surface using a circulating fluid injected down the drill rods. The borehole is supported with either steel casing or the drilling fluid. Where a casing is used, the borehole is advanced sequentially by driving the casing to the desired depth and then cleaning out the casing. The process of driving and cleaning the casing is commonly referred to as the 'drive-and-wash' technique.

Continuous Sampling - Includes a variety of methods and procedures during which the borehole is advanced via continuous recovery of soil samples. *Direct Push* sampling is a common method that uses static downward pressure combined with percussive energy to drive a steel mandrel into the ground at continuous intervals while recovering soil samples in disposable acetate liners.

Rock Coring - Utilizes downward pressure and rotary action applied to a core barrel equipped with a diamond-set or tungsten carbide coring bit. During conventional coring, the entire barrel is retrieved from the hole upon completion of a core run. Wireline coring allows for removal of the inner barrel assembly containing the actual core while the the drill rods and outer barrel remain in the hole. Various types and sizes of core barrels and bits are used.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 2
SOIL DESCRIPTION

SOIL CONSTITUENTS

Naturally occurring soils consist of one or more of the following matrix constituents defined in terms of particle size.

Constituent		U.S. Sieve Size			Observed Size (in.)		
Gravel	(Coarse)	3/4 in.	-	3 in.	3/4	-	3
Gravel	(Fine)	No. 4	-	3/4 in.	1/5	-	3/4
Sand	(Coarse)	No. 10	-	No. 40	1/16	-	1/5
Sand	(Medium)	No. 40	-	No. 10	1/64	-	1/16
Sand	(Fine)	No. 200	-	No. 40	1/300	-	1/64
Fines	(Silt or Clay)	Smaller than		No. 200	Less than		1/300

SOIL IDENTIFICATION

Soil identification refers to the grouping of soils with similar physical characteristics into a category defined by a **group name** and corresponding **group symbol** based on estimation of the matrix soil constituents to the nearest 5% and simple manual tests. Proportions of cobbles, boulders, and other non-matrix soil materials are not considered during this procedure but are included in the overall soil description if observed or thought to be present. Refer to the following descriptions and tables adapted from ASTM D2488.

Coarse-Grained Soil - Coarse-grained soils contain fewer than 50% fines and are identified based on the following table.

Primary Constituent	Fines Percent	Type of Fines and Gradation		Group Symbol	Group Name [1]
GRAVEL *% gravel > % sand*	≤ 5%	well graded		GW	Well graded gravel
		poorly graded		GP	Poorly graded gravel
	10%	clayey fines	well graded	GW-GC	Well graded gravel with clay
			poorly graded	GP-GC	Poorly graded gravel with clay
		silty fines	well graded	GW-GM	Well graded gravel wth silt
			poorly graded	GP-GM	Poorly graded gravel with silt
	15% to 45%	clay fines		GC	Clayey gravel
		silt fines		GM	Silty gravel
SAND *% sand ≥ % gravel*	≤ 5%	well graded		SW	Well graded sand
		poorly graded		SP	Poorly graded sand
	10%	clayey fines	well graded	SW-SC	Well graded sand with clay
			poorly graded	SP-SC	Poorly graded sand with clay
		silty fines	well graded	SW-SM	Well graded sand with silt
			poorly graded	SP-SM	Poorly graded sand with silt
	15% to 45%	clay fines		SC	Clayey sand
		silt fines		SM	Silty sand

[1] If soil is a gravel and contains 15% or more sand, add "with sand" to the group name. If soil is a sand and contains 15% of more gravel, add "with gravel" to the group name.

Inorganic Fine-Grained Soil - Fine-grained soils contain 50% or more fines and are identified based on the following table.

Plasticity Criteria	Dry Strength	Coarse Fraction S = Sand, G = Gravel		Group Symbol	Group Name [1]
Medium	Medium to high	< 15% S + G		CL	Lean clay
		≥ 30%	% S ≥ % G	CL	Sandy lean clay
		S + G	% S < % G	CL	Gravelly lean clay
Non-plastic	None to low	< 15% S + G		ML	Silt
		≥ 30%	% S ≥ % G	ML	Sandy silt
		S + G	% S < % G	ML	Gravelly silt
High	High to very high	< 15% S + G		CH	Fat clay
		≥ 30%	% S ≥ % G	CH	Sandy fat clay
		S + G	% S < % G	CH	Gravelly fat clay
Low to Medium	Low to medium	< 15% S + G		MH	Elastic silt
		≥ 30%	% S ≥ % G	MH	Sandy elastic silt
		S + G	% S < % G	MH	Gravelly elastic silt

[1] If soil contains 15% to 25% sand or gravel, add "with sand" or "with gravel" to the group name.

Organic Fine-Grained Soil - Fine-grained soils that contain enough organic particles to influence the soil properties are identified as Organic Soil and assigned the group symbol **OL** or **OH**.

Highly Organic Soil (Peat) - Soils composed primarily of plant remains in various stages of decomposition are identified as Peat and given the group symbol **PT**. Peat usually has an organic odor, a dark brown to black color, and a texture ranging from fibrous (original plant structure intact or mostly intact) to amorphous (plant structure decomposed to fine particles).

SOIL DESCRIPTION

Soils are *described* in the following general sequence. Deviations may occur in some instances.

Identification Components

(1) Group Name and Group Symbol

Description Components

(2) Consistency (Fine-Grained) or Apparent Density (Coarse-Grained)
(3) Color (*note, the term "to" may be used to indicate a gradational change*)
(4) Soil Moisture
(5) Matrix Soil Constituents (Gravel, Sand, Fines)
  └► Proportion (*by weight*), particle size, plasticity of fines, angularity, etc.
(6) Non-Matrix Soil Materials and Proportions (*by volume*)
(7) Other Descriptive Information (Unusual Odor, Structure, Texture, etc.)
(8) [Geologic Formation Name or Soil Survey Unit]

SPT N-VALUE CORRELATIONS

Consistency	SPT N-Value	Apparent Density	SPT N-Value
Very soft	0 - 2	Very loose	0 - 5
Soft	2 - 4	Loose	5 - 10
Medium stiff	4 - 8	Medium dense	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very stiff	15 - 30	Very dense	> 50
Hard	> 30		

SOIL MOISTURE

Dry..... Apparent absence of moisture; dry to the touch.
Moist..... Damp but no visible water.
Wet..... Visible free water; saturated.

PROPORTIONS / PERCENTAGES

Proportions of gravel, sand, and fines (excluding cobbles, boulders, and other constituents) are stated in the following terms indicating a range of percentages by weight (to nearest 5%) of the minus 3-in. soil fraction and add up to 100%.

Mostly ..... 50% - 100%
Some ..... 30% - 45%
Little ..... 15% - 25%
Few ..... 5% - 10%
Trace..... Less than 5%

Proportions of cobbles, boulders, and other non-matrix soil materials including artificial debris, roots, plant fibers, etc. are stated in the following terms indicating a range of percentages by volume (to the nearest 5%) of the total soil.

Numerous ..... 40% - 50%
Common ..... 25% - 35%
Occasional ..... 10% - 20%
Trace..... Less than 5%

PLASTICITY (FINES ONLY)

Non-plastic.....Dry specimen ball falls apart easily. Cannot be rolled into thread at any moisture content.
Low.....Dry specimen ball easily crushed with fingers. Can be rolled into 1/8-in. thread with some difficulty.
Medium.....Difficult to crush dry specimen ball with fingers. Easily rolled into 1/8-in. thread.
High.....Cannot crush dry specimen ball with fingers. Easily rolled and re-rolled into 1/8-in. thread.

COBBLES AND BOULDERS

Cobbles - Particles of rock that will pass a 12-in. square opening and be retained on a 3-in. sieve.

Boulders - Particles of rock that will not pass a 12-in. square opening.

Note: Where the percentage (by volume) of cobbles and/or boulders cannot be accurately or reliably estimated, the terms "with cobbles", "with boulders", or "with cobbles and boulders" may be used to indicate observed or inferred presence.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 3
ROCK DESCRIPTION

ROCK DEFINITION

Where reported on an exploration log, *rock* is defined as any naturally formed aggregate of mineral matter occurring in larges masses or fragments. This definition of rock should not be taken as a replacement for any definitions relating to rock and/or rock excavation defined in construction documents. Intensely weathered or decomposed rock that is friable and can be reduced to gravel size particles or smaller by normal hand pressure is identified and described as soil. Poorly indurated formational materials which display both rock-like and soil-like properties are identified and described as rock followed by the soil description. In such cases, the term "poorly indurated" or "weakly cemented" is added to the rock name (e.g. weakly cemented sandstone).

ROCK IDENTIFICATION

Rock is identified by a combination of *rock type* (igneous, metamorphic, or sedimentary) followed by the the *rock name* (e.g. granite, schist, sandstone).

ROCK DESCRIPTION

Rock descriptions are presented in the following general sequence. The detail of description is dictated by the complexity and objectives of the project.

Identification Components

(1) Rock Type and Name

Description Components

(2) Rock Grain Size (*for clastic sedimentary rock*)
(3) Crystal Size (*for igneous and metamorphic rock*)
(4) Bedding Spacing (*for sedimentary rock*)
(5) Color
(6) Hardness and Weathering Descriptors
(7) Fracture Density
(8) [Geologic Formation Name]

ROCK QUALITY DESIGNATION

$$\text{RQD (\%)} = \frac{\Sigma \text{ Length of intact core pieces} \geq 4 \text{ inches}}{\text{Total length of core run (inches)}} \times 100$$

The RQD should correlate with the fracture density in most cases. Higher RDQ values generally indicate fewer joints and fractures.

GRAIN / CRYSTAL SIZE

Grain Size for Clastic Sedimentary Rock

The names of clastic sedimentary rocks are generally based on their predominant clast or grain size (e.g. fine sandstone, medium sandstone, coarse gravel conglomerate, cobble conglomerate, siltstone, claystone).

Crystal Size for Igneous and Metamorphic Rock

Grain Size Description	Average Crystal Size (in.)
Very coarse grained (pegmatitic)	Greater than or equal to 3/8
Coarse-grained	Between 3/16 and 3/8
Medium-grained	Between 1/32 and 3/16
Fine-grained	Between 1/250 and 1/32
Aphanitic	Less than or equal to 1/250

BEDDING SPACING

Bedding Description	Thickness / Spacing
Massive	Less than 10 ft.
Very thickly bedded	3 ft. to 10 ft.
Thickly bedded	1 ft. to 3 ft.
Moderately bedded	4 in. to 1 ft.
Thinly bedded	1 in. to 4 in.
Very thinly bedded	1/4 in. to 1 in.
Laminated	Less than 1/4 in.

Note: Bedding is generally only applicable to sedimentary or bedded volcanic rocks.

HARDNESS

Hardness	Criteria
Extremely hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows.
Very hard	Cannot be scratched with a pocketknife or sharp pick with difficulty. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with with a pocketknife or sharp pick with difficulty. Breaks with heavy hammer blows.
Moderately hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows.
Moderately soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick. Breaks with light to moderate manual pressure.
Very soft	Can be readily indented, grooved, or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

WEATHERING (INTACT ROCK)

Weathering Description	Discoloration and/or Oxidation	General Characteristics
Fresh	Body of rock and fracture surfaces are not discolored or oxidized.	Rock texture unchanged. Hammer rings when crystalline rocks are struck.
Slightly weathered	Discoloration or oxidation limited to surface of, or short distance from, fractures. Most surfaces exhibit minor to complete discoloration.	Rock texture preserved. Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately weathered	Discoloration or oxidation extends usually throughout. Fe-Mg minerals appear rusty. All fracture surfaces are discolored or oxidized.	Rock texture generally preserved. Hammer does not ring when rock is struck. Body of rock slightly weakened.
Intensely weathered	Discoloration or oxidation throughout. Feldspar and Fe-Mg minerals altered to clay to some extent. All fracture surfaces are discolored or oxidized and friable.	Rock texture altered by chemical disintegration. Can usually be broken with moderate to heavy manual pressure or by light hammer blow . Body of rock is significantly weakened.
Decomposed	Discoloration or oxidation throughout but resistant minerals such as quartz may be unaltered. All feldspar and Fe-Mg minerals are completely altered to clay.	Resembles a soil; partial or complete remnant rock structure may be preserved. Can be granulated by hand. Resistant minerals may present as stringers or dikes.

FRACTURE DENSITY

Description	Observed Fracture Density
Unfractured	No fractures
Very slightly fractured	Core lengths greater than 3 ft.
Slightly fractured	Core lengths mostly from 1 ft. to 3 ft.
Moderately fractured	Core lengths mostly from 4 in. to 1 ft.
Intensely fractured	Core lengths mostly from 1 in. to 4 in.
Very intensely fractured	Mostly chips and fragments

Note: Fracture density is based on the fracture spacing in recovered core, measured along the core axis (excluding mechanical breaks).

Attachment B
Geotechnical Laboratory Test Results

THIELSCH ENGINEERING

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thielsch.com
Let's Build a Solid Foundation

Client Information:
Weston & Sampson
Foxborough, MA
PM: Matthew Zanchi
Assigned By: Matthew Zanchi
Collected By: Client

Project Information:
Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA 02482
W&S Project Number: ENG21-0701
Summary Page: 1 of 1
Report Date: 10.18.2021

LABORATORY TESTING DATA SHEET, Report No.: 7421-K-B009

Boring No.	Sample No.	Depth (ft)	Laboratory No.	Identification Tests								Proctor / CBR / Permeability Tests								Laboratory Log and Soil Description
				As Received Moisture Content %	LL %	PL %	Gravel %	Sand %	Fines %	Org. %	G_s	Dry unit wt. pcf	Test Moisture Content %	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) (Corr.)	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec	
				D2216	D4318		D6913/D422			D2974	D854			D1557						
B-1	S-3	4-6	21-S-B280				9.4	74.0	16.6											Light Brown silty sand
B-5	S-4	6-8	21-S-B281	29.9						6.6										Organic Content Only

Date Received: 10.08.2021

Reviewed By: Ronald L. Thielsch

Date Reviewed: 10.18.2021

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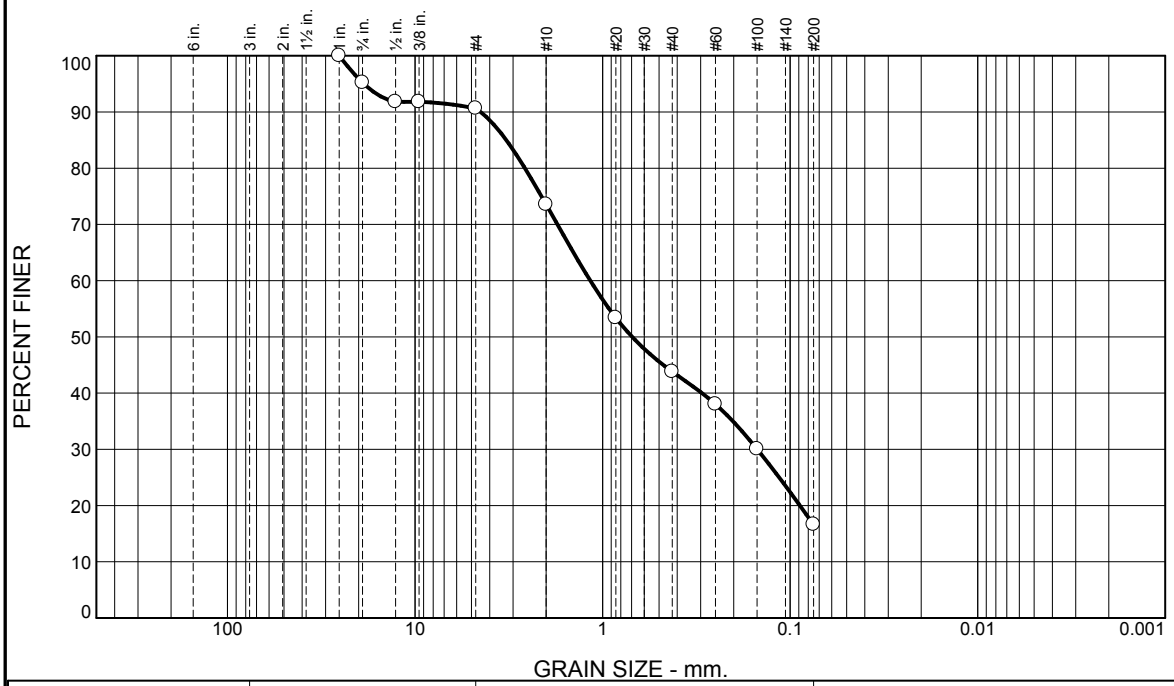
Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.8	4.6	17.0	29.8	27.2	16.6	

Test Results (D6913 & ASTM D 1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
3/4"	95.2		
1/2"	91.8		
3/8"	91.8		
#4	90.6		
#10	73.6		
#20	53.4		
#40	43.8		
#60	38.0		
#100	30.0		
#200	16.6		

* (no specification provided)

Material Description

Light Brown silty sand

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= SM **AASHTO (M 145)=** A-1-b

Coefficients

D_{90}= 4.4663 D_{85}= 3.2627 D_{60}= 1.1624
D_{50}= 0.6960 D_{30}= 0.1497 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 10.08.2021 **Date Tested:** 10.13.2021

Tested By: RL / DN

Checked By: Ronelle LeBlanc, E.I.T.

Title: Laboratory Coordinator

Source of Sample: B-1 **Depth:** 4-6
Sample Number: S-3 **Date Sampled:**

Thielsch Engineering Inc.

Cranston, RI

Client: Weston & Sampson

Project: Morses Pond Beach and Bath House
Morses Pond Access Rd, Wellesley, MA 02482

Project No: ENG21-0701 **Figure** 21-S-B280

Attachment C
Important Information about this
Geotechnical-Engineering Report

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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Appendix D: Wetlands Delineation Report

Weston & Sampson

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Wetland Delineation Report

August 2021

Wellesley, Massachusetts
Project # ENG21-0701

Morses Pond Beach
Wellesley, MA

Wetland Delineation Conducted By:
Devin Batchelder, CWS on 8/27/2021

TABLE OF CONTENTS

Page

1.0 SITE DESCRIPTION....1-1

2.0 DELINEATION OF WETLAND RESOURCES....2-1
2.1 Site Observations....2-1
2.2 Wetland Delineation Methodology....2-1
2.3 Isolated Vegetated Wetland (IW)....2-2
2.4 Bank....2-3
2.5 Other Protected Areas....2-4

3.0 SUMMARY....3-1

4.0 REFERENCES....4-1

FIGURES

Figure 1....Wetlands Field Map
Figure 2....USGS Topographic Map
Figure 3....FEMA FIRM Map
Figure 4....Environmental Resources Map

APPENDICES

Appendix A ....ACOE Wetland Determination Data Forms
Appendix B ....Site Photographs

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1.0 SITE DESCRIPTION

On August 27th, 2021, the presence of wetland resources was investigated near Morses Pond in Wellesley, MA. This investigation area is located off Morses Pond Access Road with undeveloped woodlands and recreational walking paths. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland resource areas including, an isolated vegetated wetland and lake banks, were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is trained in the wetland delineation process using the Massachusetts Department of Environmental Protection (MassDEP) and the US Army Corps of Engineers methodology. A further description of these wetland resource areas is presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

The Weston & Sampson wetland scientist, trained in the ACOE Wetland Delineation Manual and Massachusetts Department of Environmental Protection (MassDEP) Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetland Protection Act guidance document, observed the following protected wetland resources at the site:

- Isolated Vegetated Wetland (IW)
- Banks – Lake

Field data were recorded on US Army Corps of Engineers (ACOE) Wetland Determination Data Forms. See Appendix A for completed data forms and Appendix B for site photographs.

2.2 Wetland Delineation Methodology

A wetland delineation assessment was conducted in accordance with the Massachusetts Wetland Protection Act Regulations (310 CMR 10.55(2)(c)), Massachusetts Department of Environmental Protection (MassDEP) Delineating Bordering Vegetated Wetlands Under the Massachusetts Protection Act (March 1995), and ACOE Wetland Manual (Technical Report Y-87-1).

The bordering vegetated wetlands (BVW) delineation methodology included the characterization of vegetation, soil any hydrologic conditions in both wetland and upland areas to identify the transitional area, which was used as the wetland limit. Pink flags with distinct flag numbers are left in the field to show wetland resource area limits.

Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations, the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when

ranked in descending order of abundance and cumulatively totaled) that immediately exceeds 50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, water-stained leaves.

2.3 Isolated Vegetated Wetland (IW)

A single Isolated Vegetated Wetland (IW) series was delineated at the site. The limit of the IW resource area was determined by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions consistent with the BVW delineation methodology. Wetland flags left in the field included:

- Wet A1 through Wet A9 (Wet “A” Series)

Dominant vegetation within the IW included red maple (*Acer rubrum*), coastal pepperbush (*Clethra alnifolia*), and poison ivy (*Toxicodendron radicans*), these species commonly thrives in hydric conditions. The soils were composed of fine sandy loam with 5% redoximorphic features appearing 8 inches below the soil surface. Wetland hydrology was evident having a high-water table, surface water, saturation present, and water-stained leaves.

The adjacent upland vegetation was dominated by American hop-hornbeam (*Ostrya virginiana*), red oak (*Quercus rubra*), and wild sarsaparilla (*Aralia nudicaulis*). Soils were composed of fine sandy loam. No indicators of wetland hydrology were observed.

The Massachusetts Wetland Protection Act does not protect isolated vegetated wetlands however, certain individual communities have chosen to extend protections to these isolated wetlands within their local bylaws. The town of Wellesley places protection on isolated wetlands per the Town of Wellesley Wetlands Protection Bylaw: Article 44 of Town Bylaw section 2 states isolated wetlands are considered jurisdictional as long as they cover 2,500 square feet of surface area. This isolated wetland on site is approximately 5,360 square feet in size, therefore is considered to be jurisdictional.

Under the Town of Wellesley Wetland bylaws isolated wetlands are subject to a 100-foot buffer.

2.4 Bank

Water bodies, including perennial streams, intermittent streams, ponds and lakes, have banks which are protected by the Massachusetts Wetland Protection Act. Bank is a wetland resource area defined by 310 CMR 10.54(2)(a) as "the portion of land surface which normally abuts and confines a water body. It occurs between a waterbody and a vegetated bordering wetland and adjacent floodplain, or, in absence of these, it occurs between a waterbody and an upland." Vegetated banks provide valuable functions such as flood control, stormwater prevention, fisheries protection, and water quality protection. The limit of this resource area is identified by Top of Bank (TOB) which is located at the first observable break in slope or the Mean Annual Flood Level (MAFL), whichever is lower. TOB is easily identified in the field so that indicator was utilized for this wetland delineation.

Lake Bank

Morses Pond and adjacent un-named adjacent extension of the pond are located in Wellesley, MA. Both ponds are connected to form a joined water body. The waterbody is 100 acres in size, based on the Towns of Wellesley history page on this pond. Due to its size, Morses Pond and un-named pond are classified as a lake. According to the Massachusetts Wetland Protection Act a lake is defined as "any open body of fresh water with a surface area of ten acres or more and shall include great ponds." (310 CMR 10.04). Great Ponds are defined in 310 CMR 9.02 as "any pond which contained more than ten acres in its natural state … prior to any alteration by damming or other human activity". Although Morses

Pond is greater than ten acres in size, it is not listed on the Massachusetts List of Great Ponds. Both banks of the lake were flagged. Wetland flags left in the field included:

- TOB-A1 through TOB-A84 Stop (Lake Bank "A" Series)

The Lake Bank A Series begins near the Morses Pond boat ramp. Flags were not left within the beach area due to public safety and usage however the locations were identified using GPS. The flag line continues to include the un-named lake extension due to a hydrologic connection being present running under a walking bridge. Fewer flags were hung on the western side of the unnamed lake extension due to the presence of a fence. The flag line otherwise continues to wrap around the entire lake system.

Banks are subject to a 100-foot buffer under the Massachusetts Wetland Protection Act per 310 CMR 10.02(2)(b).

2.5 Other Protected Areas

Weston & Sampson created environmental resources maps (see Figure 4) of the site to determine the presence of other protected areas. The data source of these map layers was the Massachusetts Geographic Information System (MassGIS). These areas included:

- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Certified and Potential Vernal Pools
- Areas of Critical Environmental Concern (ACEC)
- Outstanding Resource Waters (ORW)
- Cold Water Fisheries

Wetland resources identified in the field were also added to these maps. These maps showed no other environmental resource areas are located on this site other than the wetland resource areas previously identified in this report.

FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site. See Figure 3 for FIRM map. Based on the information provided

by the FIRM map a portion of the investigation area located within a Zone AE. FEMA defines a Zone AE as “areas subject to inundation by the 1-percent-annual-chance flood event”. The 1-percent-annual-chance flood event is the same as the 100-year event. As a result, portions of the investigation area are located within the 100-year flood zone.

3.0 SUMMARY

On August 27th, 2021, the presence of wetland resources was investigated near Morses Pond in Wellesley, MA. A single isolated vegetated wetland and lake banks were identified and flagged at the site.

Additional environmental mapping was conducted using MassGIS data layers and FEMA FIRM mapping. This additional mapping indicates that the site location is found in the 100-year flood zone.

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Path: \\wse03.local\WSE\Projects\MA\Wellesley MA\Morses Pond Beach Feasibility Study (2)\Permitting\Wetland Delineation Wellsley\GIS\Maps\Wetland Flags.mxd **User:** Page.Hailey **Saved:** 9/2/2021 1:46:59 PM **Opened:** 9/2/2021 1:47:10 PM

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Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

Legend

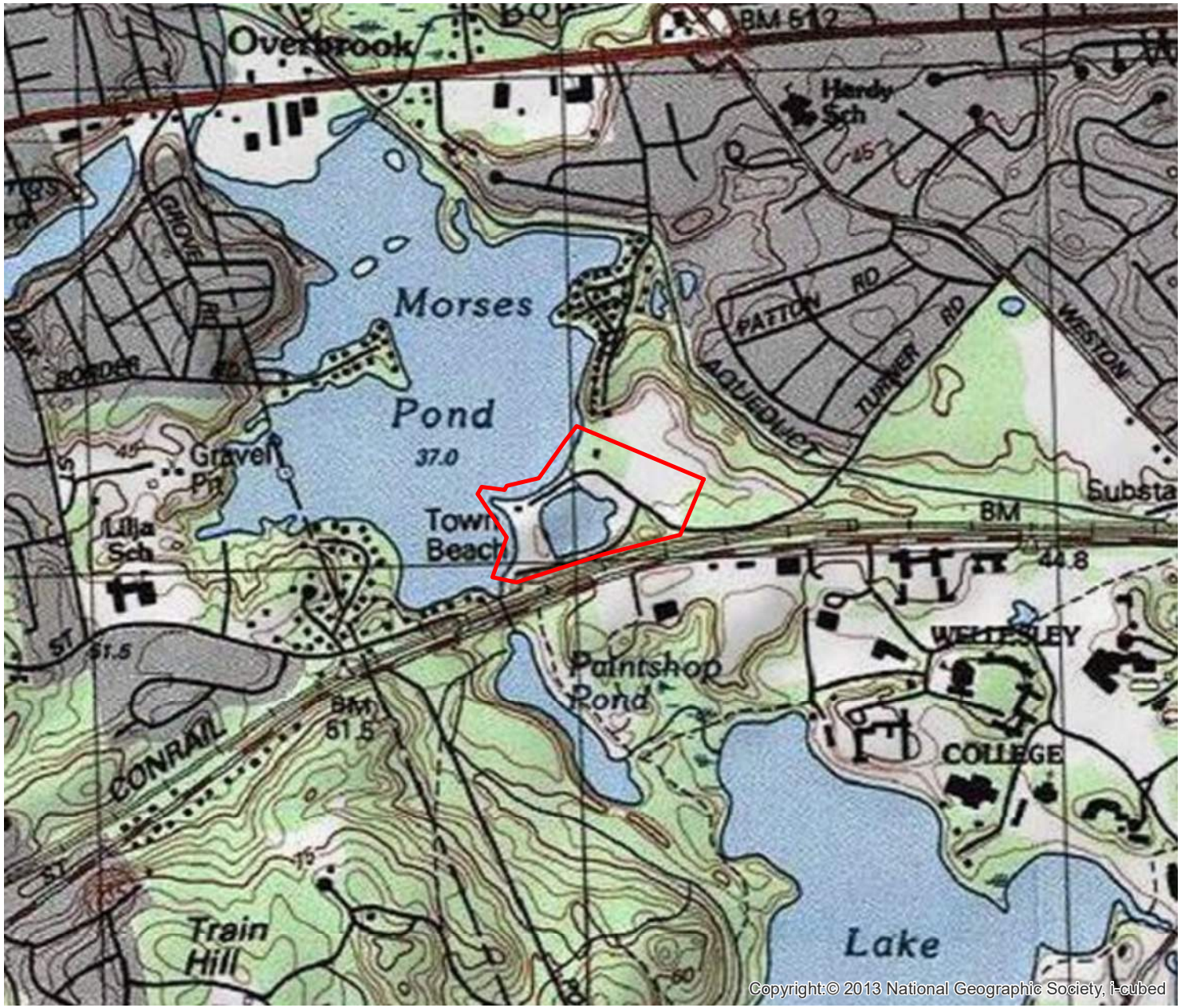
- Area of Interest
- Isolated Wetland
- Bank- Lake

FIGURE 1

Morses Pond Beach
Wellesley, MA

Wetland Field Map

Weston & Sampson



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Data Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

Legend

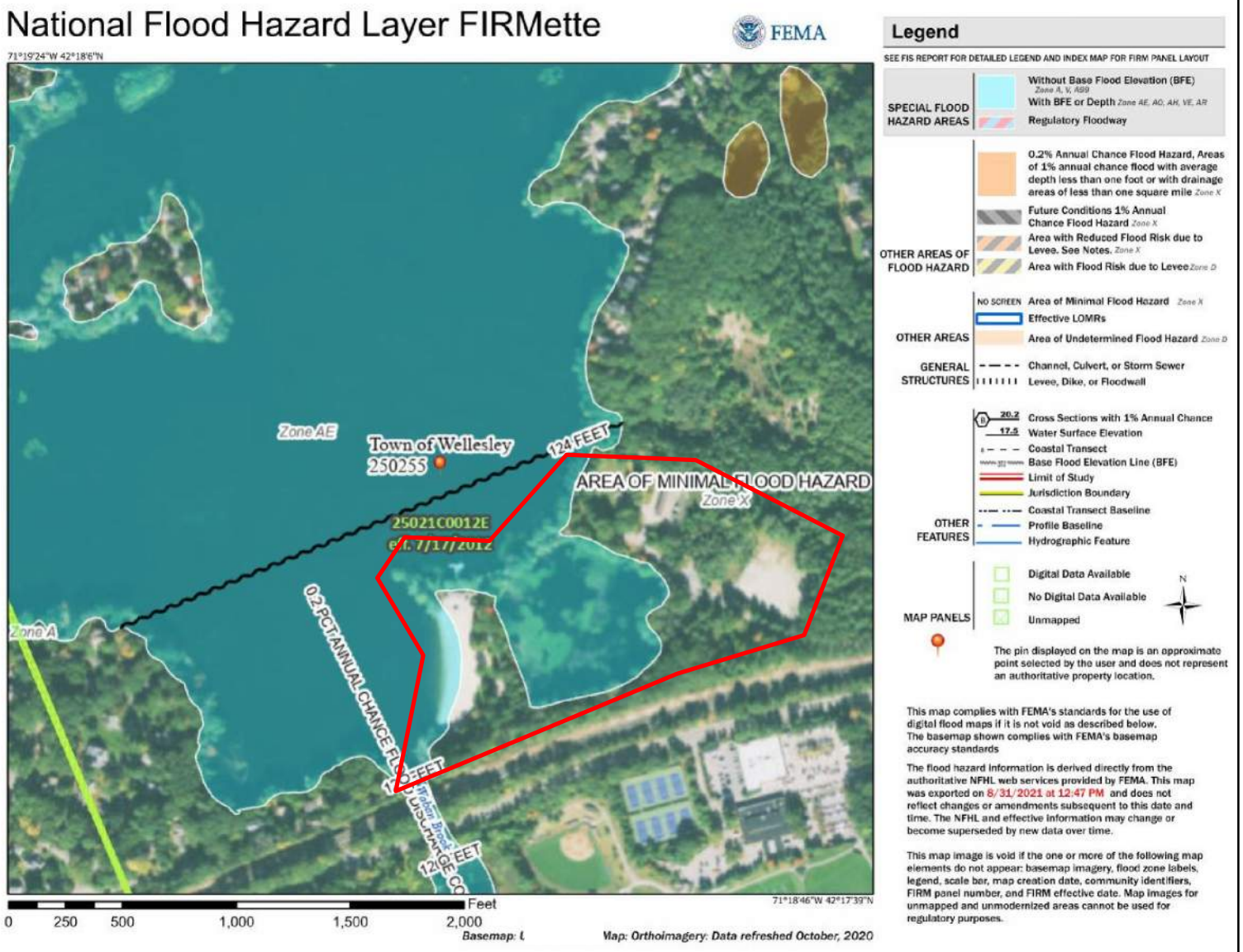
Area of Interest

FIGURE 2

Morses Pond Beach
Wellesley,MA

USGS Topographic Map

Weston & Sampson



Legend

Area of Interest

FIGURE 3

Morses Pond Beach
Wellesley,MA

FEMA Map

Weston & Sampson

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200 100 0 200
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Data Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

Legend

- Isolated Wetland
- Bank- Lake
- Area of Interest
- Perennial Stream
- Intermittent Stream
- Marsh/Bog
- Wooded marsh
- Cranberry Bog
- Salt Marsh
- Open Water
- Reservoir (with PWSID)
- Tidal Flats
- Beach/Dune
- Public Way
- Marsh Boundary - landward
- Landlocked Tidelands
- Jurisdiction
- Historic High Water
- Marsh Boundary - seaward
- Contemporary High Water
- Inferred Contemporary High Water
- Inferred Historic High Water
- <all other values>

HABITAT

- American Oyster
- Blue Mussel
- Bay Scallop
- European Oyster
- Ocean Quahog
- Quahog
- Razor Clam
- Surf Clam
- Sea Scallop
- Soft-Shelled Clam

ACECs

- ACECs
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Priority Habitats of Rare Species
- NHESP Certified Vernal Pools
- NHESP Potential Vernal Pools
- Cold Water Fisheries

Outstanding Resource Waters

- Public Water Supply Contributor
- ORW for ACEC
- ORW for both Water Supply and Other

FIGURE 4

Morses Pond Beach
Wellesley,MA

Environmental Resources Map

Weston & Sampson

APPENDIX A

ACOE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Morses Pond City/County: Wellesley Sampling Date: 8/27/2021

Applicant/Owner: _____ State: MA Sampling Point: Wet-A UP

Investigator(s): Devin Batchelder Section, Township, Range: _____

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): 0-8% Lat: 42°17'46.81"N Long: 71°18'53.48"W Datum: _____

Soil Map Unit Name: Hinckley loamy sand NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** **Yes** _____ **No** X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wet-A UP

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. American Hop-hornbeam(*Ostrya virginiana*)	25	Yes	FACU
2. Red Oak (*Quercus rubra*)	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	35	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. American Hop-hornbeam(*Ostrya virginiana*)	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	
Herb Stratum (Plot size: 5')			
1. Wild Sarsaparilla(*Aralia nudicaulis*)	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	50 (A)		200 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: Wet-A UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR2/1	100					FSL	
10-20	10YR3/5	100					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Morses Pond City/County: Wellesley Sampling Date: 8/27/2021

Applicant/Owner: Borrego Solar State: MA Sampling Point: Wet-A WET

Investigator(s): Devin Batchelder Section, Township, Range: _____

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): 0-8% Lat: 42°17'46.81"N Long: 71°18'53.48"W Datum: _____

Soil Map Unit Name: Hinckley loamy sand NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes X	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0"
Water Table Present?	Yes X	No _____	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: BVW-A8 WET

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Red Maple (*Acer Rubrum*)	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Coastal Pepperbush(*Clethra alnifolia*)	25	Yes	FAC
2. White Ash(*Fraxinus americana*)	5	No	FACU
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Poison ivy (*Toxicodendron radicans*)	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. Virginia Creeper(*Parthenocissus quinquefolia*)	1	No	FACU
2.			
3.			
4.			
	1 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: BVW-A8 WET

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR2/1	100					FSL	
8-20	2.5Y5/2	95	10YR4/6	5			FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

APPENDIX B

Site Photographs

Photo 1: Morses Pond

Photo 2: Connecting Bridge of Un-named adjacent extension to Morses Pond

Photo 3: Un-named extension adjacent Pond to Morses

Photo 4: Isolated Wetland

Appendix E: Electrical System Narrative

Morses Pond Bathhouse & Administration Building
Wellesley, MA
J#791 010 00.00
L#79933/Page 1/April 1, 2022

ELECTRICAL SYSTEMS

NARRATIVE REPORT

The following is the Electrical Systems narrative, which defines the scope of work and capacities of the Power and Lighting system, as well as the Basis of Design.

1. CODES

All work installed under Section 260000 shall comply with the Massachusetts State Building Code and all state, county, and federal codes, laws, statutes, and authorities having jurisdiction.

2. DESIGN INTENT

All work is new and consists of furnishing all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operating installation of the electrical work and all items incidental thereto, including commissioning and testing.

A. Power Distribution:

1. Electrical power will be brought into the site via underground secondary cables. Service entrance equipment will be located in the utility room, along with lighting and power panels. The service capacity will be sized for 200 amperes at 120/208V, 3Ø, 4 wire.

2. The emergency lighting system will consist of battery backup integral to the LED light fixtures.

B. Interior Lighting System:

1. General offices lighting fixtures will consist of recessed 2'x2' LED luminaries with dimming drivers. The fixtures will be wired for automatic dimming where natural day light is available and also for multi-level switching.

2. Toilet Rooms will consist of LED wall mounted valance fixtures and wet location LED recessed downlights.

3. Storage, mechanical, etc. will be provided with LED industrial wraparound fixtures with acrylic lens.

4. Exit signs will be of the energy efficient, long life LED type with battery back-up.

5. Each area will be locally switched and designed for multi-level controls. Each office space and toilet room will have an occupancy sensor to turn lights off when unoccupied. In general, lighting power density will be 30-40% less than IECC 2018.

C. Site Lighting System:

1. Building perimeter fixtures will be wall mounted LED luminaries over exterior doors.

2. Covered canopy lighting will consist of marine grade LED cylinders with dimming drivers.

3. All fixtures will be of the dark sky compliant, cut-off type.

D. Wiring Devices:

1. Offices will generally have one (1) duplex outlet per wall. At each workstation a double duplex receptacle will be provided.

2. Exterior weatherproof receptacles will be installed at exterior doors.

3. Receptacles in Toilet Rooms will be GFI type mounted at 48 inches above floor.

E. Fire Alarm System:

1. A fire alarm and detection system will be provided with battery back-up. The system will be of the addressable type where each device will be identified at the control panel and remote annunciator by device type and location to facilitate search for origin of alarms.

2. Heat detectors will be provided in all spaces.

3. The alarm transmission method will be via an AES radio box with antenna via the multi-tap cabinet.

F. Security System:

1. An addressable security intrusion system will be provided.

2. Position switches will be provided at all exterior doors.

G. Lightning Protection System:

1. A system of lightning protection will be provided. The system will be installed in compliance with the provisions of the latest “Code for Protection Against Lightning” for buildings as adopted by the National Fire Protection Association and the Underwriters’ Laboratories, Inc. for UL Master Label System.

2. The lightning protection equipment will include air terminals, conductors, conduits, fasteners, connectors, ground rods, etc.

3. The lightning protection system will be installed for the new facility.

3. TESTING REQUIREMENTS

A. The Electrical Contractor shall provide testing of the following systems with the Owner and Owner's Representative present:

1. Lighting and power panels for correct phase balance.
2. Emergency Lighting
3. Lighting control system
4. Fire alarm system.
5. Security systems.
6. Lightning Protection System

B. Testing reports shall be submitted to the Engineer for review and approval before providing to the Owner.

4. OPERATION MANUALS AND MAINTENANCE MANUALS:

A. When the project is completed, the Electrical Contractor shall provide operation and maintenance manuals to the Owner.

5. RECORD DRAWINGS AND CONTROL DOCUMENTS:

A. When the project is completed, an as-built set of drawings, showing all lighting and power requirements from contract and addendum items will be provided to the Owner.

Appendix F: HVAC System Narrative

Morses Pond Bathhouse & Administration Building
Wellesley, MA
J#791 010 00.00
L#79932/Page 1/April 1, 2022

HVAC SYSTEMS

NARRATIVE REPORT

The following is the HVAC system narrative, which defines the scope of work and capacities of the HVAC system as well as the Basis of Design.

1. CODES

   All work installed under Section 23 00 00 shall comply with the Massachusetts State Building Code and all local, county, and federal codes, laws, statutes, and authorities having jurisdiction.

2. DESIGN INTENT

   The work of Section 23 00 00 shall be new and consists of furnishing all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operating installation of the Heating, Ventilating and Air Conditioning work and all items incidental thereto, including commissioning and testing.

   Capacities of systems and equipment are as specified:

   1. Electric radiant heaters: (6) 375 watt electric radiant heaters
   2. One (1) inline exhaust fan; 1,335 CFM
   3. Electric duct re-heat coil: (1) 3.8 kW electric duct heater
   4. One (1) 3-ton VRF air-cooled heat pump condenser serving 5 VRF indoor heat pump fan coil units
   5. One (1) 1.6-ton duct-mounted heat pump DX coil & associated outdoor-mounted heat pump condenser
   6. One (1) indoor-mounted energy recovery unit with an air handling capacity of approximately 400 cfm
   7. Grilles, registers and diffusers.
   8. Copper refrigerant piping and elastomeric cellular piping insulation
   9. Copper condensate drain piping
   10. Galvanized ductwork
   11. 2” & 3” thick duct insulation wrap
   12. Vibration isolation and seismic restraints.
   13. Testing and balancing of systems.

14. Four (4) exhaust/ intake louvers with gravity damper.

3. BASIS OF DESIGN: (MASS CODE)

Weather values are listed herein based on the local weather values as determined from ASHRAE Weather data tables.

Outside: 5°F winer, Summer 88°F DB 74°F WB

Inside: 70° F +/- 2 deg F. for heating. Unoccupied temperature setback will be provided.

Generally outside air is provided at the rate of 20 cfm/person in all office and restroom spaces. In all cases ASHRAE guide 62-2013 and IMC 2015 Mechanical Code will be met as a minimum. All occupied areas will be designed to maintain 1,000 PPM carbon dioxide maximum.

4. SYSTEM DESCRIPTION

A. Bath House – HVAC System:

1. A central inline exhaust fan shall be ducted to all regularly occupiable spaces to provide code-required ventilation. Make-up air for the exhaust system shall be provided through the use of operable windows and/or louvered intakes.

B. Office Building – HVAC System:

1. A central inline energy recovery ventilator would be ducted to outdoor air intake and exhaust louvers to provide fresh air to the building and remove code required exhaust air. A duct-mounted DX coil in series with a duct-mounted electric resistance heating coil would provide tempered and de-humidified air to the building occupiable areas.

2. A Variable Refrigerant Flow (VRF) heat pump system shall provide heating and cooling to the regularly occupied areas of the building; a combination of wall and ceiling mounted indoor fan coil units would be installed within the spaces to be served and connected to an outdoor-mounted heat pump condenser unit.

3. Electric radiant ceiling/wall panels shall be provided to heat the non-occupied building spaces (storage/ toilet/ concessions) that are not provided with VRF indoor units.

4. All condensate would be piped to drain to a mop sink or to a splash block outdoors.

5. Supply and exhaust air shall be conveyed to and from the spaces served by ceiling or wall-mounted return air registers and supply diffusers.

Appendix G: Plumbing System Narrative

Morses Pond Bathhouse & Administration Building
Wellesley, MA
J#791 010 00.00
L#79931/Page 1/April 1, 2022

PLUMBING SYSTEMS

NARRATIVE REPORT

The following is the Plumbing system narrative, which defines the scope of work and capacities of the Plumbing system as well as the Basis of Design.

1. CODES

   A. All work installed under Section 220000 shall comply with the MA Building Code, MA Plumbing Code and all state, county, and federal codes, laws, statutes, and authorities having jurisdiction.

2. DESIGN INTENT

   A. All work is new and consists of furnishing all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operating installation of the Plumbing work and all items incidental thereto, including commissioning and testing.

3. GENERAL

   A. The Plumbing Systems that will serve the project are cold water, hot water and sanitary waste and vent system.

   B. The Building will be serviced by Municipal water and Municipal sewer system.

   C. All Plumbing in the building will conform to Accessibility Codes and to Water Conserving sections of the Plumbing Code.

4. DRAINAGE SYSTEM

   A. Soil, Waste, and Vent piping system is provided to connect to all fixtures and equipment. System runs from 10 feet outside building and terminates with stack vents through the roof.

   B. Drainage system piping will be service weight cast iron piping; hub and spigot with gaskets for below grade; no hub with gaskets, bands and clamps for above grade 2 in. and larger. Waste and vent piping 1-1/2 in. and smaller will be type ‘L’ copper.

5. WATER SYSTEM

   A. New 2-inch domestic water service from the municipal water system will be provided. A meter and backflow preventer, if required, will be provided.

   B. Cold water distribution main is provided. Non-freeze wall hydrants with integral back flow preventers are provided along the exterior of the building.

   C. Domestic hot water heating for bathroom lavatories and sinks shall be provided with instantaneous electric point of use water heaters.

   D. Water piping will be type ‘L’ copper with wrot copper sweat fittings, silver solder or press-fit system. All piping will be insulated with 1 in. thick high density fiberglass.

6. FIXTURES

A. Furnish and install all fixtures, including supports, connections, fittings, and any incidentals to make a complete installation.

B. Fixtures shall bear the manufacturer's guaranteed label trademark indicating first quality. All acid resisting enameled ware shall bear the manufacturer's symbol signifying acid resisting material.

C. Vitreous china and acid resisting enameled fixtures, including stops, supplies and traps shall be of one manufacturer by Kohler, American Standard, or Eljer, or equal. Supports shall be Zurn, Smith, Josam, or equal. All fixtures shall be white. Faucets shall be Speakman, Chicago, or equal.

D. Fixtures shall be as scheduled on drawings.

1. Water Closet: High efficiency toilet, 1.28 gallon per flush, wall hung, vitreous china, siphon jet. Manually operated 1.28 gallon per flush-flush valve.

2. Urinal: High efficiency 0.13 gallon per flush urinal, wall hung, vitreous china. Manually operated 0.13 gallon per flush-flush valve.

3. Lavatory: Wall hung/countertop ADA lavatory with 0.35 GPM metering mixing faucet.

4. Sink: MAAB/ADA stainless steel countertop sink with gooseneck faucet and 0.5 GPM aerator.

5. Drinking Fountain: Barrier free hi-low wall mounted electric water cooler, stainless steel basin with bottle filling stations.

6. Janitor Sink: 24 x 24 x 10 Terrazo mop receptor Stern-Williams or equal.

7. DRAINS

A. Drains are cast iron, caulked outlets, nickaloy strainers, and in waterproofed areas and roofs shall have galvanized iron clamping rings with 6 lb. lead flashings to bond 9 in. in all directions. Drains shall be Smith, Zurn, Josam, or equal.

8. VALVES

A. Locate all valves so as to isolate all parts of the system. Shutoff valves 3 in. and smaller shall be ball valves, solder end or screwed, Apollo, or equal.

9. INSULATION

A. All water piping shall be insulated with snap-on fiberglass insulation Type ASJ-SSL, equal to Johns Manville Micro-Lok HP.

10. CLEANOUTS

A. Cleanouts shall be full size up to 4 in. threaded bronze plugs located as indicated on the drawings and/or where required in soil and waste pipes.

11. ACCESS DOORS

A. Furnish access doors for access to all concealed parts of the plumbing system that require accessibility. Coordinate types and locations with the Architect.

APPENDIX C

Morses Pond Beach Advisory Committee Recommendations and Considerations

Morses Pond Beach Advisory Committee Recommendations and Considerations

Morses Pond Beach and Bathhouse Project Goal

Take a collaborative approach amongst all stakeholders to develop an ADA compliant outcome that meets the programmatic needs for Rec, environmental impact needs for NRC, operational needs for Rec staff and customer experience needs for patrons and the Wellesley community at large, while at the same time enhancing the overall natural and aesthetic qualities of the site with a design that is simple, safety oriented and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.

NRC and Wetlands Focus on Regulatory Compliance, Environmental Impact and Impervious Material Footprint on Site, Sustainability and Potential for Changes in the Frequency, Duration, Days and Times of Use (See 1/31/24 memo from NRC to Rec)

Key Provisions from the Town of Wellesley Wetlands Protection Regulations effective May 4, 2017

Section 2.5, (2)(a); Buffer Zone - Definition, Critical Characteristics, and Boundary - Buffer Zone is the area of land located between the boundary of Water Bodies and Waterways, Bank, or a Vegetated Wetlands and a line located 100 feet horizontally outward from said boundary.

Section 2.5(4); Performance Standards

2.5(4)(a)1. - No activity shall be allowed within the 25-foot No Disturbance Zone (i.e., land within 25 feet of the limit of Water Bodies and Waterways, Bank, or Vegetated Wetlands) and any work proposed within the Buffer Zone shall be designed to retain and preserve a minimum of 25 feet of undisturbed natural vegetation and soil adjacent to the limit of Water Bodies and Waterways, Bank, and Vegetated Wetlands.

2.5(4)(a) 2. Work in those portions of Buffer Zone found to be significant to the preservation and protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. An activity or activities on a single lot that cumulatively alters up to 10% or 5,000 square feet, whichever is less, of land in this resource area found to be significant to the protection of wildlife habitat per Section 2.5(1)(a)3. above, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond this threshold may be permitted if they will not impair the capacity of the Buffer Zone to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure and mitigation of altered habitat requirements contained in Section 2.10 below.

2.5(4)(a) 3. Work within the Buffer Zone that does not meet the wildlife habitat assessment threshold at Section 2.5(4)(a)2. above that results in the removal of a tree or trees (dbh 5 inches or larger) within the Buffer Zone shall require the planting of one replacement tree for each tree that is removed. The proposed replacement tree(s) shall be of a native species, have a caliper of at least 1.5 inches, be located to optimize the contribution to the Bylaw Interests and Values, and be monitored for two growing seasons after planting. Alternatively, the applicant may propose a functionally equivalent mitigation plan to the above replacement tree(s) that may include native trees, shrubs, and ground cover and/or invasive species removal with a proposed monitoring plan that serves to benefit the Bylaw Interests and Values of the Buffer Zone.

2.5(4)(a) 4. Stormwater is managed according to regulatory standards at 310 CMR 10.05(6)(k) to (q) established by the Department, as applicable, and Section 1.6(8)(b)4.g. of these regulations above, as applicable.

2.5(4)(a) 5. Where a proposed activity within the Buffer Zone will increase impervious surfaces and reduce groundwater recharge, infiltration measures must be designed to maintain existing groundwater recharge.

DRAFT

2.5(4)(a) 6. Activities proposed within Buffer Zone shall not impair its capacity to provide for recreation.

2.5(4)(a) 7. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.

2.5 (4)(a) 8. Notwithstanding Section 2.5(4)(a)1. above, the Committee may allow activities within the Buffer Zone that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made debris, invasive species removal projects, and/or the planting of native vegetation.

Note: The Buffer Zone does not have performance standards under the Wetlands Protection Act (MGL, Chapter 131, Section 40) (the Act) or the MassDEP Wetlands Protection Regulations. As such, the performance standards listed at Section 2.5(4)(a)1. to 7. of the Town of Wellesley Wetlands Protection Regulations are more stringent than any provisions of the Act or the MassDEP Regulations.

Also, this project may also trigger performance standards for Bordering Vegetated wetlands (BVW), section 2.4(4) 4-7 and Bordering Land subject to flooding (BLSF), section 2.7.4.

Key Provisions from Article 97 of the Articles of Amendment to the State Constitution as adopted by voters in November 1972

The Morses Pond site is considered protected park and conservation land under Article 97 of the Articles of Amendment to the State Constitution.

Article 97 provides that the people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose. ... Lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two thirds vote, taken by yeas and nays, of each branch of the general court.

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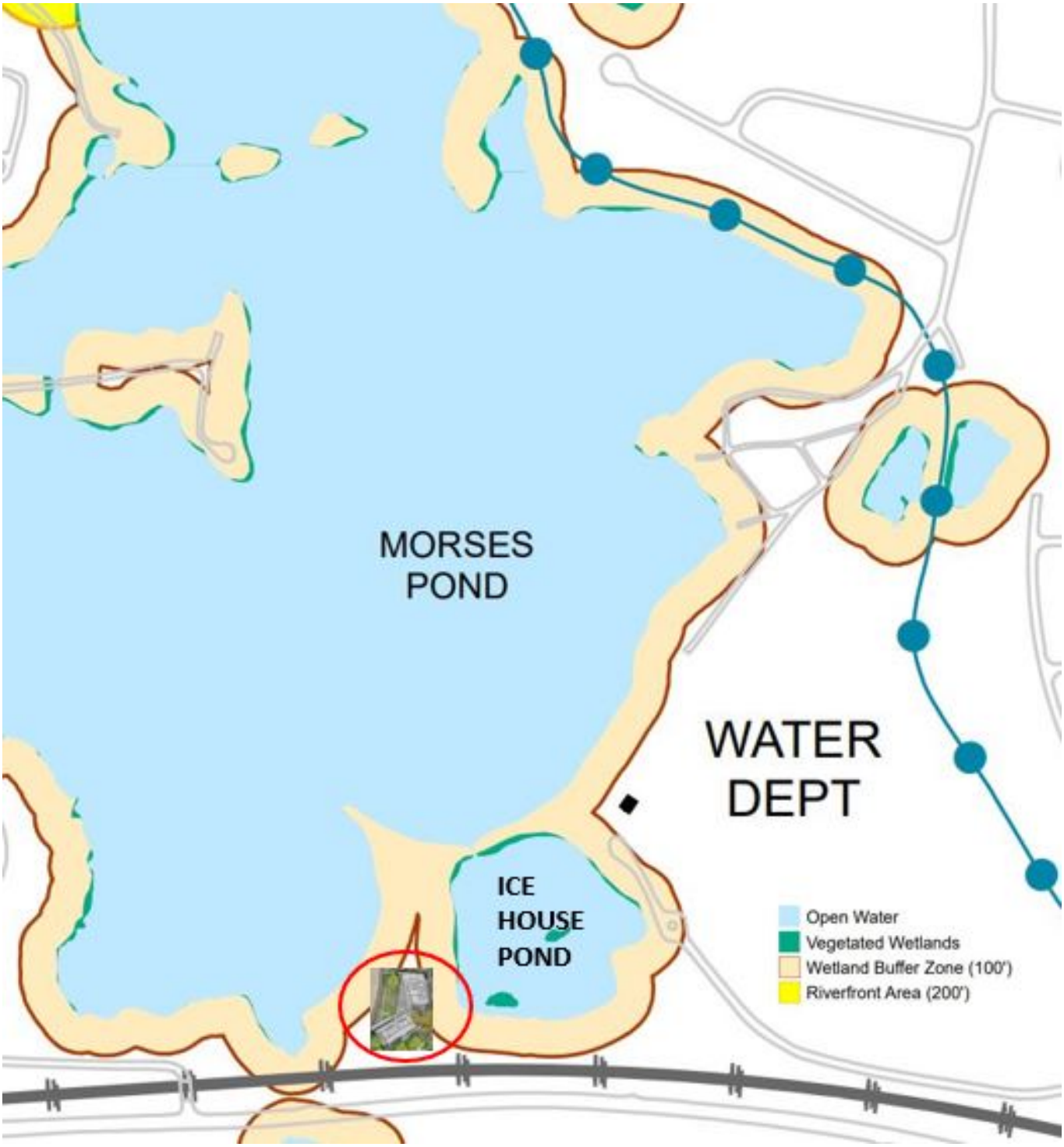
Proposed Building Location

Proposed siting location for bathhouse and beach operations buildings (shown in red circle, below – note that location is an approximation) are situated in a location that appears to fall mostly outside of the Wetland Buffer Zone



Recommendation # 1 – Ice House Pond Foot Paths

Consider removing the proposed 730 foot path (circled in red, below), abutting the access road, on south side of Ice House pond, located in 25 foot No Disturbance Zone. Consider utilizing a north entrance gate to admit season pass holders and existing west side pathway, separated from the beach by a fence and shrubbery, for daily pass purchasers entrance at administrative building.

Consider removing the proposed, new 470 foot path (circled in yellow, below), on west side of Ice House pond, located in 25 foot No Disturbance Zone. Consider utilizing a north entrance gate to admit season pass holders and existing west side pathway, separated from the beach by a fence and shrubbery, for daily pass purchasers entrance at administrative building.

Recommendation # 2 – Impervious Surface Footprint of Buildings

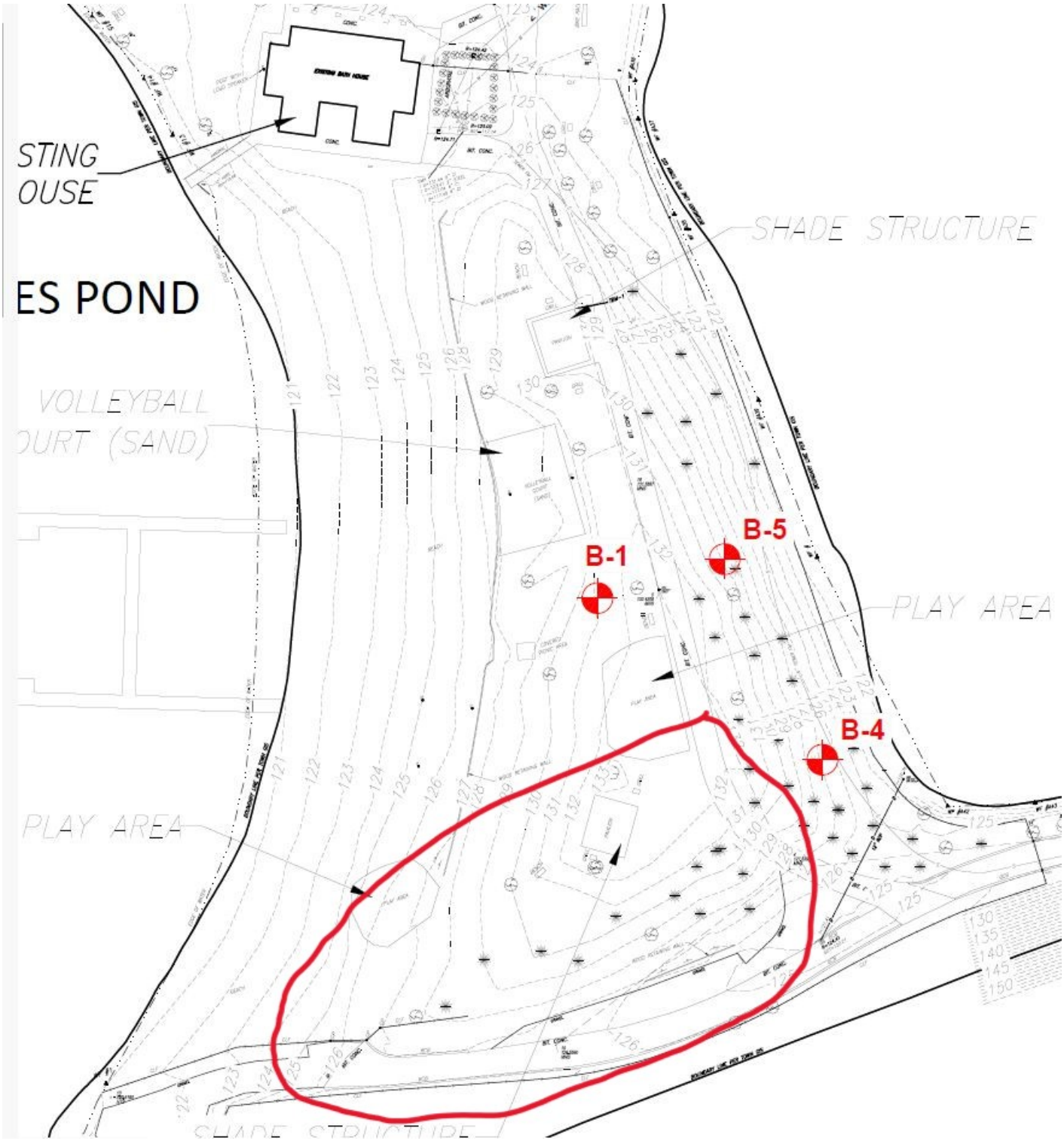
To minimize the amount of impervious surface impact on stormwater and in order to preserve as much natural open space as possible, consider reducing the overall size of the combined footprint of the two buildings while allowing the buildings to still meet Rec's operational and programmatic needs. Possible areas to consider for reduction include potentially reduce size of men's and women's bathrooms and large storage areas in bathhouse and the size of gatekeeper's room and first aid room in administration building or other alternatives proposed by Rec. While not suggesting limiting the toilet count to the following minimum requirements, MA 248 CMR10.10, Uniform State Plumbing Code, requires at public beaches, a minimum of 1 female toilets per 500 patrons and 1 male toilets per 1,000 patrons.

Recommendation # 3 – Impervious Surface Footprint of Uncovered Patio Area

Consider elimination of the majority of the proposed uncovered concrete pavers (circled in red, below) on the west side of bathhouse and administration buildings to minimize the impact of impervious surface on stormwater, maintenance requirements and in order to preserve as much natural open space as possible. Additional considerations: If patrons are sitting in chairs and at tables on the uncovered concrete pavers in front of the administration building, that may have a negative impact on visibility from the beach manager's office of beach operations and a negative impact on quick access from the lifeguard room to a beach emergency. If patrons are sitting in chairs and at tables on the uncovered concrete pavers in front of the bathhouse, there may be a potentially undesirable impact of beach patrons transiting through the tables and chairs as they come and go to the bathroom.

Recommendation # 4 – Minimize Site Grading Requirements

Confirm that when considering location of buildings (on a spectrum between the middle of the beach and the current proposal on the south end of the beach, the current location has the least impact on the need for grading to make the site handicap accessible and has the least impact on any wetland buffer zones. Did the borings indicate enough separation from groundwater and the designed level of the bottom of the buildings after the planned grading to achieve ADA accessibility goals? There appears to be an approximately six foot difference in elevation between the handicapped parking area and entrance to the proposed buildings (see below, outlined in red)



Is there a possibility of utilizing a switchback path (see red outline, below) from the handicapped parking area to the bathhouse area to reduce the need for site grading to accommodate ADA accessibility?

Alternatively, is there a possibility of utilizing the accessible boardwalk path being proposed (shown in purple, below) from the handicapped parking area to the bathhouse area to reduce the need for site grading to accommodate ADA accessibility?

Recommendation # 5 – Confirm Items Identified in 1/31/24 NRC Memo Have Been Addressed

Rec and NRC look at the 5 considerations identified in NRC's memo to Rec, dated 1/31/24 and make sure both boards are satisfied that the considerations have been or are being addressed.

Recommendation # 6 – Determine Whether Any Change In Use is Planned

Determine whether any aspect of the proposed design constitute a "change in use" pursuant to NRC policy. NRC policy states that "Any change in use of any parkland or playing field shall be compatible with the existing natural and man-made features of the site and the characteristics of the surrounding area and neighborhood. Special consideration will be given to the protection of trees and other natural features. Any increase in the intensity of the use of the site shall not substantially affect the character of the site and the surrounding area and neighborhood … Should the board agree that the suggested change constitute a change in use, then the change must be voted on at a public hearing after a proposal is submitted to the board."

Recommendation # 7 – Evaluate Any Accommodations Needed for Food Trucks (if desired)

If food trucks are a potentially desired amenity for the beach, determine whether food trucks contain their own source of power and water or whether access to additional power and/or water is desired. If so, determine the preferred location for parking a food truck and whether any additional power or water resources should be proximately sited.

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Topics for PBC, Rec, NRC and FMD to Consider

General Considerations

If Rec makes the decision to allow free access to the beach, does that change any of the desired building design or site location features?

Determine which properties are considered abutters to the project and send notice to abutters when Notice of Intent is filed with Wetlands.

Site Considerations

Will a wastewater ejector be needed no matter where the buildings are located?

Is the difference in the number and type of existing trees (native and/or invasive) that need to removed, depending on the location of the buildings, a factor that needs to be considered?

Determine whether 10% or 5,000 square feet of naturalized areas will be altered and if so, perform a wildlife habitat evaluation to be included with the Wetlands filing.

Determine whether there will be a >5% increase in impervious surface and if so perform a stormwater management evaluation to be included with the Wetlands filing. Check with Wellesley DPW to see if they have any additional stormwater standards.

Will all pathway material be permeable, durable, complement the natural environment and allow for ADA compliant access?

What is the net addition or reduction of impervious surfaces associated with the proposed project?

When should a proposed landscape and planting plan be developed and who should be involved?

What is the proximity of the proposed playground location to any trees and is there any associated safety or maintenance impact that needs to be considered?

Building Considerations

What is the estimated useful life of the buildings as designed with the proposed materials?

What are the expected annual maintenance costs for the buildings, as designed?

Are there any construction, ventilation, condensation-related mold, maintenance and/or monitoring issues associated with having a conditioned space in a building that will have active ingress/egress activity during the summer season and that will be closed for approximately five months in the winter season?

How easy and cost effective will it be to repair the proposed building surfaces if the buildings are vandalized?

Is there a request for building and/or path lighting that goes beyond that required by any relevant code?

Are the proposed building materials health-safe, strong, durable, long-lasting, sustainable, energy-efficient, fire resistant, pest resistant, mold resistant, rot resistant, aesthetically pleasing and able to withstand forces of wind, water, ice, snow and extreme weather, particularly during the 5-6 months the buildings will be vacant?

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Are there materials that would provide a longer useful life and reduced maintenance costs for the buildings that are as aesthetically pleasing and sustainable?

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TOWN OF WELLESLEY *MASSACHUSETTS*

NATURAL RESOURCES COMMISSION

Bea Bezmalinovic, Chair
Jay McHale, Vice Chair
Lisa Collins, Secretary
Laura Robert
Michael D'Ortenzio

Brandon Schmitt, Director
Telephone: 781.431.1019, Ext. 2294
Website: www.wellesleyma.gov/NRC

MEMORANDUM

TO: **Paul Cramer, Chair, Recreation Commission**
FROM: **Brandon Schmitt, Director NRC**
CC: **Matt Chin, Recreation Director, Mark Wolfson, Recreation Commissioner**
DATE: **January 31, 2024**
RE: **Morses Pond Beach Design**

We want to reiterate our appreciation to Recreation for advancing this much-needed redesign of Morses Pond Beach and Bathhouse. Morses Pond is a natural asset for the Town and efforts to improve the infrastructure and make it more accessible/inclusive to all will be a benefit to the Town.

We anticipate that the NRC will vote on either 1 or 15 February to determine whether the NRC is in support of the allocation of CPC funds to advance this project from feasibility to design stage. We appreciate the feedback to questions that have been submitted to date.

As Weston and Sampson writes, the (Morses Pond Beach and Bathhouse) designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.

The NRC has identified the following considerations that need to be addressed:

1) **Anticipate wetlands considerations and plan/budget for mitigation**. The NRC wants to ensure early and appropriate coordination with Wetlands Protection Committee to avoid delays later in the process.
    a. Weston and Sampson indicates that the exact number of trees to be removed will be determined once building designs are finalized. As currently designed, the Morses Pond Beach and Bathroom project appears to remove trees in the wetlands buffer zone, which will require replacement. The plans also appear to result in an increase in impervious surface, which will also trigger a requirement for stormwater mitigation. The replacement of trees to fulfill the Wetlands requirements cannot be counted toward any stormwater mitigation requirements.
    b. As noted in the feasibility study, Weston & Sampson will replace any trees removed with native tree species, which would also be the NRC's preferred approach.
    c. If the project increases impervious surfaces by 5%, then there will be a need to produce a stormwater report. There will also likely be a need to decrease both the rate and volume of runoff by 5%.
    d. If the project disturbs 5,000 square feet or more, then there will also likely be a need to complete a wildlife habitat impact study.
2) **Encourage low-impact sustainable design incorporated whenever possible throughout all phases of the project** (including the buildings, the playground, the landscape, the pathways,

etc). Our interest extends to ensuring that appropriate care is taken in the construction process to avoid negative impacts (e.g. use of quality fill, plant material to avoid introduction of invasives).

a. In this context, the NRC notes the request to add exterior and interior lighting and heating/cooling to the building, which is a change from the current building. The NRC has concerns about lighting, especially outdoor lighting because it disrupts sleep cycles and behavior of plants and animals. If lighting is incorporated into the design, then the NRC will expect that processes/policies and enforcement mechanisms will be presented that minimize the impacts of lighting (e.g. motion controls, limited hours for illumination, limited use of lights, IDA compliant fixtures, etc).
b. The estimated landscaping allocation of $150,000 is noted. As the design is refined, the NRC will look forward to additional information about what will be covered by this allocation to ensure sufficient funds, and to avoid duplication in budgeting.
c. The NRC will also look forward to regular/final review of landscaping plans, including revisions.

3) **Impact of potential increases in use during spring and fall seasons on the environment and the neighborhood -** The NRC recognizes that Morses Pond is a natural asset for the Town and residents enjoy the Pond in many different ways (passive recreation, hiking, water sports, swimming, beach use, birdwatching, etc). NRC also appreciates the partnership with Recreation on programming the summer events at Morses Pond.

   The proposed design includes the potential for changes in the frequency, duration, days and times of use. NRC wants to understand better and appreciates that there is limited data available at this time. NRC will expect changes to be supported by demonstrated need, and not to provide variety in programs that already enjoy access to existing facilities elsewhere. This is because changes and increases in use can negatively affect our important ecosystems at Morses Pond and the most gentle use, while improving existing uses, is the best way to protect our natural asset.

   The NRC anticipates that Recreation will present a seasonal application to use Town parks and conservation for approval for spring and fall seasons.

4) **Ownership, maintenance and budgeting of the Morses Pond Beach and Bathhouse**

   The building ownership is an outstanding question. Assuming that the NRC owns the building and bathhouse, the NRC may propose to lease the buildings to Recreation. In this arrangement, Recreation will assume the responsibility for planning for, budgeting, and ensuring maintenance of the buildings.

5) **NRC Engagement with Recreation during subsequent project phases**

   The NRC seeks to engage with Recreation through a liaison to any working group or sub-committee created to shepherd this process. The NRC also expects Recreation to provide updates at key milestones (to be defined.)

NRC members are encouraged to consider the Criteria for Evaluating Land Use Change (https://wellesleyma.gov/DocumentCenter/View/1026/NRC-Policy-Manual-2017-Edition-PDF) (2-9) in the NRC's Law, Policy and Regulation Handbook. NRC Members may also wish to review considerations for the feasibility stage (https://wellesleyma.gov/DocumentCenter/View/11823/PBC-Proponent-User-Manual)(p. 7) in the Permanent Building Committee Proponent's Handbook.

APPENDIX D

Permit Feasibility Assessment, June 2025

Weston & Sampson SM

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Permit Feasibility Assessment

June 2025

MORSES POND BEACH AREA AND BATHHOUSE

WELLESLEY, MASSACHUSETTS

PREPARED FOR:
Town of Wellesley
Facilities Management Department

TABLE OF CONTENTS

Page

TABLE OF CONTENTS i

LIST OF FIGURES ii

LIST OF ATTACHMENTS iii

1.0 INTRODUCTION 1-4
1.1 Existing Site Conditions 1-4
1.2 Environmental Receptors Mapping 1-8

2.0 REGULATORY FRAMEWORK 2-1
2.1 Federal Permits and Approvals 2-1
2.1.1 National Environmental Policy Act (NEPA) Review 2-1
2.1.2 NPDES Construction General Permit 2-2
2.1.3 U.S. Army Corps of Engineers 2-2
2.2 State Permits and Approvals 2-3
2.2.1 Massachusetts Environmental Policy Act (MEPA) Review 2-3
2.2.2 MassDEP Waterways, Chapter 91 Permitting 2-4
2.2.3 MassDEP, 401 Water Quality Certification 2-4
2.2.4 Massachusetts Historical Commission, Project Notification Form 2-5
2.2.5 Article 97 Land 2-5
2.3 Local Permits and Approvals 2-6
2.3.1 Notice of Intent 2-6

3.0 MITIGATION 3-1
3.1 Bordering Land Subject to Flooding – Compensatory Storage 3-1
3.2 Buffer Zone 3-1

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LIST OF FIGURES

Figure 1 USGS Topographic Map.....1-1

Figure 2 Wetlands Field Map 1-2

Figure 3 FEMA Firmette Map 1-3

Figure 4 Environmental Receptors Map 1-4

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LIST OF ATTACHMENTS

Attachment A ..... Project Maps

Attachment B ..... Concept Plans (Forthcoming)

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1.0 INTRODUCTION

This feasibility study assesses the environmental permitting that is anticipated to be required for the Morses Pond Beach and Bathhouse Project in Wellesley, Massachusetts. The Town of Wellesley is planning to redevelop the Morses Pond beach area by constructing a new bathhouse and beach operations building, improving site accessibility, circulation, and recreational amenities. The project is anticipated to include regrading to meet ADA standards, evaluation and potential modification of pedestrian circulation paths and parking access, stormwater management improvements, and restoration or enhancement with native plantings.

The goal of the proposed project is to take a collaborative approach amongst all stakeholders to develop an ADA compliant outcome that meets the programmatic needs for recreation, environmental impact needs for Wellesley Natural Resource Commission[1] (NRC), operational needs for recreation staff and customer experience needs for patrons and the Wellesley community at large, while at the same time enhancing the overall natural and aesthetic qualities of the site with a design that is simple, safety oriented and sustainable, and in keeping with the historical, environmental, and social site character.

1.1 Existing Site Conditions

The proposed project is located at Morses Pond Beach located near Turner Road (follow Morses Pond Access Road) in Wellesley, MA. The property includes existing paved areas, a building, recreational walking paths, and undeveloped woodlands. See Figure 1 below for Locus Map or Attachment A, Figure 2.

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[1] https://www.wellesleyma.gov/418/Natural-Resources-Commission-NRC

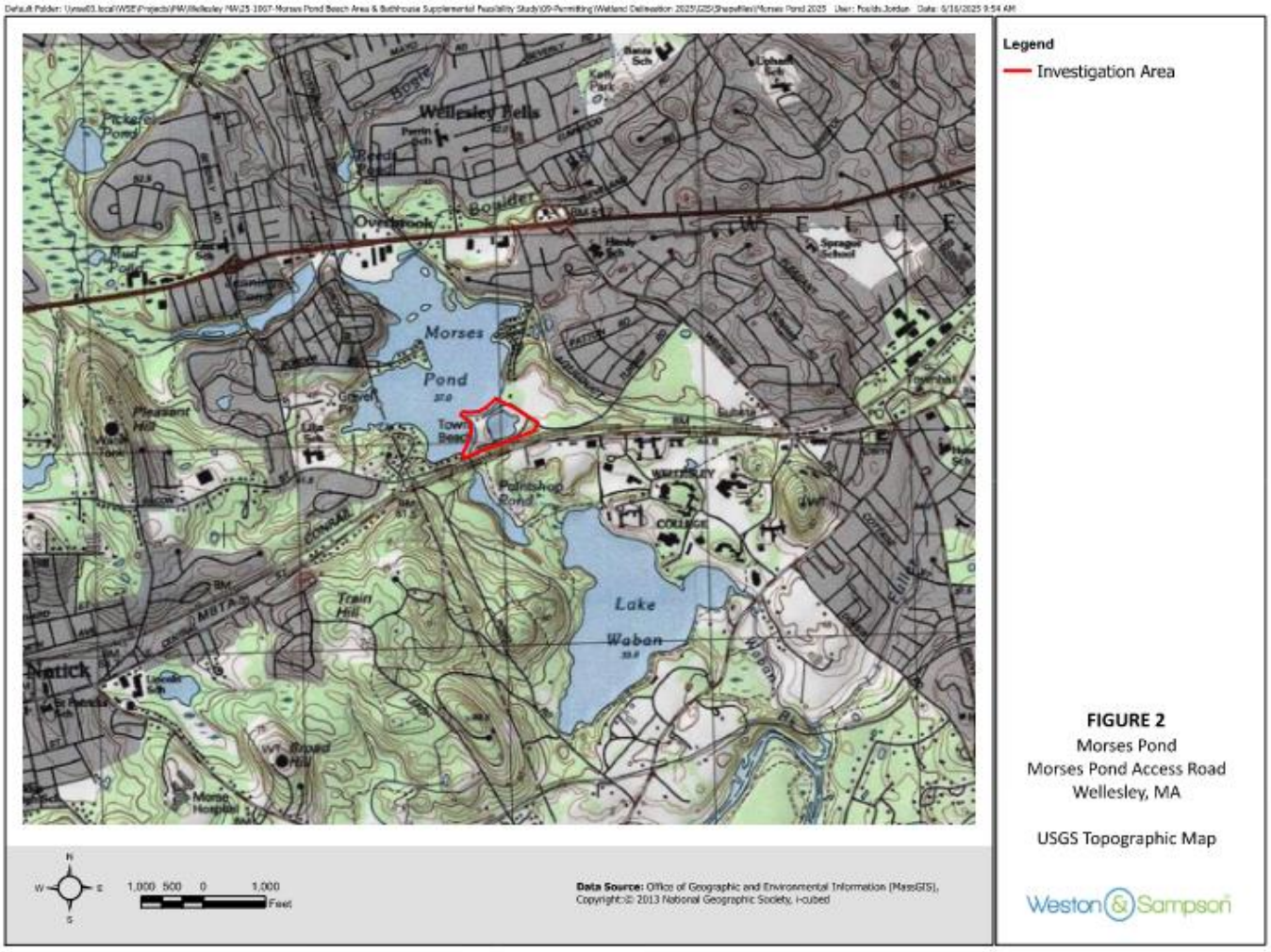

Figure 1: USGS Topographic Map

On June 12th, 2025, a wetland delineation was performed by Weston & Sampson employees trained in the wetland delineation process using the Massachusetts Department of Environmental Protection (MassDEP) and the U.S. Army Corps of Engineers methodology. Within the vicinity of the anticipated limit of work delineated wetland resources include an Isolated Vegetated Wetland and Lake Bank (see Figure 2 on the next page or Attachment A, Figure 1).

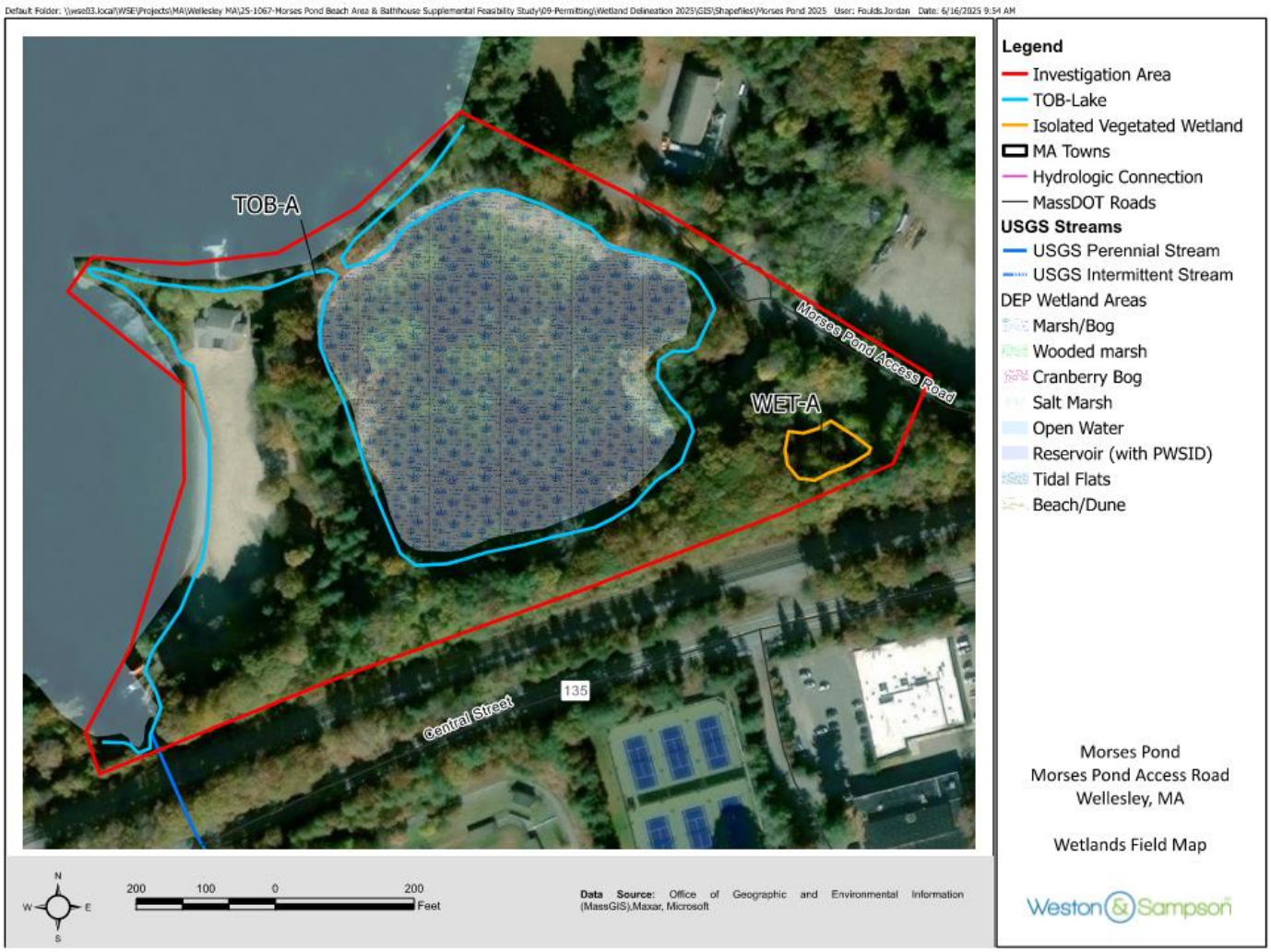

Figure 2: Wetlands Field Map

FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site. Based on current FEMA flood maps the investigation area is located within a Zone AE 100-year flood zone with a base flood elevation of 124 feet NAVD88. However, there is a preliminary FIRM map available that will be active as of July 8, 2025. The area is still shown as a Zone AE but with the base flood elevation to be updated to elevation 124.2 feet NAVD88. See Figure 3 on the next page or Attachment A, Figure 4 for FIRM map where the preliminary FIRM was utilized. The 100-year flood zone is jurisdictional under the Massachusetts Wetlands Protection Act (WPA) (310 CMR 10.00) as Bordering Land Subject to Flooding (BLSF).

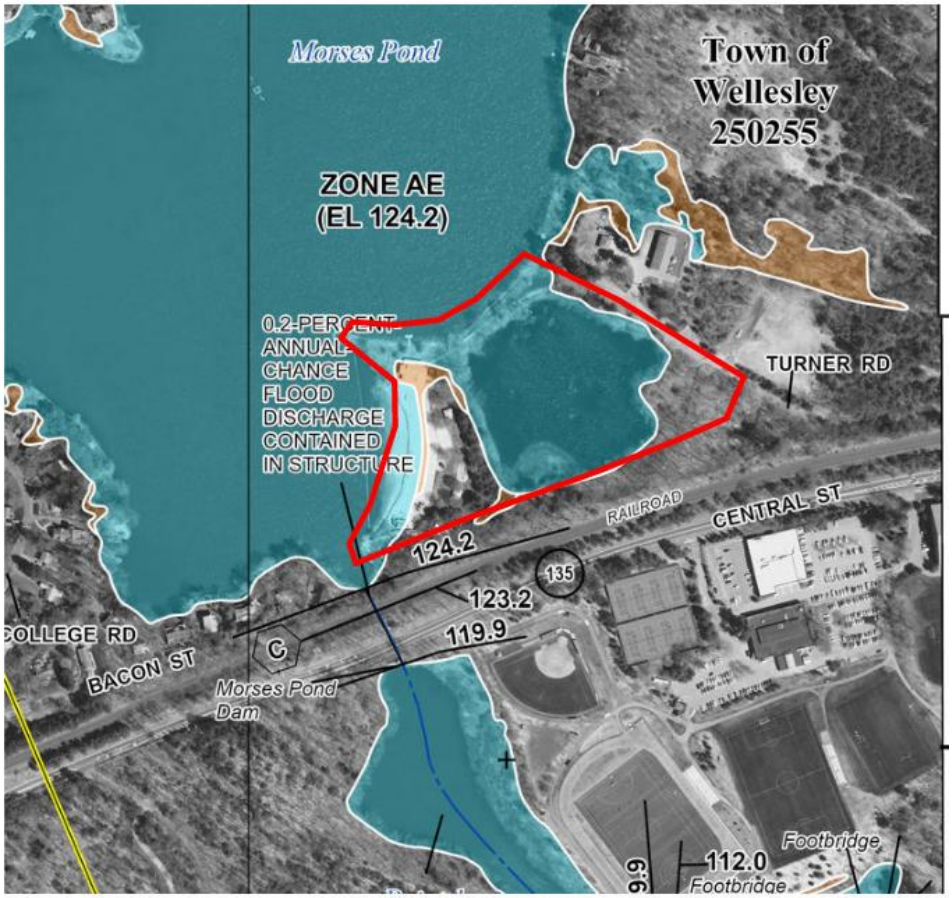

Figure 3: FEMA FIRM Map

It is important to note that, although the WPA does not protect a buffer zone off of BLSF, the Town of Wellesley Wetlands Protection Bylaw protects a 200-foot buffer zone off of BLSF. At this site, that would be a 200-foot buffer zone off of elevation 124.2' NAVD88 (the base flood elevation).

Inland Bank associated with Morses Pond and Ice House Pond additionally has a 100-foot buffer zone that is protected under both the WPA and the Wellesley Wetlands Protection Bylaw. The bylaw also implements a 25-foot No Disturbance Zone off of Bank.

The Isolated Vegetated Wetland, while not jurisdictional under the WPA, is jurisdictional under the Wellesley Wetlands Protection Bylaw, as the bylaw protects isolated wetlands that are greater than 2,500 square feet in size. The bylaw also protects a 25-foot No Disturbance Zone off of Isolated Vegetated Wetlands, as well as a 100-foot buffer zone.

1.2 Environmental Receptors Mapping

Weston & Sampson created environmental resources maps (see Figure 4 below and in Attachment A) of the site to determine the presence of other protected areas. The data source of these map layers was the Massachusetts Geographic Information System (MassGIS). These areas included:

- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Certified and Potential Vernal Pools
- Areas of Critical Environmental Concern (ACEC)
- Outstanding Resource Waters (ORW)
- Coldwater Fisheries
- Article 97 Land
- Massachusetts Historical Commission (MHC) Inventory

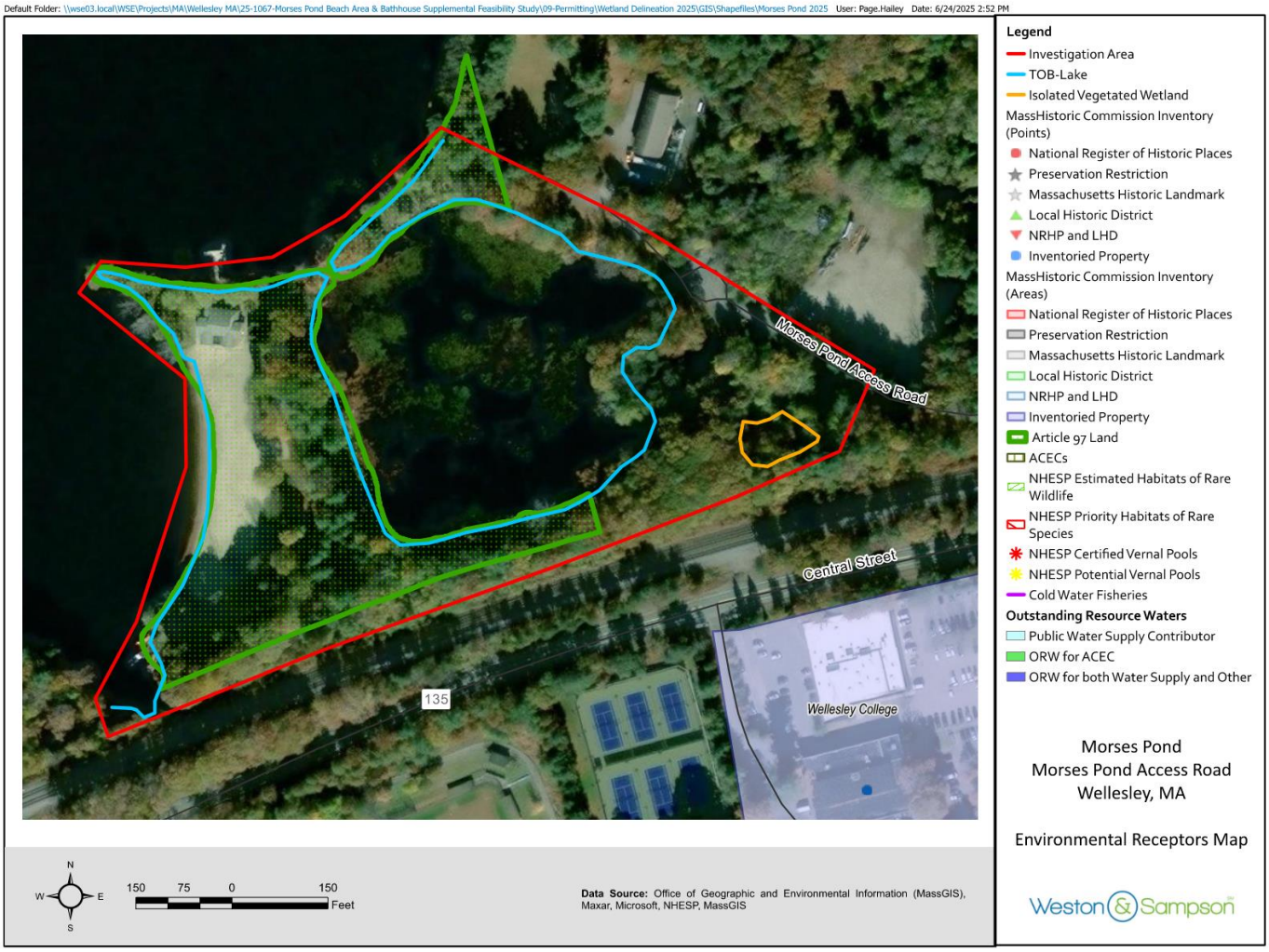

Figure 4: Environmental Receptors Map

Based on MassGIS information, the western portion of the investigation area along Morses Pond Beach is located within Article 97 Land (protected open space) owned and managed by the Town of Wellesley. The site is not located within NHESP Priority Habitats of Rare Species, NHESP Estimated Habits of Rare Wildlife, Areas of Critical Environmental Concern, Outstanding Resource Waters, or Coldwater Fisheries. Additionally, no Massachusetts Historical Commission inventory areas or sites have been identified on the site. Additionally, the site does not contain any mapped NHESP certified or potential vernal pools.

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2.0 REGULATORY FRAMEWORK

Included below is a summary of the various federal, state and local permits/authorizations that may be required for implementation of the project. While several potential designs were assessed, all of them primarily involve work within the beach area. For the purposes of this permit assessment, we assume that the project will not result in any impacts to waterbodies, vegetated wetlands, or bank, and that impacts will be limited to Bordering Land Subject to Flooding (the 100-year floodplain), the 100-foot buffer zone, and potentially the local 25-foot No Disturb Zone. Note that concepts are still being developed at this time; therefore, this assessment will need to be updated once the conceptual design plans have been completed.

Additionally, at this conceptual level, only a precursory assessment of permitting requirements can be made through the application of general assumptions. The determination of applicable environmental permits and approvals is dependent on the type and magnitude of proposed impacts to protected environmental resources as well as use(s) and type(s) of activity/activities occurring within regulated waterways. Accordingly, actual permitting requirements will need to be further evaluated/refined with the advancement of design as part of subsequent project phase(s) once a strategic pathway for next steps has been developed with public and private property owners.

Please note that this section includes only anticipated environmental permitting needs and does not include other local permits that may be required, including but not limited to Planning Board and Zoning Board approvals.

2.1 Federal Permits and Approvals

2.1.1 National Environmental Policy Act (NEPA) Review

The National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental impacts of certain proposed actions. The Act requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. Specifically, all federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment. A project requires a NEPA review when it involves federal action, such as federal findings, a federal permit, or working on federal lands.

There are three levels of NEPA review, including a categorical exclusion (CATEX), an Environmental Assessment (EA) or an Environmental Impact State (EIS). The level of permitting required would need to be confirmed with the lead federal agency once the lead agency is determined (if there will be federal funding).

For the purposes of this feasibility assessment, we assume that the project will not obtain any federal funding sources and will not require any federal permits, and therefore a NEPA review will not be required. However, if it is determined that federal funding or a federal permit is required, NEPA review would likely be required.

2.1.2 NPDES Construction General Permit

If the project will result in greater than one acre of earth disturbance, coverage under the U.S. Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) would be required.

The CGP is intended to protect water quality by regulating stormwater discharges from construction sites. To obtain coverage, the project proponent must prepare a Stormwater Pollution Prevention Plan (SWPPP) that outlines erosion and sediment control measures, pollution prevention practices, and site-specific stormwater management strategies. In addition, an electronic Notice of Intent (eNOI) must be filed with EPA through their NPDES eReporting Tool (NeT) at least 14 days prior to the start of construction. The SWPPP must be implemented and maintained throughout construction, and a Notice of Termination (NOT) must be filed once final stabilization is achieved.

If coverage under the CGP is required, coverage should be obtained at least 14 days prior to construction. CGP review takes approximately 14 days.

It is anticipated that the project may result in greater than one acre of land disturbance. If the project will result in greater than one acre of land disturbance, coverage under the NPDES CGP, along with development of a SWPPP, will be required.

2.1.3 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) regulates construction and other work in navigable waterways under Section 10 of the Rivers and Harbors Act of 1899, and has authority over the discharge of dredged or fill material into "waters of the United States," including wetlands, under Section 404 of the Clean Water Act (CWA). Activities regulated under these authorities include fill for development, water resource projects, infrastructure improvements, and mining operations. Projects that propose such work must receive federal authorization from USACE prior to construction.

Federal authorization through the ACOE can be obtained through an Individual Permit (IP) or under the MA State General Permit (GP). The MA GP identifies specific categories of activities with allowable thresholds to help streamline the federal review process through either a Self-Verification Notification (SVN) or Pre-Construction Notification (PCN). In the state of Massachusetts, the GP is re-issued on a periodic five (5) year basis. ACOE reviews depending on the category of the permit (SVN, PCN, or IP) can take anywhere between 4-6+ months.

It is assumed that Section 10 authorization will not be required, as all work is anticipated to occur above the Ordinary High Water Mark (OHWM) of navigable waters, and no direct work is proposed within navigable channels. Additionally, authorization under Section 404 of the Clean Water Act is not currently anticipated, as no discharge of dredged or fill material into wetlands or other waters of the U.S. is proposed.

However, if the project design changes and will result in impacts below the OHWM of Ice House Pond or Morses Pond, then authorization under Section 404 of the Clean Water Act would be required.

2.2 State Permits and Approvals

2.2.1 Massachusetts Environmental Policy Act (MEPA) Review

The purpose of MEPA and 301 CMR 11.00 is to provide meaningful opportunities for public review of the potential environmental impacts of a project for which a permit is required from an agency of the Commonwealth, and to assist agencies of the Commonwealth in using all feasible means to avoid damage to the environment or, to the extent damage to the environment cannot be avoided, to minimize and mitigate damage to the environment to the maximum extent practicable. MEPA's review is intended to inform the participating agencies of the project, to maximize consistency between agency actions, and to facilitate coordination of all environmental and development review and permitting processes of the Commonwealth. The MEPA process provides an opportunity for the project proponent to identify the required agency actions and to describe and analyze how the project will comply with applicable regulatory standards and requirements. Through review of the MEPA documents, each participating agency can comment on aspects of the project or issues regarding its agency action that require additional description or analysis.

There are twelve MEPA review threshold categories contained in the Act covering the following topics of Land, State Listed Species, Wetlands, Waterways and Tidelands, Water, Wastewater, Transportation, Energy, Air, Solid and Hazardous Waste, Historical and Archaeological Resources, Areas of Critical Concern, and Regulations. In addition to triggering a threshold, a state action (i.e., state funding or state permitting) is necessary to trigger MEPA review. For this project, no state permits are anticipated to be required. Funding sources for the project have not been fully determined at this time. However, if the project requires state funding, and if it triggers one of the below review thresholds, then MEPA review would be required.

- 301 CMR 11.03(1)(b)3. - Disposition or change in use of land or an interest in land subject to Article 97 of the Amendments to the Constitution of the Commonwealth, unless the Secretary waives or modifies the replacement land requirement pursuant to M.G.L. c. 3, § 5A and its implementing regulations.
- 301 CMR 11.03(3)(b)(1)b.- Alteration of 500 or more linear feet of bank along a fish run or inland bank
- 301 CMR 11.03(3)(b)1f. - Alteration of ½ or more acres of any other wetlands (includes Bordering Land Subject to Flooding)

At this time, none of these thresholds are anticipated to be triggered; however, they are included here for transparency and to support ongoing coordination should project details change.

If MEPA review is required, the project would require submittal of both an Environmental Notification Form (ENF) and a mandatory Environmental Impact Report (EIR) due to the site being located within 1 mile of an Environmental Justice (EJ) community. The Town could file an Expanded ENF and request that the Secretary allow a Single EIR. This permitting path usually can take between 6-8+ months to complete. There is a chance that MEPA would request both a Draft and Final EIR, which would extend the review timeline to between 8-12+ months.

MEPA review typically begins around 50% design, but this can vary depending on the project's timeline and the other permits needed.

Based on the current conceptual design plans for the project, the project is not anticipated to require review under the Massachusetts Environmental Policy Act (MEPA); however, a discussion has been included in the event that the project does require state funding and exceeds one of the MEPA review thresholds described above.

2.2.2 MassDEP Waterways, Chapter 91 Permitting

The "Public Waterfront Act" or Massachusetts General Law Chapter 91 (Chapter 91) dates back to 1866 and serves to provide the public with access to tidelands and waterways and to protect public interests associated with those resources. Chapter 91 takes jurisdiction in four general areas: flowed tidelands, filled tidelands, great ponds, and non-tidal navigable rivers and streams on which public funds have been expended either upstream or downstream within the river basin. For inland rivers and streams this jurisdiction extends up to the Ordinary High-Water Mark. Per [33 CFR 328.3(d)] OHW is defined as "with respect to non-tidal waters, is the line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

Chapter 91 licenses can take 12+ months to complete whereas a Chapter 91 permit may have a slightly shorter review period. If there are any existing licenses on the site, there is potential a minor modification submission may meet Chapter 91 requirements, and this review tends to be a 1+ month review. Consultation with MassDEP Waterways is advised to determine the best permitting pathways, if applicable.

It has been confirmed on the Massachusetts Great Pond List[2] that Morses Pond is not identified as a Great Pond. Additionally, no work is anticipated to occur below the OHWM, therefore it is anticipated that no Chapter 91 permitting is required.

2.2.3 MassDEP, 401 Water Quality Certification

Projects in Massachusetts involving the discharge of dredged or fill material, dredging, or dredged material disposal activities in waters of the United States, which require federal licenses or permits are subject to 314 CMR 9.00. 314 CMR 9.07 also applies to any dredging project and the management of dredged material within the marine boundaries and at upland locations within the Commonwealth, respectively. A 401 WQC may also be required for a 401 WQC for major or minor excavation/fill activities that occur below MHW. The purpose of the 401 Water Quality Certification (WQC) is to ensure that proposed discharges of dredged or fill material, dredging and dredged material disposal in the Waters of the United States within the Commonwealth comply with the Surface Water Quality Standards and other appropriate requirements of the state law.

There are a number of thresholds that can trigger the need for 401 review, including but not limited to:

- Any activity that results in a discharge of dredged material, dredging, or dredged material disposal greater than 100 cubic yards to waters subject to regulation by the ACOE, Federal Energy Regulatory Commission or other federal agency;

[2] https://www.mass.gov/doc/massachusetts-great-ponds-list/download

- Any activity resulting in any discharge of dredged or fill material to any Outstanding Resource Water (ORW).

- Any activity resulting in the cumulative loss of more than 5,000 square feet (SF) of bordering and isolated vegetated wetland and/or land under water/ocean, except for routine maintenance projects meeting as defined in accordance with 314 CMR 9.04(5) or a loss of any amount of vegetated wetland or land under water/ocean involving outstanding resource waters, rare species in an isolated vegetated wetland, salt marsh, an individual Section 404 USACE permit, or activities where MassDEP invokes discretionary authority pursuant to 314 CMR 9.04(11) to require an application for an individual water quality certification.

- Any activity resulting in a cumulative loss of up to 5,000 SF of bordering and isolated vegetated wetland and/or land under water/ocean involving activities exempt under the WPA, subject to a Section 404 ACOE permit and results in any discharge of dredged or fill material to bordering vegetated wetlands or land under water/ocean; any activity subject to the provisions of 314 CMR 9.04(13) or a cumulative loss of more than 5,000 SF of vegetated wetland or land under water/ocean involving routine maintenance as defined in accordance with 314 CMR 9.04(5).

401 WQC reviews generally take 4-6+ months to complete.

The project is not anticipated to require a 401 WQC since no impacts to wetlands or waterways are proposed, and all work is anticipated to occur above the Ordinary High Water (OHW) line.

However, if the project design changes and will result in impacts below the OHWM of Ice House Pond or Morses Pond, or to the Isolated Vegetated Wetland, then authorization under Section 401 of the Clean Water Act may be required.

2.2.4 Massachusetts Historical Commission, Project Notification Form

The Massachusetts Historical Commission (MHC) reviews new construction, renovation, or demolition projects that require funding, license, permit, or approval from any state or federal governmental agency. MHC, as the office of the State Historic Preservation Officer (SHPO), reviews any projects that require funding, licenses, permits, or approvals from federal agencies, pursuant to Section 106 of the National Historic Preservation Act. Section 106 requires federal agencies to consider the effects of their actions on historic properties, and to take into account comments of consulting parties and the public prior to funding, licensing, permitting, or approving projects. MHC PNF reviews usually take 1+ month to complete.

Based upon the assumption that there is no federal or state permitting required for the proposed project, an MHC review is not anticipated to be required. If the project ends up requiring state or federal funding or a state or federal permit, MHC review would be required.

2.2.5 Article 97 Land

Per the Executive Office of Environmental Affairs (EEA) Article 97 Land Disposition Policy, it is the policy of EOEA and its agencies to protect, preserve and enhance all open space areas covered by Article 97 of the Article of Amendment to the Constitution of the Commonwealth of Massachusetts. Accordingly, as a general rule, EOEA and its agencies shall not sell, transfer, lease, relinquish, release, alienate, or

change the control or use of any right or interest of the Commonwealth in and to Article 97 land. The goal of this policy is to ensure no net loss of Article 97 lands under the ownership and control of the Commonwealth and its political subdivisions.

An Article 97 land disposition is defined as a) any transfer or conveyance of ownership or other interests; b) any change in physical or legal control; and c) any change in use, in and to Article 97 land or interests in Article 97 land owned or held by the Commonwealth or its political subdivisions, whether by deed, easement, lease or any other instrument effectuating such transfer, conveyance or change.

This proposed project includes work on land classified as Article 97 land (see Figure 4 in Section 1.2 of this report, or Attachment A - Figure 4). According to MassGIS the land is identified as "Morses Pond Beach" and this land is owned and controlled by the Town of Wellesley NRC and the primary purpose is for recreation.

Further consultation is required with the Town of Wellsley's Legal Council to confirm if an Article 97 filing may be needed. At this time there is no set regulatory timeline for this review process.

2.3 Local Permits and Approvals

2.3.1 Notice of Intent

The Massachusetts Wetlands Protection Act (MGL c.131 § 40) (WPA) and implementing regulations (310 CMR 10.00) is a state statute administered at the municipal local level. The site described above is anticipated to require to the submission of a Notice of Intent (NOI) application to the local Conservation Commission (Wellesley Wetlands Protection Committee[3]) for work in jurisdictional areas regulated under the WPA and associated local bylaws which at a minimum are anticipated to include Bordering Land Subject to Flooding, and/or the 100-foot buffer zone along with other restricted buffer zones defined under the local bylaw.

Currently, the Town of Wellsley has a Wetlands Protection Bylaw/Regulations (Article 44), as further described below in Section 1.1.1. The NOI application must express compliance with performance standards in the WPA for BLSF (310 CMR 10.57 (4) (a)1-3) and any additional performance standard outlined in the local bylaw (see section 1.1.1).

Additionally, per 310 CMR 10.57, if 10% of the land in BLSF on a single lot or 5,000 square feet (whichever is less) will be impacted by a project, a Wildlife Habitat Evaluation should be conducted. Depending on the determination of final impact areas on site it should be determined if a Simplified or Detailed Wildlife Habitat Evaluation will be required under 310 CMR 10.60. The Wildlife Habitat Evaluation is typically included as an attachment to the NOI.

NOI reviews typically take 2-3+ months to complete dependent on the scope of work and additional information required by the local Conservation Commission.

[3] https://www.wellesleyma.gov/421/Wetlands-Protection-Committee

1.1.1. Wellesley Wetlands Bylaw and Regulations

The Wellesley Wetlands Protection Committee (WPC) (often referred to as the Conservation Commission in other towns) is a 5-member board of volunteers who are appointed by Wellesley's Natural Resources Commission (NRC). The NRC, having the powers and duties of a Conservation Commission, has delegated to the Wetlands Protection Committee the power and authority to administer and enforce the provisions of the Massachusetts Wetlands Protection Act (MGL Ch. 131 §40) and the Wellesley Wetlands Protection Bylaw (Article 44).

The Wellesley Wetlands Protection Bylaw/Regulations (Article 44) place additional performance standards on the resource areas that likely will be impacted as a part of this project including Bordering Land Subject to Flooding (Section 2.7 (4) (a) 1-7) and Buffer Zones (Section 2.5 (4) (a) 1-8), including their local 25-foot No Disturbance Zone and 100-foot Buffer Zone. It is to be noted per Article 44, additional performance standards are placed on Isolated Vegetated Wetlands (Section 2.4 (4) (a) and (b) 1-4) and Bank (Section 2.3 (4) (a-e)) (including Lake Bank), however no alterations to these resource areas are anticipated.

The Wellesley Wetlands Protection Bylaw/Regulations also places a 200-foot buffer zone on Bordering Land Subject to Flooding, however, the assumption has been made based on the current concept that proposed work is occurring only within BLSF and not in the surrounding buffer.

Although the WPA does not place Wildlife Habitat Evaluation requirements on Buffer Zone the Wellesley Wetlands Protection Bylaw/Regulations contains the requirement to determine if wildlife habitat functions may be altered as a part of the proposed project. Per Article 44 Section 2.4 (4)(a) an activity or activities on a single lot that cumulatively alters up to 10% or 5,000 square feet, whichever is less, of land in this resource area found to be significant to the protection of wildlife habitat per Section 2.5(1)(a) (i.e. Buffer Zones), shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond this threshold may be permitted if they will not impair the capacity of the Buffer Zone to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure and mitigation of altered habitat requirements contained in Section 2.10.

Prior to the formal NOI filing, consultation with the Wellesley WPC is recommended as design progresses to determine permitting requirements

DRAFT

3.0 MITIGATION

For permanent impact to resource areas under the WPA and the Wellesley Wetlands Protection Bylaw/Regulations, mitigation will likely be required in the form of a compensatory flood storage mitigation area and restoration of the local buffer zone areas (25-foot No Disturbance Zone and 100-foot Buffer Zone).

3.1 Bordering Land Subject to Flooding – Compensatory Flood Storage

If the project results in fill below the base flood elevation (124.2' NAV 88), compensatory flood storage will need to be provided in accordance with Article 44, Section 2.7(4)(a) and 310 CMR 10.57(4)(a). Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, that would be displaced by the proposed project.

3.2 Buffer Zone

Per the Wellesley Wetlands Protection Bylaw/Regulations Article 44, 2.5 (4)(a), no activities in the 25-foot No Disturbance Zone are allowable, and any work proposed within the Buffer Zone shall be designed to preserve a minimum of 25 feet of undisturbed natural vegetation and soil adjacent to the limit of water bodies and waterways, banks, and vegetated wetlands.

Additionally, work within the Buffer Zone that does not meet the wildlife habitat assessment threshold (Article 44, Section 2.5 (4)(a)2) that results in the removal of a tree or trees (5 inches Diameter at Breast Height or larger) within the Buffer Zone shall require the planting of one replacement tree for each tree removed. Replacement tree(s) should be a native species, have a caliper of at least 1.5 inches, be located to optimize the contribution to the Bylaw interests and values, and be monitored for two growing seasons after planting. Alternatively, the applicant may propose a functionally equivalent mitigation plan to the above replacement tree(s) that may include native trees, shrubs, and ground cover and/or invasive species removal with a proposed monitoring plan that serves to benefit the Bylaw interests and values of the Buffer Zone.

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Attachment A

Project Maps

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200 100 0 200
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Data Source: Office of Geographic and Environmental Information (MassGIS),Maxar, Microsoft

Legend

- Investigation Area
- TOB-Lake
- Isolated Vegetated Wetland
- MA Towns
- Hydrologic Connection
- MassDOT Roads

USGS Streams

- USGS Perennial Stream
- USGS Intermittent Stream

DEP Wetland Areas

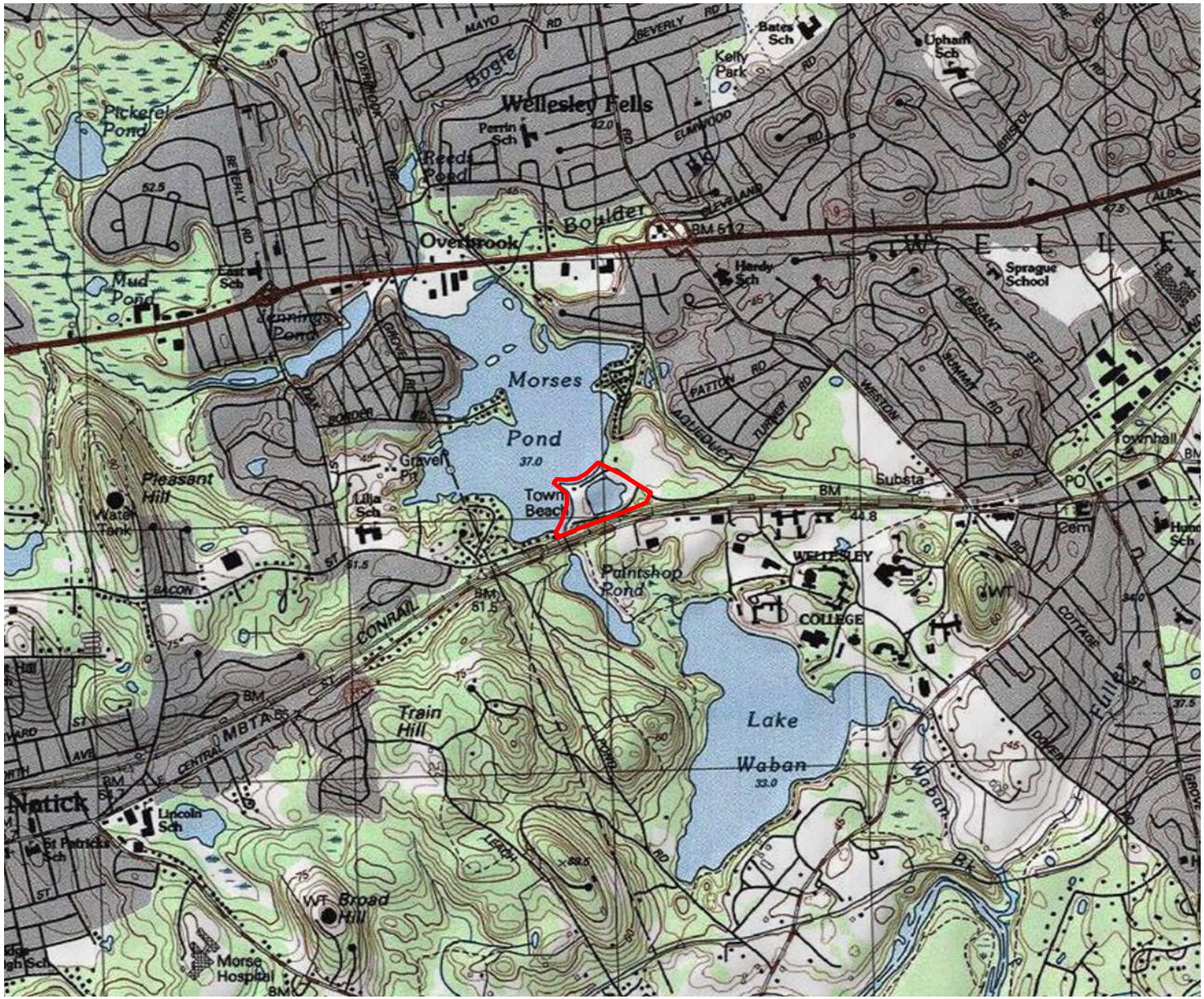
- Marsh/Bog
- Wooded marsh
- Cranberry Bog
- Salt Marsh
- Open Water
- Reservoir (with PWSID)
- Tidal Flats
- Beach/Dune

FIGURE 1

Morses Pond
Morses Pond Access Road
Wellesley, MA

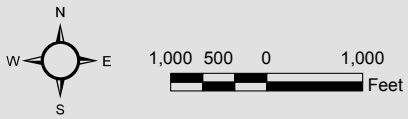
Wetlands Field Map

Weston & Sampson



Legend

Investigation Area



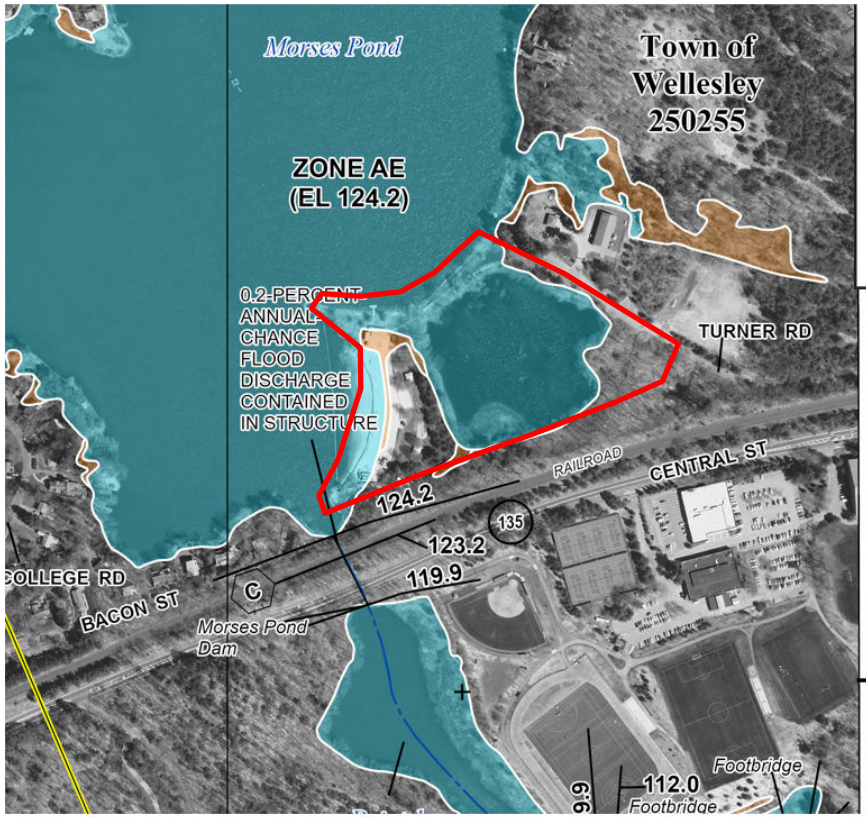
Data Source: Office of Geographic and Environmental Information (MassGIS), Copyright:© 2013 National Geographic Society, i-cubed

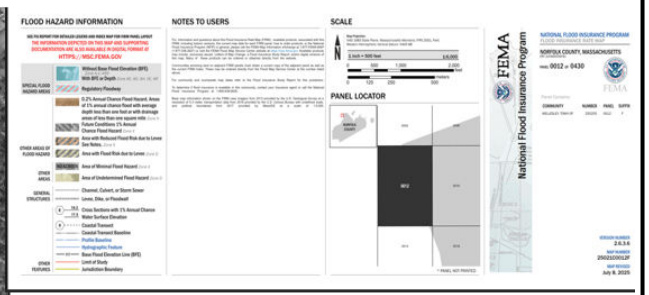
FIGURE 2

Morses Pond
Morses Pond Access Road
Wellesley, MA

USGS Topographic Map

Weston & Sampson





Legend

Investigation Area

FIGURE 3

Morses Pond
Morses Pond Access Road
Wellesley, MA

FEMA Map

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Data Source: FEMA, USGS National Map 2023

Weston & Sampson

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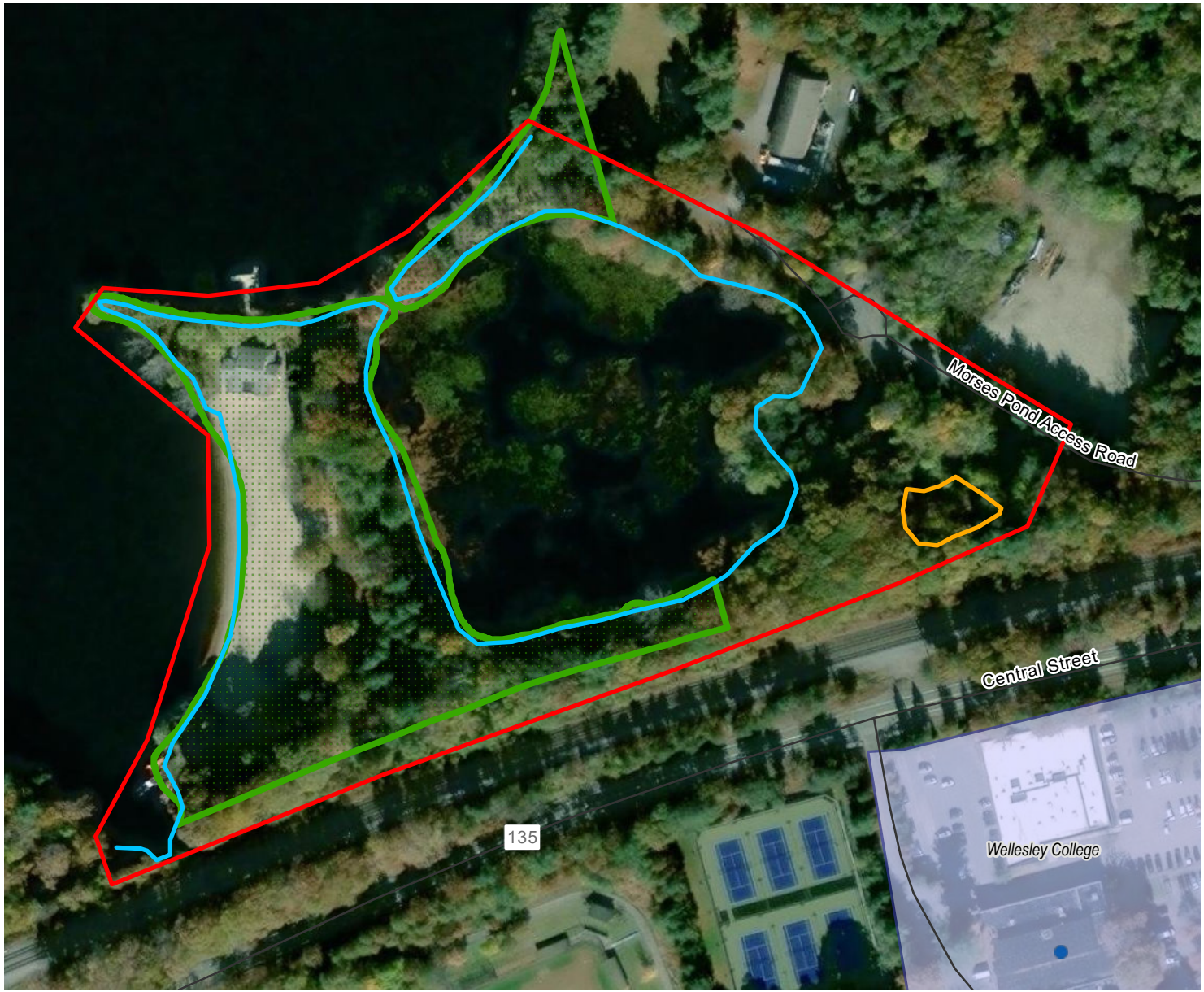


Legend

- Investigation Area
- TOB-Lake
- Isolated Vegetated Wetland

MassHistoric Commission Inventory (Points)

- National Register of Historic Places
- Preservation Restriction
- Massachusetts Historic Landmark
- Local Historic District
- NRHP and LHD
- Inventoried Property

MassHistoric Commission Inventory (Areas)

- National Register of Historic Places
- Preservation Restriction
- Massachusetts Historic Landmark
- Local Historic District
- NRHP and LHD
- Inventoried Property
- Article 97 Land
- ACECs
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Priority Habitats of Rare Species
- NHESP Certified Vernal Pools
- NHESP Potential Vernal Pools
- Cold Water Fisheries

Outstanding Resource Waters

- Public Water Supply Contributor
- ORW for ACEC
- ORW for both Water Supply and Other

N W E S

150 75 0 150 Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Maxar, Microsoft, NHESP, MassGIS

FIGURE 4

Morses Pond
Morses Pond Access Road
Wellesley, MA

Environmental Receptors Map

Weston & Sampson

DRAFT

Attachment B

Concept Plans (Forthcoming)

APPENDIX E

Updated Project Goals, Operations and Proposed Programming, July 2025

100 Foxborough Blvd., Suite 250, Foxborough, MA 02035
Tel: 508.698.3034

M E M O R A N D U M

TO:	Morses Pond Beach Advisory Committee, Town of Wellesley, MA
FROM:	Cassie Bethoney RLA, Weston & Sampson; Zac Cardwell, AIA, Maryann Thompson Architects
DATE:	Submitted July 29, 2025
SUBJECT:	Updated Project Goals, Operations and Proposed Programming Morses Pond Beach & Bathhouse Supplemental Feasibility Study

---

At the Morses pond Beach Advisory Committee (MoPoBAC) Meeting on June 6, 2025, the Committee reviewed and updated the Project Goals, Operations and Programming for the Morses Pond Beach and Bathhouse Supplemental Feasibility Study, per below:

1. Project Goals and Objectives
   - The site is very much loved as it is, so a master plan tenet should include preserving and enhancing all that is great.
   - The bathhouse has outlived its practical and functional life and given the extent of repairs and upgrades required in order to bring the building into full code compliance and functionality, it is more cost effective and practical to demolish the existing building and create a new building.
   - The design shall improve universal access for site amenities, walkways and paths.
   - Designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.
   - Through the establishment of meadows and native landscape plantings, wildlife habitat can be improved.
   - New building enhancements should be attractive, low-intensity, and supportive of neighborhood and town-wide use during the summer swimming season.
   - Improvements to Morses Pond Beach will be designed in a cost-effective and sustainable manner.

2. Current Operations

   Required:
   - Bathhouse
     - Equipment storage
     - First aid
     - Concession/vending area
     - Bathrooms/changing rooms
     - Guardroom
     - Beach manager office
   - Beach area
     - Volleyball
     - Sunbathing / seating

- Lawn area
  - Shade structures
  - Grills
  - Picnic benches
- Playground
- Boat access and rentals

Further discussion:

- Extent of reconfigured and more efficient parking lot, ADA parking spots, drop-off
- Walking loop

3. Existing Bathhouse Program

Public Uses

- Women's Bathroom 426 nsf
  - Separate bathroom / changing areas
  - (3) stalls
  - (4) large changing areas
- Men's Bathroom 325 nsf
  - Separate bathroom / changing areas
  - (6) stalls (no urinals),
  - (3) small changing areas
- Accessible / Family Bathrooms 74 nsf
  - (1) provided
  - Accessed off corridor to staff area

Staff Uses

- Guardroom 206 nsf
  - Room for lockers / cubbies
  - Storage for equipment
  - Fridge / microwave for lunches
- Lifeguard changing rooms 242 nsf
  - (2): Women's/Men's
- First Aid 110 nsf
  - Room for first aid bed, supply cabinet and desk
  - Contains one hand sink
  - Not large enough for group training (approx. 10 ppl)
- Office/Gatekeeper 174 sf

Mechanical

- Mechanical spaces 62 nsf
  - Spread out in a few different areas plus overhead hot water tank in family bathroom

Storage

- General storage area 444 nsf
  - Spread out in three different building areas

Total Existing Interior Spaces: 2,063gsf

Exterior Elements:

- Covered porch 180 sf
  - Vending Machine Location
  - Provides sheltered waiting area outside bathrooms
- Lifeguard break area 488 sf
  - Doesn't address beach area
- Water Fountain
  - Wall mounted model
  - Ability to drain down for winter
- Rinse station
- Storage container 200 sf

Total Existing Exterior Elements: 868gsf

4. New Bathhouse Program

Public Uses

- Women's Bathroom 300 nsf
  - Separate bathroom / changing areas
  - (3) total stalls (1 accessible)
  - (2) total changing areas (1 accessible)
  - (1) total changing table
- Men's Bathroom 300 nsf
  - Separate bathroom / changing areas
  - (3) total combination stalls/urinals (1 accessible of each)
  - (2) total changing areas (1 accessible)
  - (1) total changing table
- Accessible / Family Bathrooms 120 nsf
  - (2) to be provided

Staff Uses

- Gatekeeper office 160 nsf
  - Adjacent to beach area entry
  - Visitor walk-up window
  - Space for 2 to 3 staff people
- Guardroom 250 nsf
  - Beach facing
  - Room for lockers / cubbies
  - Storage for guard equipment
  - Fridge / microwave for lunches
  - Training area large enough for 10 to 12 people
- First Aid 130 nsf
  - Room for first aid bed (two?), supply cabinet and desk
  - Contains one hand sink
  - Beach facing entrance

- Beach Manager's Office 80 nsf
  - Can be consolidated with the Guardroom, Gatekeeper, and/or First Aid Spaces

Mechanical Space 100 nsf

Storage 644 nsf

- General storage area
  - Consolidated in one space or multiple spaces.
  - Attached, adjacent, or remote
  - Boat, golf cart, cleaning supplies, toilet paper, life jackets, off season storage
  - Possible DPW storage

TOTAL INTERIOR SPACE: 2,084 NSF
10% GROSSING FACTOR 2,292 GSF

APPENDIX F

Site Constraint Clarifications, July 2025

Weston & Sampson
100 Foxborough Blvd., Suite 250, Foxborough, MA 02035
Tel: 508.698.3034

M E M O R A N D U M

TO: Glenn Remick, Project Manager, Design and Construction, Facilities Management, Town of Wellesley, MA

FROM: Cassie Bethoney RLA

DATE: July 1, 2025 | Revised July 9, 2025

SUBJECT: Morses Pond Beach & Bathhouse Feasibility
Site Constraint Clarifications

During early discussions in this feasibility study, the following topics were raised requiring clarification. A summary of outcomes is provided below. Further discussion on each topic follows.

Topic	Key Outcomes
Zone I Wellhead Protection Area Restrictions	No new land uses are permitted unless they are for water supply or shown to have no significant impact. Occasional parking may be allowable with precautions.
ADA Parking and Accessibility	Existing parking lot can satisfy ADA and staff/public parking with modifications. No requirement for parking within 200' or drop off with 100' of buildings applies. Building location is not restricted.
MBTA Commuter Line Adjacencies	Work within 30' of MBTA property requires a license and coordination with MBTA. Surveying recommended to confirm actual boundary. The proposed scope of improvements under this project can avoid work within the 30’ offset.
Resiliency Considerations	The 100-year FEMA flood elevation has increased slightly to 124.2 NAVD88. As a potential option, the Town may consider 126.4 NAVD88 as the new minimum finished floor elevation (FFE) for a future bathhouse, which is based on the Design Flood Elevation + 12” of freeboard. Apart from elevating buildings to reduce flood risk, there are

	other approaches to resiliency that may be considered (floodable spaces within the buildings, etc.) that may allow for the buildings to sit at its current location.
Permit Feasibility Assessment	
Federal NEPA Review	Federal. Not required unless federal funding or federal permits are used. NPDES CGP alone does not trigger it. If no federal involvement, NEPA does not apply.
NPDES Construction General Permit	Federal. Likely required (if >1 acre disturbed). Requires SWPPP, eNOI submission, and site compliance with stormwater protections.
Army Corps of Engineers Permits	Federal. Not anticipated unless project changes to include work below Ordinary High Water Mark or fill in wetlands.
MEPA Review	State. MEPA only applies if **both** state funds or permits are involved **and** thresholds are met. Current scope unlikely to trigger MEPA.
Chapter 91 Permitting	State. Not applicable. Morses Pond is not a Great Pond and no work is below the Ordinary High Water Mark.
401 Water Quality Certification	State. Not currently required, unless future design impacts wetlands or water bodies.
Massachusetts Historical Commission	State. Not required unless state or federal funding/permits are involved.
Article 97 Land	State. Site is classified as Article 97 land. Project must maintain recreational use. Continued use as a beach is assumed not to require new Article 97 legislation unless advised otherwise by state officials.
Local Notice of Intent (NOI)	Local. Required under WPA and Wellesley Wetlands Bylaw for work in Bordering Land Subject to Flooding (BLSF) and buffer zones. - Compensatory flood storage is required if fill occurs below 124.2' NAVD88 (base flood elevation). Must match floodwater displacement volume. - 25-foot No Disturb Zone must remain intact. Work in 100-foot buffer zone must preserve habitat; tree removal requires native species replacement or mitigation plan.

Further discussion is included on the following pages per topic area.

1. Zone I Wellhead Protection Area Restrictions:

A portion of the site falls within a Zone I Wellhead Protection Area due to the wellheads located on the adjacent Water Department site. Zone I is defined as "the protective radius required around a public water supply well or wellfield" per 310 CMR 22.02. The protective radius at Morses Pond is shown at 400 feet on the topographic survey.

Under 310 CMR 22.21, the only land uses permitted within Zone I are those that:

a. Directly relate to the public water system (e.g., operations or maintenance of the water supply), or
b. Are demonstrated by the water supplier to have no significant impact on water quality.

All other uses are prohibited within Zone I. To be explicit, this means:

- No underground storage tanks for petroleum products
- No land uses without a clear water-supply purpose or will have no significant adverse impact on water quality

Parking vehicles in Zone I is not expressly prohibited by 310 CMR 22.21, as long as the activity is directly related to the public water system or the water supplier demonstrates it has no significant impact on water quality. However, that comes with important caveats:

- No fueling, repairs, or vehicle maintenance unless it's strictly water-supply-related.
- No uncovered storage of road salt or de-icing chemicals used on parked cars, unless contained in a structure that prevents runoff.
- No large-scale or commercial vehicle parking, junkyards, or automobile graveyards.

In practice, occasional parking of standard vehicles (e.g. for drop off) may be allowable if:

1. It's essential for water system operations, or
2. Properly managed so as not to risk contamination (e.g. parked on impermeable surface, no fluids dripped, no salt storage).

For higher-intensity or commercial parking, the Town will need a demonstration of "no significant impact" and possibly prior MassDEP approval.

References:
- 310 CMR 22.00: DRINKING WATER
- https://www.law.cornell.edu/regulations/massachusetts/310-CMR-22-21

2. ADA Parking and Accessibility

Morses Pond must comply with both local Zoning regulations and both federal ADA standards and the state's Architectural Access Board (AAB) regulations, the latter of which is more stringent.

a. **Wellesley Zoning ByLaws Section 5.17 – "Off Street Parking":** At the local level, Morses Pond is zoned 'Parks, Recreation, and Conservation' in Wellesley's Zoning ByLaws. According to Section 5.17 – Off-Street Parking, this designation has:
   - No on-site parking required.
   - No minimum distance from parking to site/entrance required (a.k.a. no 200' requirement as previously assumed)

b. **Massachusetts AAB Regulations –** According to 521 CMR Section 23.3.1 – "Parking and Passenger Loading Zones":
   - 23.3.2 applies: *"In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility."* (a.k.a. no 200' requirement as previously assumed). There is no specific requirement that accessible parking be located directly beside any single building, such as a bathroom or guardhouse.
   - No accessible spaces are required by MAAB since the number of spaces we will have regardless if we choose to have spaces will be under 15 total.
   - The "drop-off" exception only applies to 23.3.3 "buildings with multiple accessible entrances", so it does not apply to this Project. No 100' to accessible entrance drop off required.
   - Accessible routes must have firm surfaces, compliant slopes, proper signage, and curb cuts.
   - If a bathroom or admin building is a key access point, then the route from parking to that structure must be fully accessible.
   - If amenities are located at different ends of the beach, then accessible spaces must be distributed accordingly, so each facility is served by a compliant route.

c. Emergency vehicle access is still required; the existing roads can be modified to accommodate any of the locations we are discussing.
d. Public toilet rooms shall comply with 521 CMR, and shall be on an accessible route (521 CMR 30.2)

Bottom Line:

The existing parking lot, with modifications, can satisfy the requirements for Public, Staff and ADA parking. Improving the existing condition (i.e. adding parking to the South, paving ADA Parking spots, improving accessible routes, etc.) are **OPTIONS** to be presented to the Town but **do not restrict the building location.** If additional assurance is needed or desired, an ADA self-evaluation or formal review by the Massachusetts Office on Disability could confirm that accessible routes from parking areas properly serve the beach's primary facilities.

References:

- 521 CMR (Architectural Access Board) Section 23.3.1 - Parking and Passenger Loading Zones - https://www.mass.gov/doc/521-cmr-2300-parking-and-passenger-loading-zones-2006-pdf/download
- 521 CMR 30.00 Public Toilet Rooms - https://www.mass.gov/doc/521-cmr-30-public-toilet-rooms/download

- Wellesley Zoning ByLaws, Section 5.*17 – Off Street Parking* - *https://wellesleyma.gov/DocumentCenter/View/566/Section-517-Off-Street-Parking?bidId=*

3. MBTA Commuter Line Adjacencies

The MBTA Zone of Influence (ZOI) includes any construction on, above, adjacent to, or within the operational Right-of-Way of MBTA property, which is the commuter line adjacent to the site in the case of Morses Pond Beach. The ZOI is a 30-foot offset from the property line. The southern access drive falls within the ZOI due to where the property line lands relative to the edge of road. The survey indicates that it is a GIS line and not a property tie down. Noting that a GIS line may differ in location to a property line tie down, it may be prudent to get the boundary lines surveyed in the field to be exactly sure of where they fall.

To do work within the ZOI, a license must be secured, which is achieved through the following process, generally:

1. Pre-Construction Coordination
    a. The Town must initiate contact with MBTA's TOD or Capital Delivery teams during initial planning.
    b. Submit design documents early for inclusion in MBTA reviews.
2. Design & Construction Two-track Review: This process can take up to 12 months.
    a. *Technical fit-check*: Structural, geotechnical, mechanical, electrical, track/ROW implications.
    b. *Operational fit-check*: Safety, drainage, passenger flows, transit accessibility, maintenance access.
    c. Standards reference: Designs must strictly follow MBTA's technical manuals and engineering criteria (structural load, clearances).
3. License Agreement:
    a. Following approval of the construction plans, the MBTA will draft a license agreement for the work to take place. Within the license agreement, indemnification clauses, specific insurance requirements, performance bonds and maintenance warranties are articulated, as necessary. The MBTA requires MBTA-specified coverage and naming MBTA as Additional Insured. The MBTA license agreements often include operational safety measures, including protection plans, coordination with the MBTA and emergency plans.
4. Construction Inspections:
    a. The MBTA will send inspectors to regularly oversee construction activities. halt work if violations are observed, and issue penalties.
    b. As-built drawings and other closeout documents are required by the MBTA to close out the license agreement.

Fees are required for review, licensing and inspections. For inspections, the MBTA requires a force account is set up to be drawn upon for time spent performing inspections.

Reference:

- MBTA Capital Deliver Transit-Oriented Development Group; A Guide for Owners, Developers, and Contractors (ODC'S) April 2018; Section 1-MBTA Review, Authorization, and Access - MBTA-TOD-GUIDLINES-FOR-ODCs-April-2018.pdf

4. Resiliency Considerations

As part of this study, the Town may consider the option to raise the proposed buildings for resiliency purposes, given there was a change from 124 NAVD88 to 124.2 NAVD88 in the FEMA 100-year flood elevation between the 2021 and 2025 Wetland Delineation Report. We used the ASCE 24-24 guidelines to establish an ideal FFE for this study. Based on the Flood Design Class definitions in the ASCE 24-24 guidelines, we determined that Method A can be used to determine the DFE. At Morses Pond Beach:

- The bathhouse Flood Design Class is considered Class 2; Method A should be followed
- Base Flood Elevation (BFE), or 100-year flood elevation = 124.2 NAVD88

Per Method A, DFE = FE_{com} or ($FE_{MRI} + \Delta_{SLC}$) where:

- FE_{com} = Flood elevation established by the community, and
- FE_{MRI} = Flood elevation based on the required minimum Mean Recurrence Interval (MRI) for the flood design class of the building or structure (500-year for Class 2, 750-year for Class 3, 1000-year for Class 4)
- Δ_{SLC} = Relative sea level change which shall not be taken as less than 0

At Morses Pond Beach, this translates to:

- FE_{MRI}, or the 500-year flood elevation from FEMA's FIS Report (also known as the 0.2% annual chance storm) = 125.4 NAVD88
- Δ_{SLC} = 0, since there is no coastal influence at Morses Pond Beach

DFE = $FE_{MRI} + \Delta_{SLC}$
DFE = 125.4 NAVD88 + 0

We recommend 12" is added to the DFE to account for freeboard, **making the ideal proposed FFE 126.4 NAVD88 or above.**

References:

- ASCE 24-24 Flood Resistant Design and Construction (can be supplied upon request)
- FEMA Flood Insurance Study No. 25021CV001E, Volume 1 of 7 - https://wellesleyma.gov/DocumentCenter/View/37434/FIS---25021CV001E---Volume-1-of-7

5. Permit Feasibility Assessment:

A comprehensive discussion on the full range of permitting requirements for the scope of physical improvements is enclosed in the document entitled, "Permit Feasibility Assessment, Morses Pond Beach Area and Bathhouse, Wellesley, Massachusetts," prepared June 2025 by Weston & Sampson. Specific clarifications are noted below:

a. Article 97 - The site sits fully within Article 97 jurisdiction. The previous assumption was that the use of the site is not changing. It operates as a beach now and will continue to in the future. Our Project team continues to operate under this assumption unless told otherwise by either Town Counsel or the Executive Office of Energy and Environmental Affairs.

b. NEPA Applicability (federal) - Under NEPA, environmental review is required when a project involves either federal funding or federal permitting. A notable exception is coverage under the NPDES Construction General Permit, which does not independently trigger NEPA. If a project does not involve federal funds or federal permits, NEPA review is generally not required.

c. MEPA Applicability (state) - For MEPA, a two-part test determines applicability:

1. The project must involve state funding or require a state permit; AND
2. The project must meet or exceed one or more environmental thresholds outlined in the MEPA regulations. Relevant MEPA thresholds for this project may include:
   - Alteration of 500 or more linear feet of inland bank
   - Alteration of ½ acre or more of Bordering Land Subject to Flooding (100-year floodplain)
   - Disposition or change in use of land protected under Article 97 of the Massachusetts Constitution (unless the Secretary grants a waiver under M.G.L. c. 3, § 5A and its implementing regulations). *(Note: Based on our discussions with the Town, this threshold is not expected to be triggered.)*

   Importantly, certain thresholds—such as the wetland-related thresholds noted above—only apply if the project requires a state-level wetlands permit (e.g., 401 Water Quality Certification or a Chapter 91 license). Currently, we anticipate filing only a local Notice of Intent, which does not qualify as a state permit under MEPA. The Article 97 threshold, however, may be triggered based on state funding alone, without a permit requirement.

3. Transportation-Related Thresholds - MEPA regulations include several transportation-related thresholds that may apply depending on the project scope. While the current design is not expected to trigger any of the following, we recommend confirming this as design progresses:

   1. Construction, widening, or maintenance of a roadway or right-of-way that would:

- Alter terrain or bank more than 10 feet from the existing roadway for ½ mile or more (unless necessary for a structure or equipment)
- Remove five or more living public shade trees ≥14 inches DBH
- Eliminate 300 feet or more of stone wall

2. Construction of 300 or more new parking spaces at a single location

If any of these transportation thresholds are met AND state funding is involved, MEPA review could be triggered. In summary, State funding alone does not automatically trigger MEPA review. The project must also meet or exceed an applicable threshold and, in some cases, require a state permit.

Enclosed:

- Morses Pond Beach & Bathhouse Permit Feasibility Assessment, June 2025

APPENDIX G

Test Pit Results – Stormwater, August 2025

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

MEMORANDUM

TO: Cassie Bethoney, RLA and Amanda Gaal, RLA

FROM: Tara Garani, MA Licensed Soil Evaluator SE14977

DATE: August 27, 2025

SUBJECT: Morses Pond, Wellesley, MA – Test Pit Results

Test pits were conducted on August 21, 2025 at Morses Pond, which is located along Turner Road off Central Street in Wellesley, Massachusetts. Seven (7) test pits were dug by Town staff and evaluated by Tara Garani of Weston & Sampson to better understand the subsurface soil and drainage conditions present at the pond. Test pits were witnessed by Glenn Remick, Project Manager for the Town of Wellesley's Facilities Management Department and Mike Murphy, General Foreman for the Town of Wellesley's Department of Public Works Highway Division. The test pits were excavated to a depth of 5-ft to 9-ft below ground surface (b.g.s.). Test pits were stopped when groundwater was encountered or when side wall collapse began to occur. The test pits, in general, consisted of mostly gravelly or coarse sand. A site plan showing the test pit locations, detailed test pit logs, and photos are attached to this memorandum. The following is a summary of these explorations:

Test Pit #1: Test Pit #1 was the northmost test pit located northwest of the existing bath house. This test pit ranged from loamy sand to fill to gravelly sand, with a loose structure. The test pit was stopped at a depth of 60-in b.g.s., as required depths were achieved and groundwater was encountered. Redox features were encountered at 48-in b.g.s. and standing water was observed at 58-in b.g.s. No sample was taken.

Test Pit #2: Test Pit #2 was located to the southeast of the existing bath house. This test pit ranged from sand to gravelly sand, with a loose structure. The test pit was stopped at a depth of 82-in b.g.s., as required depths were achieved and groundwater was encountered. Standing water was observed at 82-in b.g.s. No sample was taken.

Test Pit #3: Test Pit #3 was located in a grass area near the center of Morses Pond Beach. This test pit ranged from loamy sand to gravelly sand, with a loose structure. The test pit was stopped at a depth of 96-in b.g.s., as the walls of the test pit had begun to collapse. No standing water or redox features were observed. No sample was taken.

Test Pit #3A: Test Pit #3A was located just northeast of Test Pit #3. This test pit ranged from loamy sand to fill to gravelly sand, with a loose structure. The test pit was stopped at a depth of 108-in b.g.s., as required depths were achieved and redox features were encountered. Redox features were encountered at 60-in b.g.s. No standing water was observed. No sample was taken.

Test Pit #4: Test Pit #4 was located to the south of Morses Pond Beach near a covered bench area and a playground structure. This test pit ranged from loamy sand to gravelly sand, with a loose structure. The test pit was stopped at a depth of 100-in b.g.s., as the walls of the test pit had begun to collapse. No standing water or redox features were observed. No sample was taken.

Test Pit #5: Test Pit #5 was located just north of a paved access road along the southern portion of Morses Pond Beach. This test pit ranged from sandy gleyed fill to gravelly sand, with a loose structure. The test pit was stopped at a depth of 100-in b.g.s., as the walls of the test pit had begun to collapse. Inconsistent redox features were observed at a depth of 25-in b.g.s. No standing water was observed. No sample was taken.

Test Pit #6: Test Pit #6 was located just north of the paved access road along the southern portion of Morses Pond Beach, east of Test Pit #5. This test pit ranged from loamy sand to sand to gravelly sand, with a loose structure. The test pit was stopped at a depth of 88-in b.g.s., as required depths were achieved and groundwater was encountered. Redox features were encountered at 46-in b.g.s. and standing water was observed at 87-in b.g.s. No sample was taken.

USDA and USGS Mapping Data: The USDA web soil survey indicates that the following soils are present at this site for test pits #1, # 2, #3, #3A, and #4: map unit 653 Udorthents. Test pits #5 and #6 are on the border of the following map units: 653 Udorthents and 245B Hinckley Loamy Sand. The USGS surficial geologic map indicates that gravel deposits, sand and gravel deposits, and sand deposits are present. The test pit data gathered at Morses Pond is consistent with the data recorded on both the USDA and USGS websites. Please refer to the attached maps and test pit results for more information and soil layer ranges.

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 1	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	9:00 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	58-in

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-4"	Ap - Brown Loamy Sand (10YR 3/1) Roots Throughout
4"-8"	Fill - Yellowish Brown Sand (2.5Y 6/3)
8"-40"	C_1 - Yellowish Brown Gravelly Sand (7.5YR 4/3) 40-50% Gravel and 5% Cobbles/Stones
40"-60"	C_2 - Yellowish Brown Gravelly Sand (7.5YR 4/3) 40-50% Gravel and 5% Cobbles/Stones Redox Features observed at 48" (5YR 3/4)
	- End of Exploration -

NOTES:

1. ESHGW observed at 48-in
2. Standing water at 58-in
3. Existing abandoned pipe exposed in test pit

TEST PIT NUMBER
TP 1

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 1	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	9:00 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	58-in

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. ESHGW observed at 48-in
2. Standing water at 58-in
3. Existing abandoned pipe exposed in test pit

TEST PIT NUMBER
TP 1

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 2	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	9:45 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	82-in

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-8"	Ap - Yellowish Brown Sand (2.5Y 6/2)
8"-16"	C_1 - Yellowish Brown Gravelly Sand (10YR 5/4) 40-50% Gravel
16"-82"	C_2 - Yellowish Brown Gravelly Sand (10YR 5/4) 40% Gravel and 10% Cobbles/Stones No redox features observed
	- End of Exploration -

NOTES:

1. Standing water at 82-in

TEST PIT NUMBER
TP 2

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 2	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	9:45 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	82-in

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. Standing water at 82-in

TEST PIT NUMBER
TP 2

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 3	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	10:15 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-6"	Ap - Brown Loamy Sand (10YR 3/2) Roots Throughout
6-96"	C_1 - Yellowish Brown Gravelly Sand (2.5Y 5/1) 50% Gravel, 30% Cobbles/Stones Roots to 75" No redox features observed
	- End of Exploration -

NOTES:

1. No weeping/standing water or redox features observed.
2. Test pit stopped at 8-feet due to side wall cave ins.

TEST PIT NUMBER
TP 3

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 3	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	10:15 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. No weeping/standing water or redox features observed.
2. Test pit stopped at 8-feet due to side wall cave ins.

TEST PIT NUMBER
TP 3

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 3A	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	12:50 P.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-4"	Ap - Brown Loamy Sand (10 YR 3/2) Roots Throughout
4-56"	C_1 - Yellowish Brown Gravelly Sand (10YR 3/3) 50% Gravel Roots throughout
56-108"	C_2 - Yellowish Brown Gravelly Sand (10YR 4/4) 50% Gravel, 20% Cobbles/Stones Redox features observed at 60" (5YR 5/6) Roots to 80"
	- End of Exploration -

NOTES:

1. ESHGW observed at 60-in
2. No weeping/standing water observed.

TEST PIT NUMBER
TP 3A

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 3A	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	12:50 P.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. ESHGW observed at 60-in
2. No weeping/standing water observed.

TEST PIT NUMBER
TP 3A

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 4	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	10:45 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-12"	Ap - Brown Loamy Sand (10 YR 4/2) Roots Throughout 5% Gravel
12-100"	C - Yellowish Brown Gravelly Sand (2.5Y 4/3) 30-40% Gravel, 30% Cobbles/Stones Roots to 80" No redox features observed
	- End of Exploration -

NOTES:

1. No weeping/standing water or redox features observed.
2. Existing wire/pipe exposed in test pit.
3. Test pit stopped at 8-feet due to side wall cave ins.

TEST PIT NUMBER
TP 4

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 4	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	10:45 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. No weeping/standing water or redox features observed.
2. Existing wire/pipe exposed in test pit.
3. Test pit stopped at 8-feet due to side wall cave ins.

TEST PIT NUMBER
TP 4

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 5	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	11:30 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-10"	Ap - Sandy Gleyed Fill (7.5YR 3/2) Roots Throughout 5-10% Gravel
12-100"	C - Yellowish Brown Gravelly Sand (2.5Y 5/4) 20% Gravel, 50% Cobbles/Stones Inconsistent redox features noted at 25" - not an indicator of SHGW
	- End of Exploration -

NOTES:

1. No weeping/standing water or consistent redox features observed.
2. Test pit stopped at 8-feet due to side wall cave ins.

TEST PIT NUMBER
TP 5

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 5	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	11:30 A.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	N/A

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. No weeping/standing water or consistent redox features observed.
2. Test pit stopped at 8-feet due to side wall cave ins.

TEST PIT NUMBER
TP 5

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 6	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	12:15 P.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	87"

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION
0-9"	Ap - Brown Loamy Sand (7.5YR 3/1) 5% Gravel
9-31"	B - Yellowish Brown Coarse Sand (10YR 4/4) 5% Gravel, 20% Cobbles/Stones
31-88"	C - Yellowish Brown Gravelly Sand (10YR 4/3) 10% Gravel, 20% Cobbles/Stones Redox Features observed at 46" (2.5YR 4/6)
	- End of Exploration -

NOTES:

1. ESHGW observed at 46-in
2. Standing water observed at 87-in

TEST PIT NUMBER
TP 6

Weston & Sampson

TEST PIT LOG

PROJECT NAME/NO.	Wellesley Morses Pond - ENG25-0709			**TEST PIT NUMBER**	
LOCATION	Wellesley, MA			TP 6	
CLIENT	Wellesley, MA			GROUND SURFACE	
CONTRACTOR	Wellesley DPW	FOREMAN:		ELEVATION	see plan
OBSERVED BY	Tara Garani	TIME	12:15 P.M.	DEPTH TO GROUNDWATER BELOW	
CHECKED BY		DATE	8/21/25	SURFACE	87"

DEPTH BELOW GROUND SURFACE (in.)	TEST PIT DIAGRAM AND SOIL DESCRIPTION

NOTES:

1. ESHGW observed at 46-in
2. Standing water observed at 87-in

TEST PIT NUMBER
TP 6

Weston & Sampson

Stormwater Test Pit Markup, revised 8/20/2025
Weston & Sampson

LEGEND

- B-2 fill to 4 ft buried topsoil to ~8.5 water at ~4 — Borings completed previously as part of previous study
- TP-1 — Test Pit
- Relocated Test Pit
- Proposed Building Alternative Area

B-2
fill to 4 ft
buried topsoil to ~8.5
water at ~4

TP-1

ALTERNATIVE B BUILDINGS

TP-2

B-3

B-5
Fill to 10 ft
water @ ~7.5

B-1
native @ 0.3 ft

TP-3A

TP-3

B-4
native @ 0.45 ft

ALTERNATIVE A BUILDINGS

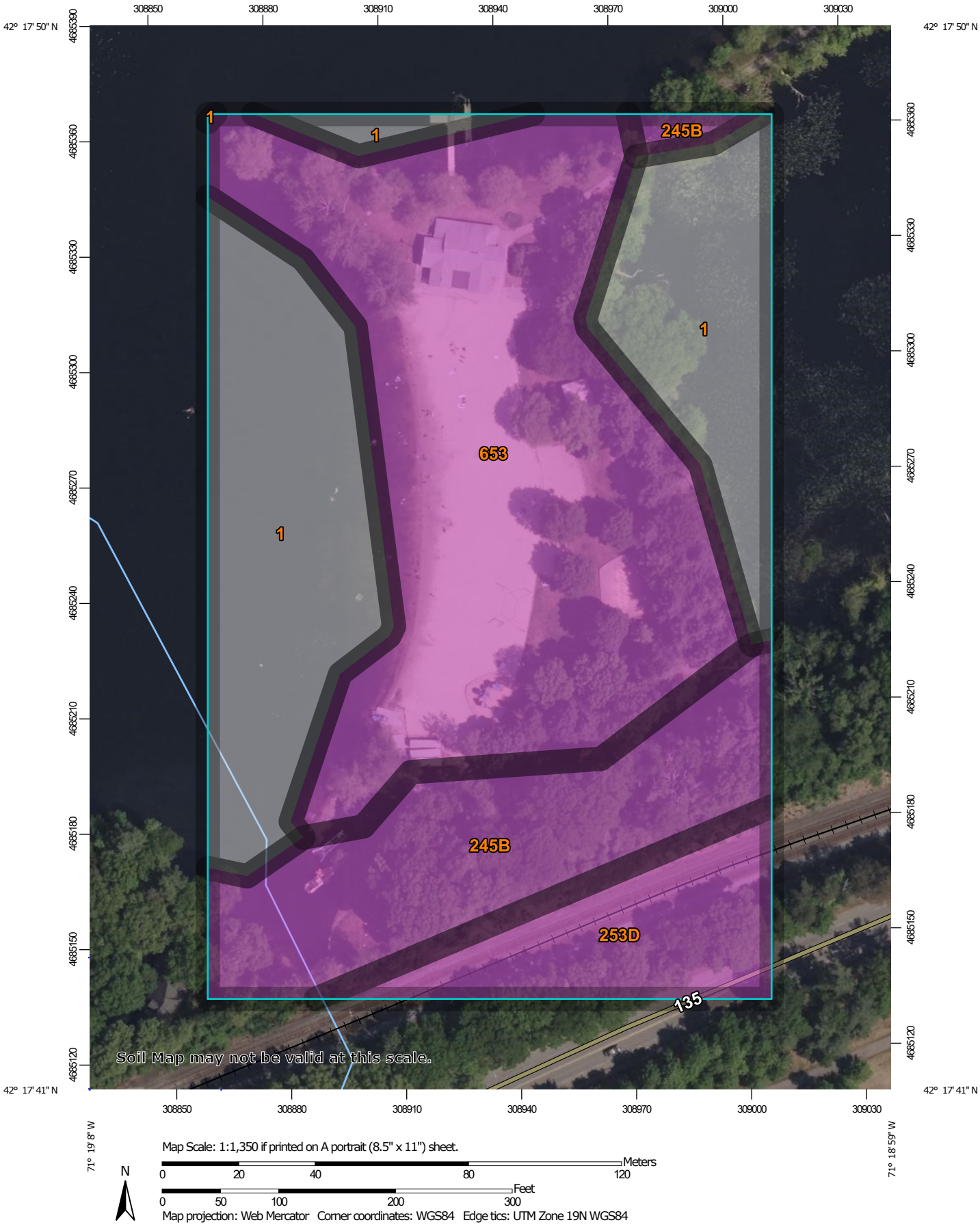
TP-4

TP-6

TP-5

0 50 100 150
SCALE: 1"=50'

Hydrologic Soil Group—Norfolk and Suffolk Counties, Massachusetts
(Morses Pond)



Map Scale: 1:1,350 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Norfolk and Suffolk Counties, Massachusetts
Survey Area Data: Version 20, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Water		2.5	30.1%
245B	Hinckley loamy sand, 3 to 8 percent slopes	A	1.5	17.7%
253D	Hinckley loamy sand, 15 to 35 percent slopes	A	0.7	8.8%
653	Udorthents, sandy	A	3.6	43.3%
Totals for Area of Interest			**8.4**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

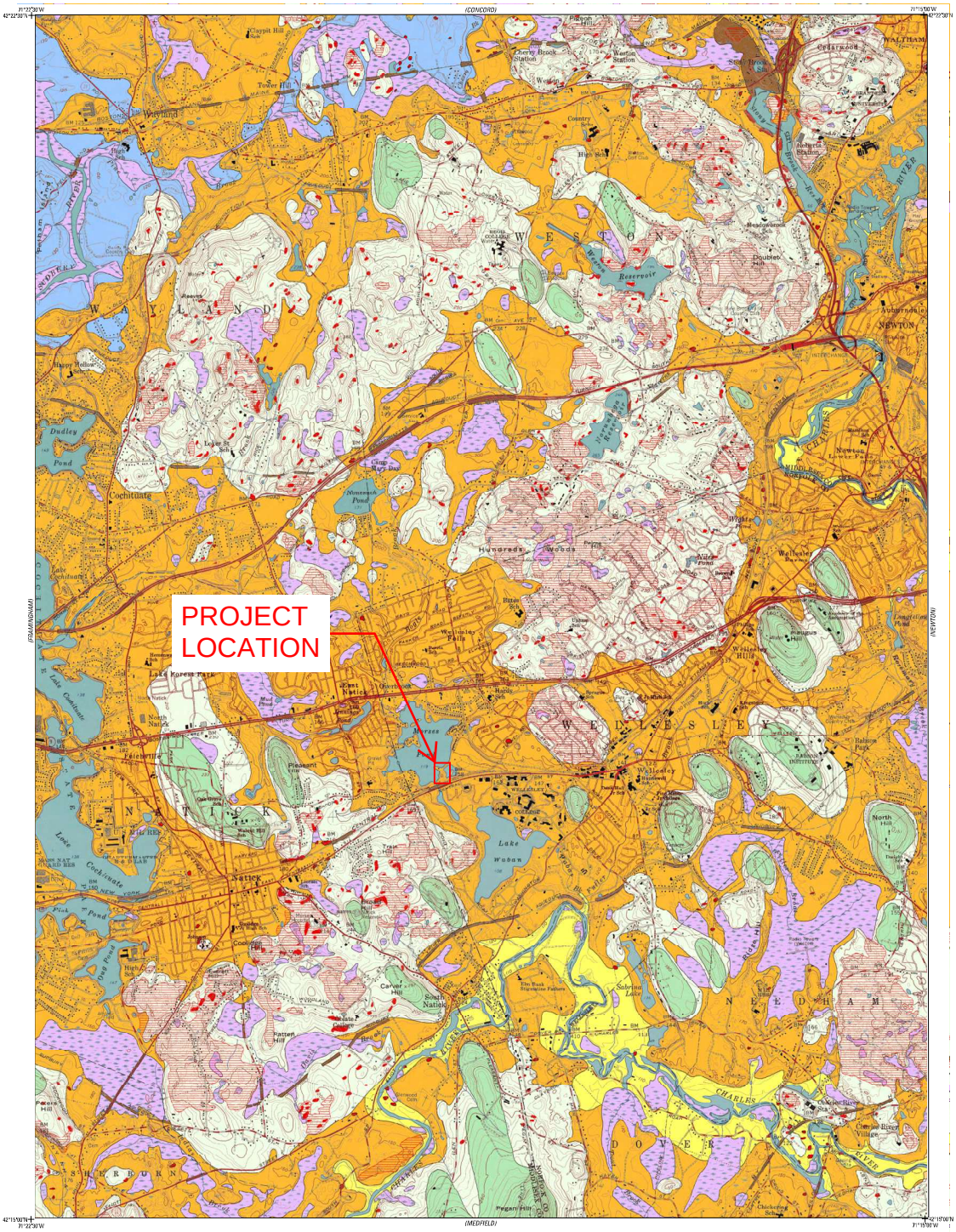
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

U.S. Department of the Interior
U.S. Geological Survey

Prepared in cooperation with the
Commonwealth of Massachusetts
Massachusetts Geological Survey
and Executive Office for Administration and Finance

Scientific Investigations Map 3402
Quadrangle 105—Natick
Discussion of surficial materials and description of map units available at https://doi.org/10.3133/sim3402



Base from U.S. Geological Survey, 1958

Map was scanned, processed, georeferenced, rectified, and cropped by the Massachusetts Geological Survey

Lambert Conformal Conic projection, North American Datum of 1983

Massachusetts state plane coordinate system, mainland zone

APPROXIMATE MEAN DECLINATION, 2018

SCALE 1:24 000

1 MILE
1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

MASSACHUSETTS
MAP LOCATION

Map units were reproduced from Nelson (1974a). Some units were restored or revised from analysis of topographic (lidar) data and 2005 orthophoto images.

Surficial Materials Map of the Natick Quadrangle, Massachusetts

Compiled by
Janet R. Stone and Byron D. Stone
2018

Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government

For sale by U.S. Geological Survey, Box 25286, Denver Federal Center, Denver, CO 80225. https://store.usgs.gov, 1–888–ASK–USGS (1–888–275–8747)

Suggested citation: Stone, J.R., and Stone, B.D., comps., 2018, Surficial materials map of the Natick quadrangle, Massachusetts, quadrangle 105 in Stone, J.R., Stone, B.D., DeSimone–Cohen, N.C., and Mabee, S.B., comps., Surficial materials of Massachusetts—A 1:24,000-scale geologic map database: U.S. Geological Survey Scientific Investigations Map 3402, 1 sheet, scale 1:24,000, https://doi.org/10.3133/sim3402.

ISSN 2329-132X (online)
https://doi.org/10.3133/sim3402

Description of Map Units

Postglacial Deposits

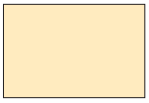
Artificial fill—Earth materials and manmade materials that have been artificially emplaced, primarily in highway and railroad embankments and in dams; unit may also include landfills, urban-development areas, and filled coastal wetlands

Cranberry bog deposits—Natural freshwater swamps or peat bogs overlain locally by artificially emplaced sand or other fill; these deposits occur primarily in southeastern Massachusetts and on Cape Cod. Commonly, cranberry bogs also are created by excavation into sand and gravel deposits that form the bed; peat and other organic material are then artificially emplaced over the bed, and water drainage pathways are diverted into the area to control seasonal flooding of the bog

Flood-plain alluvium—Sand, gravel, silt, and some organic material, stratified and well sorted to poorly sorted, beneath the flood plains of modern streams. The texture of alluvium commonly varies over short distances both laterally and vertically, and generally is similar to the texture of adjacent glacial deposits. Along smaller streams, alluvium is commonly less than 5 feet (ft) thick. The most extensive deposits of alluvium in Massachusetts are along the Housatonic, Deerfield, Westfield, Connecticut, Nashua, Merrimack, and Blackstone Rivers. Alluvium typically overlies thicker glacial stratified deposits

Swamp deposits—Organic muck and peat that contain minor amounts of sand, silt, and clay, are stratified and poorly sorted, and occur in swamps and freshwater marshes, in kettle depressions, or in poorly drained areas. Unit is shown only where deposits are estimated to be at least 3 ft thick; most deposits are less than 10 ft thick. Swamp deposits overlie glacial deposits or bedrock. They locally overlie glacial till even where they occur within thin glacial meltwater deposits

Salt-marsh and estuarine deposits—Peat and organic muck interbedded with sand and silt, deposited in saltwater or brackish-water environments of low wave energy along the coast and in river estuaries. Salt-marsh deposits are dominantly peat and muck, generally a few feet to 25 ft thick. In the major estuaries, these deposits locally overlie estuarine deposits (not mapped), which are sand and silt with minor organic material and are as much as 30 to 80 ft thick. Salt-marsh and estuarine deposits generally are underlain by adjacent glacial material, consisting of till, coarse stratified deposits, or glaciomarine fine deposits



Beach and dune deposits—Sand and fine gravel deposited along the shoreline by waves and currents, and by wind action. The texture of beach deposits varies over short distances and is generally controlled by the texture of nearby glacial materials exposed to wave action. Sand beach deposits are composed of moderately sorted, very coarse to fine sand, and are commonly laminated. Coarser layers may contain some fine gravel particles; finer layers may contain some very fine sand and silt. Gravel beach deposits are composed of granule- to cobble-size clasts in moderately sorted thin beds; deposits contain minor amounts of sand within gravel beds, and thin beds of sand as alternating layers. Beach deposits are rarely more than a few feet thick. Dune deposits are composed of moderately sorted to well-sorted, fine to medium sand, and are variably massive, laminated, and crossbedded. Dune deposits are as much as 100 ft thick. Unit includes artificial sand deposits in locally replenished beaches

Early Postglacial Deposits

Alluvial-fan deposits—Generally coarse gravel and sand deposits on steep slopes where high-gradient streams entered lower gradient valleys. Alluvial fans in some places were graded to lowering levels of glacial lakes. Fans continue to form today at some locations in Massachusetts

Valley-floor fluvial deposits—Sand, gravel, and minor silt, stratified and moderately to poorly sorted, beneath flat floors of valleys, called furrows (Mather and others, 1942), that are eroded into glacial outwash plains. The texture of the fluvial deposits commonly varies over short distances both laterally and vertically, and generally is similar to the texture of adjacent glacial deposits. The fluvial deposits overlie thick glacial stratified deposits in the upper, dry reaches of the furrow valleys and probably are less than 20 ft thick. Swamp deposits and deformation of bedding related to melting of buried ice in kettles interrupt the fluvial deposits. The deposits probably extend beneath salt-marsh and estuarine deposits in coastal valley reaches. The most extensive valley-floor fluvial deposits are on upper Cape Cod along Quaker Run and the Coonamessett, Childs, and Quashnet Rivers, and on Martha's Vineyard in Quampache Bottom

Stream-terrace deposits—Sand, gravel, and silt deposited by meteoric water (locally distal meltwater) on terraces cut into glacial meltwater sediments along rivers and streams. These deposits are shown where they overlie glaciolacustrine deposits (fine deposits map unit) and glaciomarine fine deposits; elsewhere, stream-terrace deposits are included in the coarse deposits map unit. Most stream-terrace deposits are less than 10 ft thick and overlie thicker glacial deposits; textures are commonly similar to those of underlying glacial meltwater deposits. Many stream terraces in the Connecticut River valley are composed of fine to medium sand and overlie lake-bottom silt and clay

Marine regressive deposits—Sand and minor gravel deposited along former, higher shorelines in northeastern Massachusetts by waves and currents, and by wind action on beaches and spits. These deposits are shown where they overlie glaciomarine fine deposits. Regressive beach and nearshore deposits are composed of moderately sorted, very coarse to fine sand, commonly laminated. Coarser layers may contain some fine gravel particles; finer layers may contain some very fine sand and silt. Regressive beach and nearshore deposits are rarely more than a few feet thick. Regressive spit deposits are 10 to 30 ft thick

Inland-dune deposits—Fine to medium, well-sorted sand in transverse, parabolic, and hummocky dunes as much as 60 ft thick. Deposits occur mostly in the glacial Lake Hitchcock basin (in the Connecticut Valley lowland), where sand derived from extensive glacial-lake deltas that were not yet vegetated was deposited in dune forms by early postglacial winds. Dune sand is now fixed by vegetation except where disturbed by human activities

Talus deposits—Angular, loose blocks of basalt and diabase accumulated by rockfall and creep at the base of bedrock cliffs along linear traprock ridges in the Mesozoic lowland (Connecticut Valley lowland). Talus deposits form steep, unstable slopes. Generally less than 20 ft thick

Glacial Stratified Deposits

Sorted and stratified sediments composed of gravel, sand, silt, and clay (as defined in the particle-size diagram, figure 12, below), deposited in layers by glacial meltwater. These sediments occur as four basic textural units: gravel deposits, sand and gravel deposits, sand deposits, and fine deposits. On this surficial geologic map, gravel deposits, sand and gravel deposits, and sand deposits are not differentiated and are shown as *Coarse Deposits* where they occur at the land surface. *Fine Deposits* also are shown where they occur at the land surface. Textural changes occur both areally and vertically (fig. 9); however, subsurface textural variations are not shown on this map.

PARTICLE DIAMETER										
10 256	2.5 64	.16 4	.08 2	.04 1	.02 .5	.01 .25	.005 .125	.0025 .063	.00015 .004	inches mm
Boulders	Cobbles	Pebbles	Granules	Very coarse sand	Coarse sand	Medium sand	Fine sand	Very fine sand	Silt	Clay
GRAVEL PARTICLES				SAND PARTICLES				FINE PARTICLES		

Figure 12. Grain-size classification used in this report, modified from Wentworth (1922). Abbreviation: mm, millimeter.

Coarse deposits consist of *gravel deposits*, *sand and gravel deposits*, and *sand deposits*, not differentiated in this report. *Gravel deposits* are composed of at least 50 percent gravel-size clasts; cobbles and boulders predominate; minor amounts of sand occur within gravel beds, and sand comprises a few separate layers. Gravel layers generally are poorly sorted, and bedding commonly is distorted and faulted due to postdepositional collapse related to melting of ice. *Sand and gravel deposits* occur as mixtures of gravel and sand within individual layers and as layers of sand alternating with layers of gravel. Sand and gravel layers generally range between 25 and 50 percent gravel particles and between 50 and 75 percent sand particles. Layers are well sorted to poorly sorted; bedding may be distorted and faulted due to postdepositional collapse. *Sand deposits* are composed mainly of very coarse to fine sand, commonly in well-sorted layers. Coarser layers may contain up to 25 percent gravel particles, generally granules and pebbles; finer layers may contain some very fine sand, silt, and clay

Fine deposits include very fine sand, silt, and clay that occur as well-sorted, thin layers of alternating silt and clay (varves), or as thicker layers of very fine sand and silt. Very fine to fine sand commonly occurs at the surface of these lake-bottom deposits and grades downward into rhythmically bedded silt and clay varves. In some places on the lake-bottom surface of glacial Lake Hitchcock (in the Connecticut Valley lowland) and glacial Lake Narragansett (in southeastern Massachusetts), fine deposits are overlain by as much as 30 ft of fine to medium sand, deposited as the lake level lowered or the lake shallowed; this sand has not been mapped separately. Locally, this map unit may include areas underlain by fine sand

Glaciomarine fine deposits include clay, silty clay, fine sand, and some fine gravel deposited in a higher-level sea in environments of low wave energy along the coast and in river estuaries. Fine to very fine sand, massive and laminated, commonly is present at the surface and grades downward into interbedded very fine sand, silt, silty clay, and clay. The lower silty clay and clay is massive and thinly laminated. Total thickness is generally a few feet to 75 ft

Stagnant-ice deposits—Surface coarse sediments include scattered large surface boulders, gravel deposits, and sand and gravel deposits, totaling 5 to 30 ft thick, that overlie predominantly sand deposits. Sand deposits contain deltaic foreset bedding and interlayered beds of fine sand, silt, and a little clay. Sand and silty sand deposits extend downward to basal till and bedrock. Flowtill sediments are interlayered under ice-contact slopes. Stratification in surface and underlying sediments is generally distorted and faulted due to postdepositional collapse related to melting of buried ice. Stagnant-ice deposits are confined to irregular hummocky hills, bounded by ice-contact slopes, present on tops of till hills or extending more than 30 ft above the altitudes of adjacent meltwater morphosequences in lowlands. Deposits are aligned in belts parallel to the retreating ice margin

Glacial Till and Moraine Deposits

End moraine deposits—Composed predominantly of boulders and ablation-facies sandy upper till; lenses of stratified sand and gravel occur locally within the till. In the larger deposits on Cape Cod and Martha's Vineyard, the surface ablation till is as much as 30 ft thick and overlies sand, gravel, and silty sand meltwater deposits. Some end moraine deposits include thrusted sheets of glacial meltwater deposits resulting from readvance of the ice margin (Oldale and O'Hara, 1984). Stratification in underlying sediments may also be deformed, the result of postdepositional collapse caused by melting of buried ice. Surface boulders on end moraine deposits are generally more numerous than on adjacent till surfaces; dense concentrations of boulders are present in some places. Deposits occur as freestanding hummocky landforms, commonly in ridges that trend east-northeast to west-southwest, and range in height from 10 to 100 ft

Thrust moraine deposits—In western Martha's Vineyard, thrusted moraine deposits stand as high as 300 ft in altitude and are composed of allochthonous, ice-thrusted Cretaceous, Tertiary, and older Quaternary sediments, locally overlain by thin surface till and boulders. These coastal-plain beds are fossiliferous, semi-consolidated sand, gravel, and silty clay in tilted strata that were thrust up by glacial ice into positions well above the autochthonous coastal-plain surface, which lies below sea level. Numerous northeast-southwest-trending ridges within the thrust moraine unit mark the edges of these tilted and thrusted strata

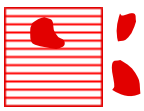
Thin till—Nonsorted, nonstratified matrix of sand, some silt, and little clay containing scattered pebble, cobble, and boulder clasts; large surface boulders are common; unit was mapped where till is generally less than 10 to 15 ft thick including areas of shallow bedrock. Predominantly consists of upper till of the last glaciation; loose to moderately compact, generally sandy, commonly stony. Two facies are present in some places: a looser, coarser grained ablation facies, melted out from supraglacial position; and an underlying more compact, finer grained lodgement facies deposited subglacially. In general, both ablation and lodgement facies of upper till derived from fine-grained bedrock are finer grained, more compact, less stony and have fewer surface boulders than upper till derived from coarse-grained crystalline rocks. Across Massachusetts, fine-grained bedrock sources include the red Mesozoic sedimentary rocks of the Connecticut Valley lowland, marble in the western river valleys, and fine-grained schists in upland areas

Thick till—Nonsorted, nonstratified matrix of sand, some silt, and little clay containing scattered pebbles, cobbles, and boulders in the shallow subsurface; at greater depths consists of compact, nonsorted matrix of silt, very fine sand, and some clay containing scattered small gravel clasts. Mapped in areas where till is greater than 10 to 15 ft thick, mostly in drumlin landforms in which till thickness commonly exceeds 100 ft (maximum recorded thickness is 230 ft). Although upper till of late Wisconsinan age is the surface deposit, lower till of probable Illinoian age constitutes the bulk of the material in thick-till areas. Lower till is moderately to very compact and is commonly finer grained and less stony than upper till. An oxidized zone, the lower part of a soil profile formed during a period of interglacial weathering, is generally present in the upper part of the lower till. This zone commonly shows closely spaced joints that are stained with iron and manganese oxides

Glacially modified coastal-plain hill deposits—In the Marshfield Hills area (Scituate, Cohasset, Hanover, and Duxbury quadrangles) and in the Pine Hills area (Manomet quadrangle), very compact till and older glacial stratified deposits overlie thrusted blocks of Tertiary coastal-plain strata that are semi-consolidated dark clay layers. Miocene-age green sand deposits have also been reported at depth. These hills in many places were sculpted by the last ice sheet, but they are generally larger (3–4 miles [mi] long and 1–2 mi wide) than typical drumlins

Thick valley till and fine deposits—Composed of sandy surface till with boulders, 3 to 20 ft thick, overlying finer grained till, or fine sand, silt, or clay, local boulders, and local weathered limestone and dolostone bedrock; total thickness of all sediments is 6 to 135 ft, averaging 50 ft. Materials reported in drillers' records include four descriptions usually synonymous with till: hardpan with no boulders; boulders and clay; gravelly hardpan; and clay with few boulders. Unit includes materials probably defining glaciolacustrine fine sediments or various weathered carbonate bedrock materials, listed as follows: gray clay, gray and yellow clay, black soft rock, and weathered bedrock. The subsurface fine sediments are exposed only in fresh, temporary landslide slopes or shallow excavations, where silty-clayey fine sand typically appears to be sheared, deformed, or disaggregated. Original laminations are difficult to discern. Surface morphology of the thick valley till and fine deposits includes (1) a glacially smoothed surface without bedrock outcrops or any relief related to bedrock structure; (2) locally a streamlined shape similar to small drumlins composed of thick till in other parts of Massachusetts; (3) landslide scarps and stream-cut banks commonly having 5 to 10 ft of relief, locally as much as 50 ft; and (4) dry, meltwater-carved channels 3 to 10 ft deep. These deposits extend almost continuously along lower valley slopes in the Housatonic and Hoosic River valleys, and their tributary valleys, that are underlain by marble, dolostone, or limestone and shale bedrock (Zen and others, 1983). The deposits appear to extend beneath the edges of glacial meltwater deposits in the valley bottoms, but their extent beneath thick glacial deposits in the centers of the valleys is not known. Some of these deposits are present in north-draining upland valleys in areas that also contain thick till deposits in drumlins

Bedrock Areas



Bedrock outcrops and areas of abundant outcrop or shallow bedrock—Solid color shows extent of individual bedrock outcrops; horizontal-line pattern indicates areas of shallow bedrock or areas where small outcrops are too numerous to map individually; in areas of shallow bedrock, surficial materials are less than 5 to 10 ft thick. These units were not mapped consistently among all quadrangles; see note at beginning of appendix 1 for information on bedrock outcrop mapping by quadrangle

APPENDIX H

Supplemental Geotechnical Explorations, September 2025

September 19, 2025

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

Town of Wellesley
c/o Ms. Cassie Bethoney, RLA
Weston & Sampson
100 Foxborough Boulevard, Suite 250
Foxborough, MA 02035

RE: **Supplemental Geotechnical Explorations**
Proposed Morses Pond Improvements
Wellesley, Massachusetts

Dear Cassie:

Weston & Sampson Engineers, Inc. (Weston & Sampson) is pleased to present this supplemental letter summarizing results of supplemental geotechnical test pits and our understanding of the site proposed improvements currently being considered for the Morses Pond Beach Area located in Wellesley, Massachusetts. The site location is shown on *Figure 1.* Additional test pits were completed on August 21, 2025 for the dual purpose of stormwater infiltration evaluation (assessment of seasonal high groundwater table and USDA soil classification) and geotechnical subsurface evaluation.

This supplemental letter is not intended to be a standalone report but, rather, supplemental to our Preliminary Geotechnical Report for the Proposed Morses Pond Improvements dated November 23, 2021 (2021 Preliminary Geotechnical Report). Refer to our 2021 preliminary geotechnical report for previous recommendations, the attached document titled "Important Information about this Geotechnical Engineering Report" by Geoprofessional Business Association (GBA), Inc., and the Limitations section of this letter.

CURRENT PROJECT UNDERSTANDING

Our current understanding of the proposed project is based on our correspondence with the project team and two August 2025 conceptual site plans for the new administration and bathhouse buildings: Alternative A shows the new buildings located to the south of the site, between the existing beach and Ice House Pond, and Alternative B shows the new buildings located to the north of the site, within the existing footprint and surrounding area of the existing administration building. Copies of these plans are included in *Attachment A*. Existing conditions plans are available as Figures 2A and 2B. Previously, only the southern option was anticipated.

Each of the proposed building site alternatives, along with explorations completed by Weston & Sampson to date, are depicted on *Figure 2A* and *2B*. We understand the new buildings will have approximate dimensions of 44 ft. by 30 ft. and 45 ft. by 20 ft. Other proposed features at the site include ADA parking areas at the southern end, a relocated playground area, gatehouse, and open lawn area to the north, and new landscaped areas and walking paths. The existing single-story brick bathhouse will be demolished.

Proposed grading was not made available to us at the time of this report however we assume that grade changes will generally be limited to within approximately 2 ft. of existing grades. Structural loading information also was not made available to us at the time of this report.

SITE HISTORY

Due to the findings of seemingly sporadic undocumented fill in the previously completed borings, Weston & Sampson completed further desktop review of the project site to better understand the site history and potential extents of undocumented fill. We reviewed available historic aerial imagery and other available information. Based on information available on the Wellesley Historical Society webpage, we understand Ice House Pond was used for commercial ice harvesting from the late 1800s until about 1931, when the Town of Wellesley purchased the land with the intent to convert it to a public beach. The town beach was initially located to the north of Ice House Pond but was later moved to its current location between about 1970 and 1978.

We have reviewed historic aerial imagery available from Environmental Data Resources, Inc. (EDR) dating back to 1938 and it is evident that the shoreline of Ice House Pond has changed substantially due to filling related to the development of the beach area. Refer to *Figures 3A and 3B* for selected images. It is possible additional filling may have occurred prior to 1938. It is evident from review of the aerial imagery that the western edge of Ice House Pond was regraded to create a straight, north-south oriented shoreline sometime in the 1970s. It appears substantial filling likely occurred at the southwest corner of the pond and at about the midpoint of the western shoreline.

The above understanding could explain the deep undocumented fill and debris that was encountered within B-5 and help to understand the potential limits of undocumented fill placement. We have prepared an approximate overlay of the 1938 Ice House Pond shoreline on a present day aerial image (refer to *Figures 3A and 3B*) to convey areas of expected fill placement and our current understanding of the site history and potential risks associated with each building site alternative.

Since our above evaluation is based on aerial imagery, it should be noted that the above shoreline alterations may be due to manmade topographic changes (filling/excavation) or changes in the lake water surface elevation. Water surface elevations in Morses Pond are controlled by a dam at the south end and it is possible historic lake surface elevations differed from present day elevations (therefore, altering the shoreline). Without details on the historic lake levels of Ice House and Morses Ponds, we cannot definitively say whether this is a factor.

SUBSURFACE CONDITIONS

Previous Subsurface Explorations

Weston & Sampson previously explored subsurface conditions at the site by advancing five (5) borings (B-1 through B-5) on September 1, 2021 as described in our 2021 Preliminary Geotechnical Report. Copies of the boring logs are included in *Attachment B*.

Recent Subsurface Exploration Program

Weston & Sampson further explored subsurface conditions on August 21, 2025 by advancing eight (8) test pits (TP-1, TP-2, TP-2A, TP-3, TP-3A, TP-4 through TP-6). Test pit locations TP-2 and TP-3 were offset (denoted as TP-2A and TP-3A) for further exploration within the proposed administration and bathhouse building footprints. The approximate location of test pits is shown in *Figure 2A*. Weston & Sampson geotechnical engineering staff monitored test pit activities, collected soil samples, measured test pit locations using GPS equipment, and prepared logs for each test pit.

The test pits were excavated by the Town of Wellesley DPW using a compact, hydraulic excavator and were advanced to depths between 4 and 9 feet, corresponding to the limits of the equipment or to approximate observed groundwater, whichever was shallower. The test pits were backfilled with the excavated materials and compacted with the excavator bucket. Test pit logs are included in *Attachment C*.

Encountered Subsurface Conditions

Subsurface conditions encountered in the test pits were generally consistent with those encountered previously in the borings and our understanding of the site history as discussed above.

Subsurface soil and groundwater conditions described below have been interpreted based on a limited number of test pits that were observed by Weston & Sampson. Variations may occur and should be expected between locations. The strata boundaries shown in our logs are based on our interpretations and the actual transitions may be gradual. Refer to the test pit logs included in *Attachment C* for detailed descriptions of the soil samples collected. The general Unified Soil Classification System (USCS) designation(s) for each stratum is included in the descriptions below in parentheses. Depths provided below are relative to the existing ground surface at the time of excavation.

Topsoil – Approximately 4 to 10 inches of topsoil was encountered at the ground surface at each of the test pit locations except for TP-2 which was completed in the beach/swim area.

Beach Sand – Approximately 9 inches of uniform beach sand was encountered from the ground surface in TP-2. The beach sand generally consisted of poorly graded fine to coarse sand with trace silt (SP).

Fill – Undocumented fill was encountered below the surficial topsoil or beach sand in each of the test pit locations, except in TP-3 and TP-3A, and extended to depths up to approximately 4 ft. The fill generally consisted of some to mostly fine to coarse sand with some fine to coarse gravel and few to little silt or mostly fine to coarse gravel with some fine to coarse sand and trace silt (SM, GP, SW-SM). The fill encountered at TP-6 also contained trace debris (glass, plastic).

Buried Topsoil – Buried topsoil was encountered below the fill in TP-5 and TP-6 and extended to depths of approximately 3 and 3.8 ft., respectively. The buried topsoil was approximately 1 foot thick and generally consisted of varying amounts of sand and gravel with trace to few silt and numerous fine roots (GP, SP-SM).

Native Sand and Gravel – Native sand and gravel was encountered below the surficial topsoil in TP-3 and TP-3A; below the fill in TP-1 through TP-2A and TP-4; and below the buried topsoil in TP-5 and TP-6. The gravel layers generally consisted of mostly gravel with little to some sand and trace to few non-plastic fines (GW, GW-GM). The sand layers generally consisted of mostly fine to coarse sand with some fine to coarse gravel, few non-plastic fines, and trace to numerous cobbles and boulders (SW-SM). Each of the borings were terminated in this stratum at depths between approximately 4 and 9 feet.

Groundwater – Depth to water was measured in test pit locations TP-1, TP-2, TP-5, and TP-6 at depths between 4.9 to 8.2 ft. (El. 117.7 to 120.6). We anticipate that groundwater levels at the site will fluctuate with water levels of Morses Pond and Ice House Pond and with season, variations in precipitation, construction in the area, and other

factors. Perched groundwater conditions could exist close to the ground surface, especially during and after extended periods of wet weather.

ENVIRONMENTAL OBSERVATIONS

Weston & Sampson made visual observations of the test pit excavations completed on August 21, 2025. No indication of petroleum products and/or hazardous substances (ex. sheen, chemical/petroleum odors, fill material indicative of petroleum products and/or hazardous substances such as paint chips, and discolored soil) were observed within the test pits. Please note that observations did not include the use of testing equipment (ex. photoionization detector) or the collection and analytical testing of soil samples that may detect petroleum products and/or hazardous substances within the soil not observed using visual and olfactory methods.

GEOTECHNICAL ASSESSMENT OF BUILDING SITING

In general, our recommendations provided in the 2021 preliminary geotechnical report do not change based on results of the August 2025 test pits. Undocumented fill and buried topsoil was encountered throughout the site and generally extended to less than 4 feet except in B-5, along the western shoreline of Ice House Pond, where loose, undocumented fill with organics and debris was encountered to a depth of about 10 feet, and in B-2, northeast of the existing bathhouse building, where undocumented fill and buried topsoil were encountered to a depth of 8.5 feet.

Undocumented fill and buried topsoil are not suitable for foundation support and need to be fully excavated and replaced with properly compacted engineered structural fill prior to supporting structural improvements. Existing undocumented fill depths less than about 4 feet are of limited concern since shallow foundations placed below the frost depth per our recommendations and building code will, by requirement, be founded below this depth.

Since the borings and test pits represent a discrete point at the site, it remains unclear how far the undocumented fill and buried topsoil deeper than 4 feet extends beyond borings B-5 and B-2. As can be seen in *Figure 3B*, portions of the historic 1938 shoreline do approach the eastern side of proposed building site Alternative A, especially in the vicinity of B-5.

Of the two currently proposed building locations, Alternative B to the north would be the preferred location from a geotechnical standpoint due to the lower likelihood of encountering unsuitable fill material at proposed foundation depths. Alternative A to the south may also be satisfactory, however, the proximity of the northeast building corner to B-5 and historic Ice House Pond shoreline raises concerns about potential existing fill and buried topsoil requiring excavation deeper than 4 feet to remove these materials.

RECOMMENDATIONS FOR ADDITIONAL GEOTECHNICAL TEST PITS

Due to the thicknesses of fill encountered in B-2 and B-5, and lack of test pits in these areas on August 21, 2025, we are unable to determine if the fill and buried topsoil extend below the proposed buildings for Alternative A or B. We recommend an additional half day of test pits to further explore the extents of the fill between the current A/B alternatives and B-2/B-5 borings. Additional test pits should be located between the proposed building footprints

and borings B-2 and B-5 to verify fill depths. We believe this will reduce the risk associated with the current uncertainties.

If additional explorations are not completed, we recommend the project team carry an allowance for over excavation and replacement of isolated pockets of fill be incorporated into the project budget. Regardless of which site is selected, Weston & Sampson geotechnical staff should be retained to review subgrade conditions and confirm suitability prior to placement of rebar and concrete.

LIMITATIONS

This letter is subject to the limitations included in our 2021 Preliminary Geotechnical Report.

It has been a pleasure assisting you with this project and we look forward to our continued involvement. Please call if you have any questions.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

Matthew J. Zanchi, PE
Project Engineer

Jennifer MacGregor, PE
Technical Leader

Attachments:
Figure 1 – Locus Plan
Figures 2A & 2B – Site Plan
Figures 3A & 3B – Historic Aerial Imagery
Attachment A – August 2025 Conceptual Site Plans
Attachment B – September 2021 Boring Logs
Attachment C – August 2025 Test Pit Logs
Attachment D – Important Information about This Geotechnical-Engineering Report

MJZ:JACM

P:\MA\Wellesley MA\25-1067-Morses Pond Beach Area & Bathhouse Supplemental Feasibility Study\07-DesignMaterials\02-Geotechnical\5.0 Report\August 2025 TP Summary Letter_FINAL.docx

FIGURES

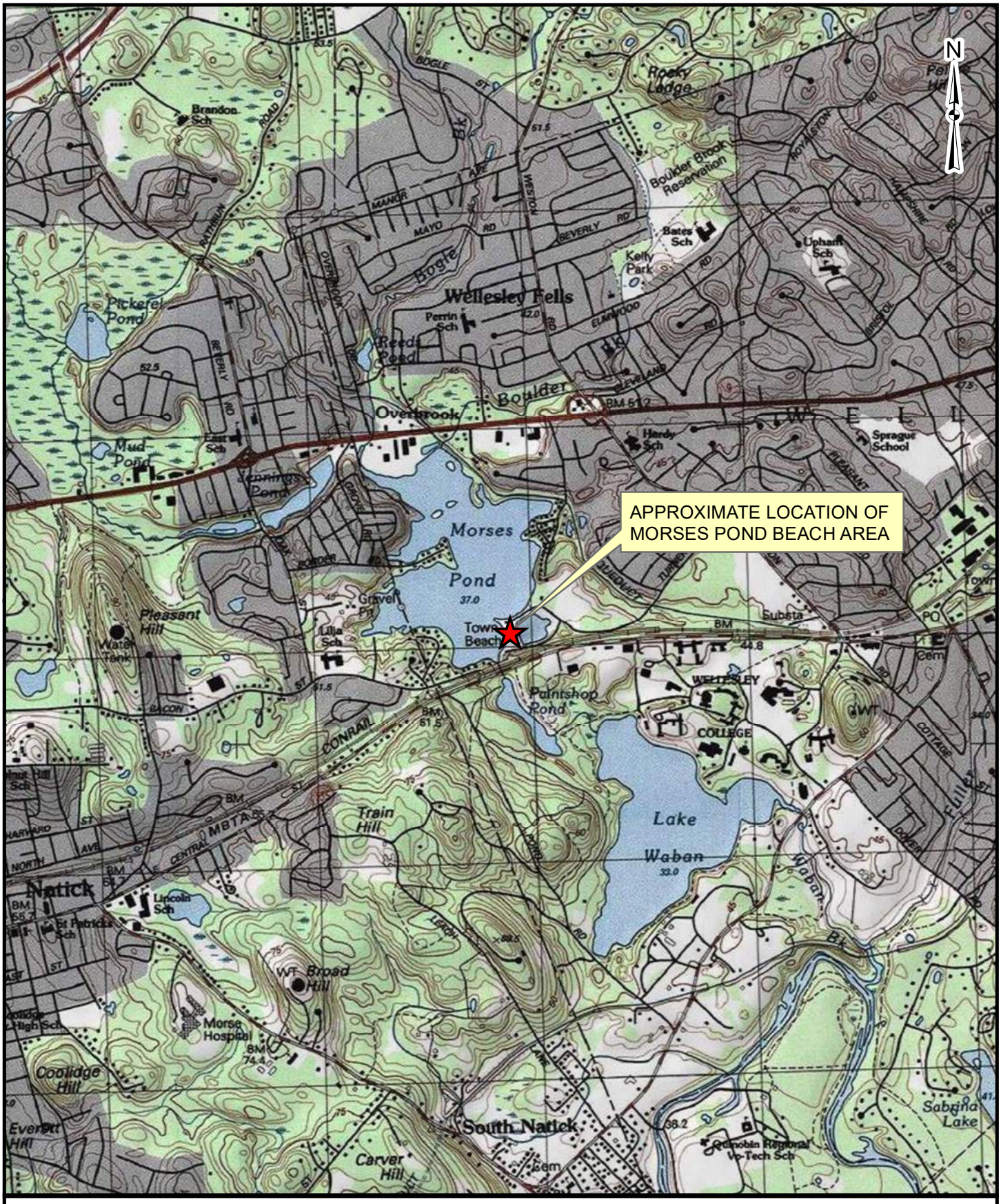


FIGURE 1
PROJECT LOCUS

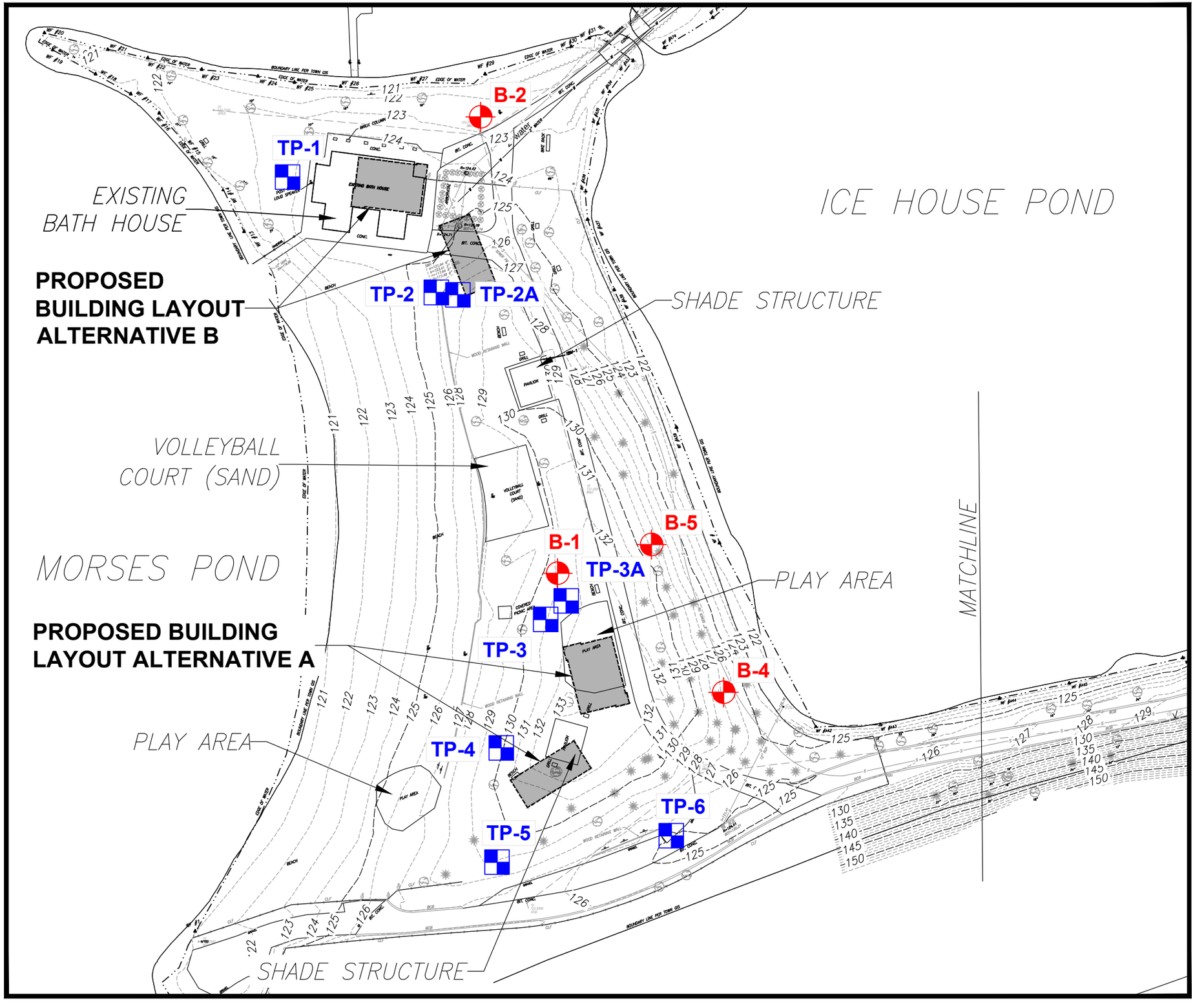
MORSES POND BEACH AREA FEASIBILITY STUDY
WELLESLEY, MASSACHUSETTS

2,000 0 2,000

Scale In Feet

Weston & Sampson

Path: P:\MA\Wellesley MA\Morses Pond Beach Area Feasibility Study\Geotech\Plans\GIS\Figure 1. Project Locus.mxd **User:** ZanchiM **Saved:** 8/26/2021 4:39:12 PM **Opened:** 8/26/2021 4:39:50 PM



Weston & Sampson℠

Weston & Sampson Engineers, Inc.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
978.532.1900 800.SAMPSON
www.westonandsampson.com

NOTES

1. THIS PLAN IS BASED ON AN EXISTING CONDITIONS SURVEY OF MORSES POND BEACH PREPARED BY BRENNAN CONSULTING DATED OCTOBER 2021.
2. BORINGS WERE COMPLETED BY TECHNICAL DRILLING SERVICES, INC. OF STERLING, MA ON SEPTEMBER 1, 2021.
3. TEST PITS WERE COMPLETED BY THE TOWN OF WELLESLEY, MA DEPARTMENT OF PUBLIC WORKS ON AUGUST 21, 2025.
4. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON ENGINEER.
5. BORING AND TEST PIT LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
6. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-1	DESIGNATION AND APPROXIMATE LOCATION OF BORING
TP-1	DESIGNATION AND APPROXIMATE LOCATION OF TEST PIT

GRAPHIC SCALE

60 30 0 60 120

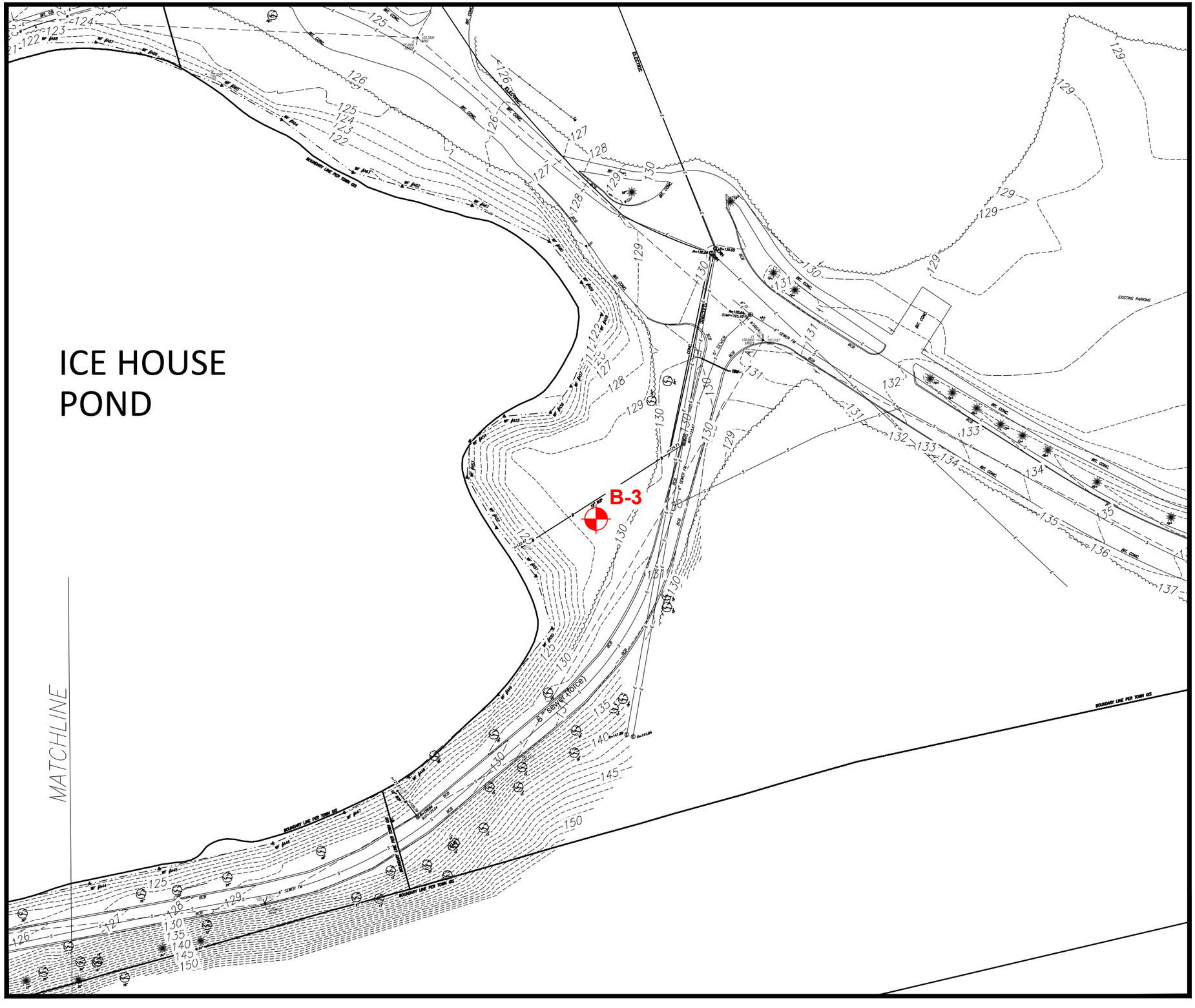
SCALE: 1"=60'

ORIENTATION	TITLE
N	SITE PLAN – WEST
	PROJECT: MORSES POND BEACH AND BATH HOUSE, WELLESLEY, MA 02482

DATE	09/2025
DRWN BY	NMK
CHKD BY	MZ
PRJ. NO.	ENG25-1067
REV. NO.	-

FIGURE 2A

\\wse03.local\WSE\Projects\MA\Wellesley MA\25-1067-Morses Pond Beach Area & Bathhouse Supplemental Feasibility Study\07-DesignMaterials\02-Geotechnical\3.0 Figures\CAD\Morses Pond Site Plan_2025.09.dwg



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4. BORING LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-3 — DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – EAST
	PROJECT
	MORSES POND BEACH AND BATH HOUSE
	WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	MZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2B

C:\Users\zanchim\appdata\local\temp\AcPublish_3816\Morses Pond Site Plan.dwg

Figure 3A. 1938 Aerial Image of Morses Pond Beach Area w/ Ice House Pond shoreline in red. Image captured by USGS and sourced via EDR.

Figure 3B. 2023 Aerial Image of Morses Pond Beach Area w/ 1938 Ice House Pond shoreline overlain in red. Image captured by USDA/NAIP and sourced via EDR.

Attachment A

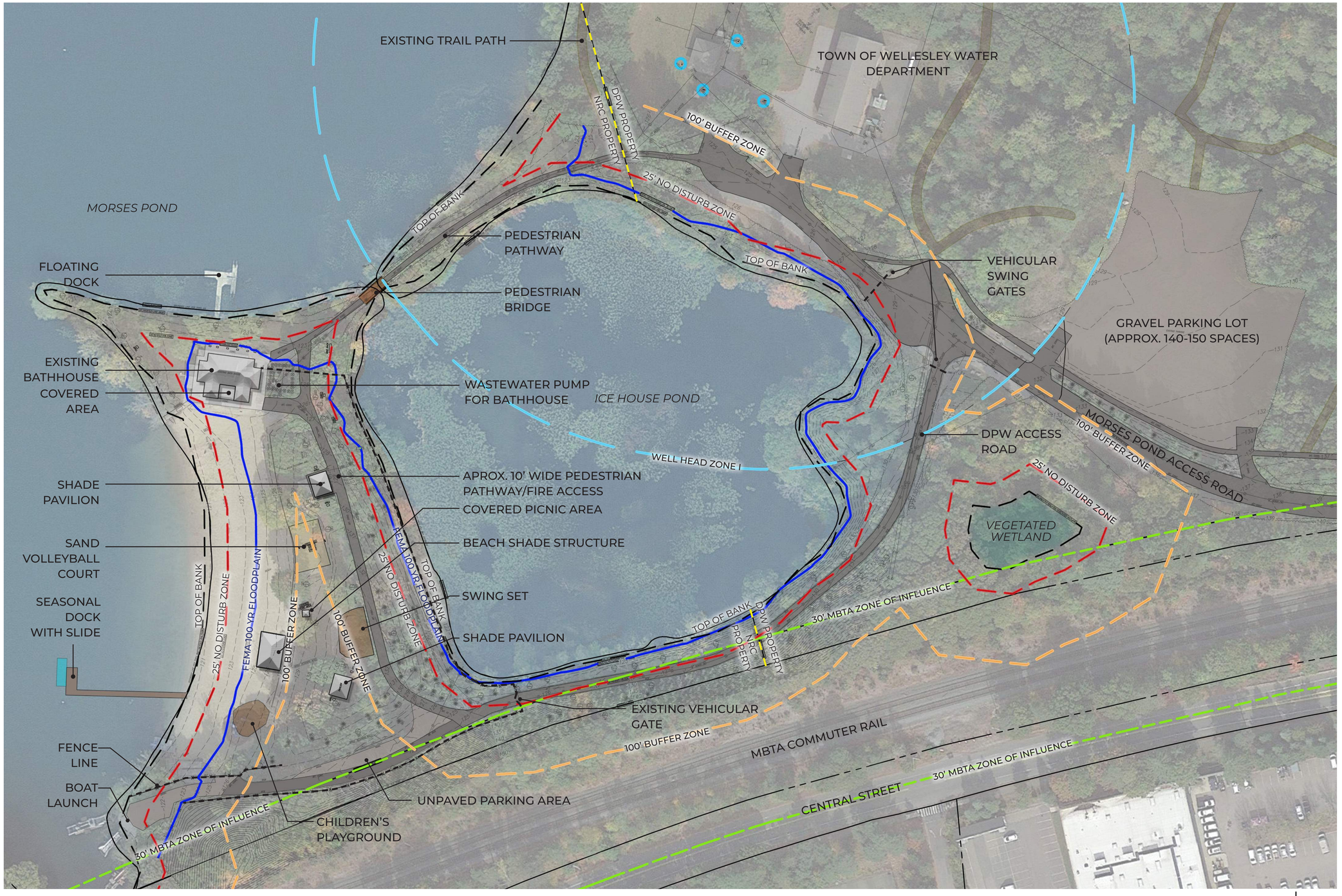
August 2025 Conceptual Site Plans

EXISTING CONDITIONS PLAN: **BUILDING AND AMENITIES INVENTORY**

TASK 1

Evaluate Site

Existing Conditions Plan and Report Analysis



0 50 100 150

SCALE 1' = 50'-0"

ALTERNATIVE A: **MODIFIED SOUTH SIDE BUILDING DESIGN**

0 50 100 150

SCALE 1' = 50'-0"

ALTERNATIVE B: **NEW NORTH SIDE BUILDING DESIGN**

0 50 100 150

SCALE 1" = 50'-0"

Attachment B

September 2021 Boring Logs

Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-1

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
			● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
	S-1 12/24	9 17 16 17	33		Topsoil- 4 inches thick. Well graded gravel with silt and sand (GW-GM) - Medium dense to dense; light brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines.	
	S-2 6/24	8 10 9 8	19			[2.0 - 21.0] Intermittent auger grinding.
5	S-3 10/24	11 6 6 11	12		Silty sand (SM) - Medium dense; brown; moist; mostly fine to coarse SAND, little non plastic fines, few fine gravel. 2-inch seam of fine sand	[4.0] GC: 9%, SC: 74%, FC: 17%
					Silty sand with gravel (SM) - Dense; brown; moist; mostly fine to coarse SAND, some fine gravel, little non plastic fines.	
10	S-4 6/24	21 23 20 16	43			
					Poorly graded gravel with silt (GP-GM) - Very dense; brown; wet; mostly coarse GRAVEL, few fine to coarse sand, few non plastic fines.	[12.5] Estimated water level at time of drilling based on changes in sample moisture.
15	S-5 6/24	20 24 32 46	>> 56		Sample is primarily gravel-sized rock fragments	
	S-6 12/12				Silty sand (SM) - Brown; wet; mostly fine to medium SAND, some non plastic fines, few fine gravel.	[16.0] Split spoon advanced 12 inches to obtain sample but blow counts not recorded.
20	S-7 9/24	19 17 19 33	36		Silty gravel with sand (GM) - Dense; brown; wet; mostly fine to coarse GRAVEL, some medium to coarse sand, little non plastic fines.	
						Exploration ended at 21.0 ft.

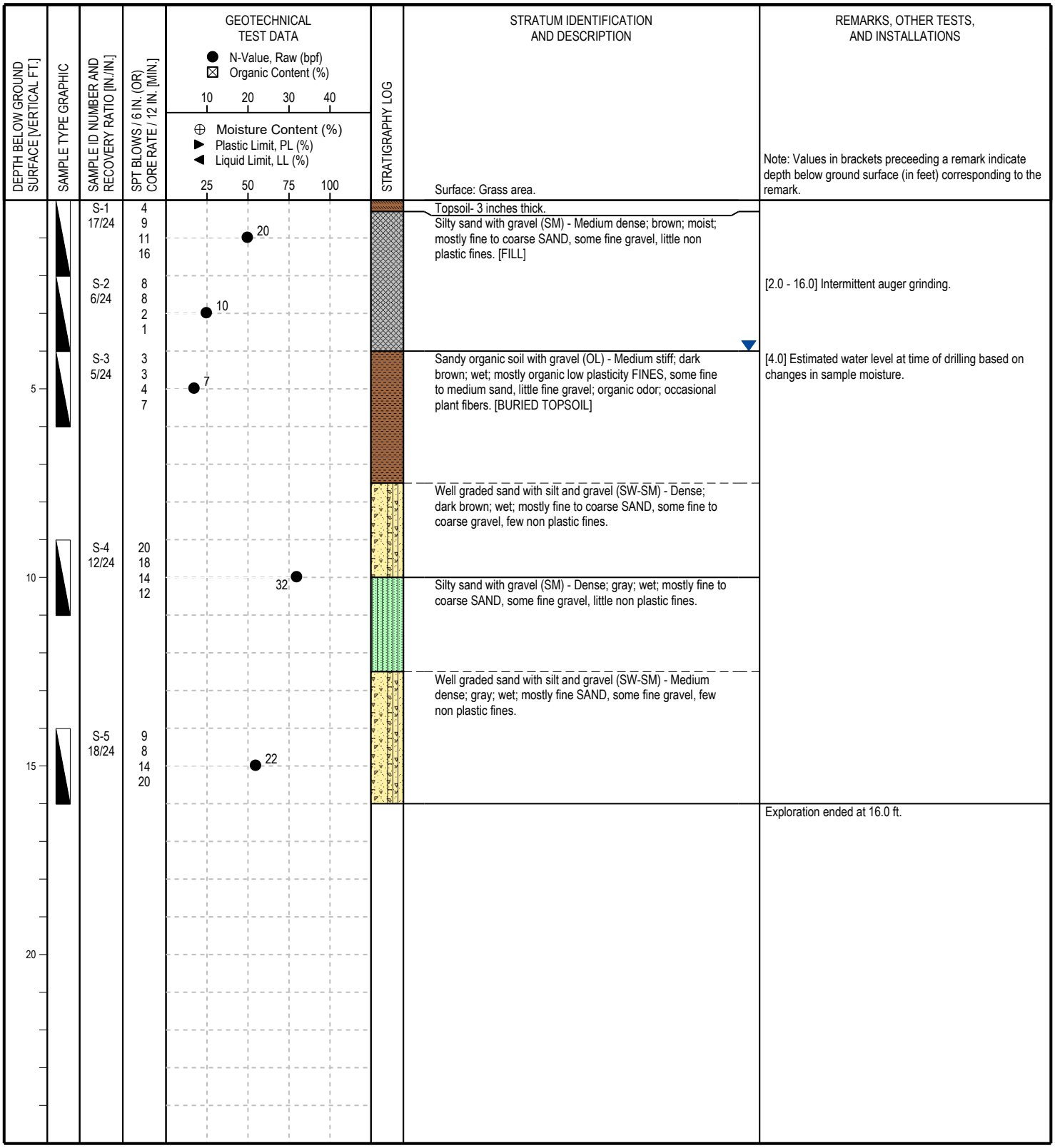
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-2

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-3

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
				N-Value, Raw (bpf); Organic Content (%); 10 20 30 40; Moisture Content (%); Plastic Limit, PL (%); Liquid Limit, LL (%); 25 50 75 100		Surface: Forest debris.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 8/24	3 9 6 6	15		Topsoil- 5 inches thick.	
						Silty sand with gravel (SM) - Loose to medium dense; brown; moist; mostly fine SAND, some fine to coarse gravel, little non plastic fines.	
		S-2 10/24	5 4 5 5	9			[2.0 - 16.0] Intermittent auger grinding.
5		S-3 9/24	8 10 14 12	24		Well graded sand with silt and gravel (SW-SM) - Medium dense; light brown; moist to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines.	
10		S-4 8/24	14 14 12 9	26		▼	[10.0] Estimated water level at time of drilling based on changes in sample moisture.
15		S-5 15/24	8 8 11 22	19			
							Exploration ended at 16.0 ft.
20							

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

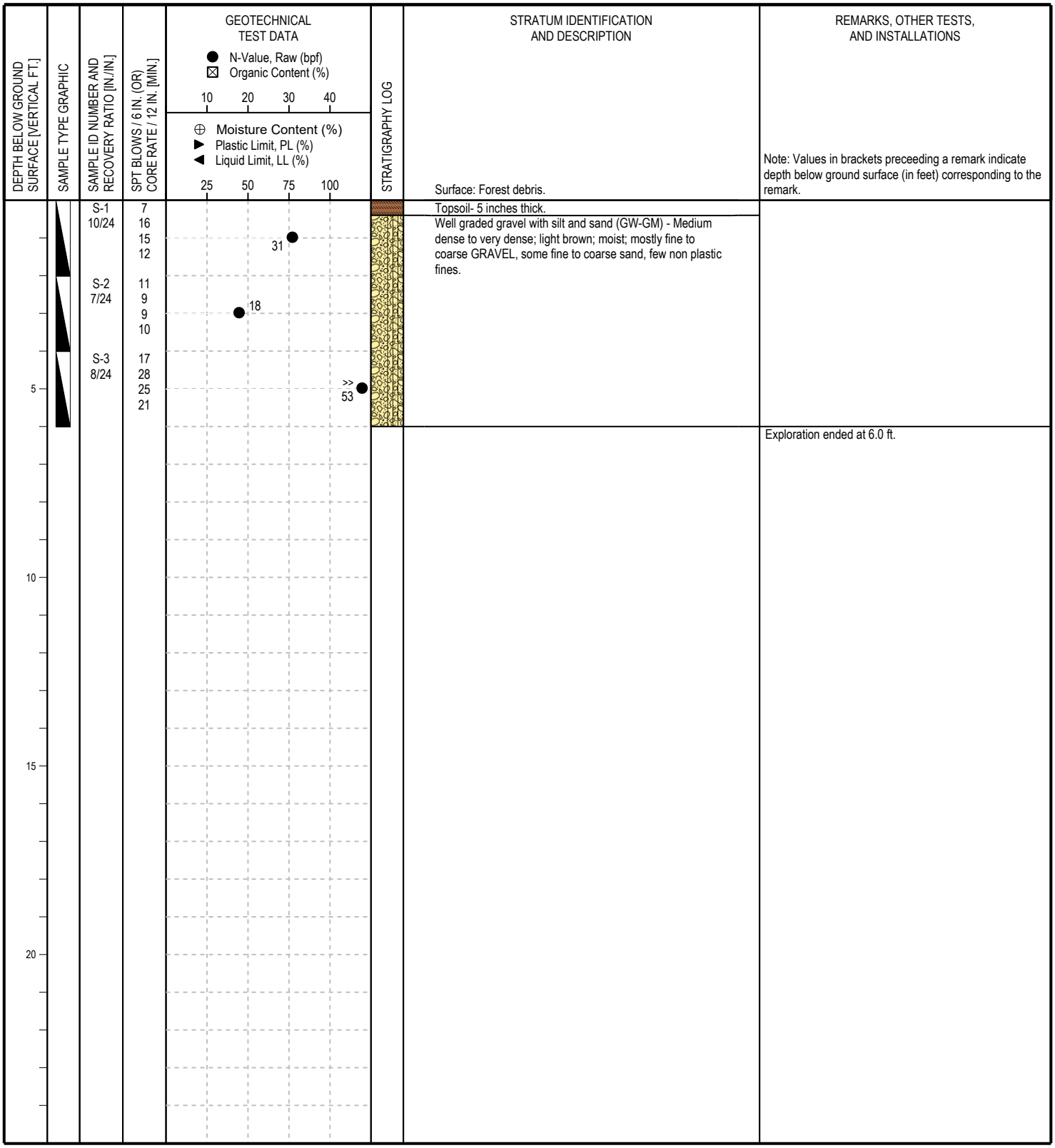
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-4

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	6.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



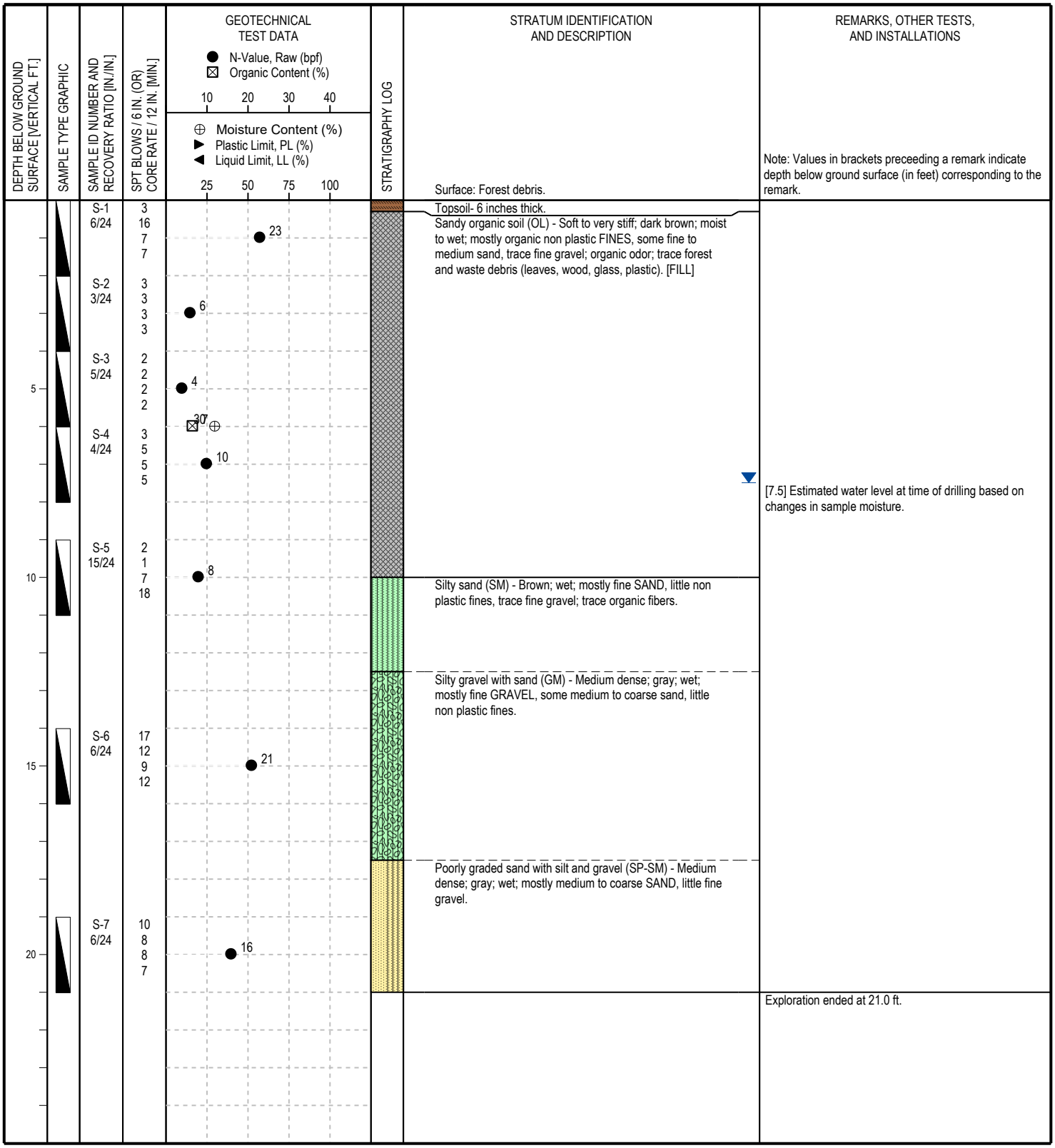
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-5

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 1 GENERAL INFORMATION

GENERAL NOTES AND USE OF LOGS

1.) Explorations were made by ordinary and conventional methods and with care adequate for Weston & Sampson's study and/or design purposes. The exploration logs are part of a specific report prepared by Weston & Sampson for the referenced project and client, and are an integral part of that report. Information and interpretations are subject to the explanations and limitations stated in the report. Weston & Sampson is not responsible for any interpretations, assumptions, projections, or interpolations made by others.

2.) Exploration logs represent general conditions observed at the point of exploration on the date(s) stated. Boundary lines separating soil and rock layers (strata) represent approximate boundaries only and are shown as solid lines where observed and dashed lines where inferred based on drilling action. Actual transitions may be gradual and changes may occur over time.

3.) Soil and rock descriptions are based on visual-manual examination of recovered samples, direct observation in test pits (when permissible), and laboratory testing (when conducted).

4.) Water level observations were made at the times and under the conditions stated. Fluctuations should be be expected to vary with seasons and other factors. Use of fluids during drilling may affect water level observations. The absence of water level observations does not necessarily mean the exploration was dry or that subsurface water will not be encountered during construction.

5.) Standard split spoon samplers may not recover particles with any dimension larger than 1-3/8 inches. Reported gravel conditions or poor sample recovery may not reflect actual in-situ conditions.

6.) Sections of this guide provide a general overview of Weston & Sampson's practices and procedures for *identifying* and *describing* soil and rock. These procedures are predominantly based on ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)*, the International Society of Rock Mechanics (ISRM) standards, and the *Engineering Geology Field Manual* published by the Bureau of Reclamation. Not all aspects of this guide relating to description and identification procedures of soil and rock may be applicable in all circumstances.

SAMPLER GRAPHICS

- Split Spoon (Standard) 2" OD, 1-3/8" ID
- Split Spoon (Oversize) 3" OD, 2-3/8" ID
- Shelby or Piston Tube 3" OD, 2-7/8" ID
- Double-Tube Rock Core Barrel 2" Core Diameter
- Direct Push with Acetate Liner Various Liner Sizes
- A — Auger Sample *(from cuttings or hand auger)*
- G — Grab Sample *(manual, from discrete point)*
- C — Composite Sample *(multiple grab samples)*

WELL GRAPHICS

- Cement concrete seal around casing or riser pipe
- Bentonite seal around casing or riser pipe
- Cement grout seal around casing or riser pipe
- Soil backfill around riser pipe or beneath screen
- Gravel backfill around screen or riser pipe
- Sand backfill around screen or riser pipe (filter sand)
- Solid-wall riser; Sch. 40 PVC, 1" ID unless noted otherwise
- Slotted screen; Sch. 40 PVC, 1" ID with machined slots

CAVING / SEEPAGE TERMS

The following caving and/or seepage terms may appear on a test pit log.

Caving Term	Criteria
Minor	less than 1 cubic ft.
Moderate	1 to 3 cubic ft.
Severe	greater than 3 cubic ft.

Seepage Term	Criteria
Slow	less than 1 gpm
Moderate	1 to 3 gpm
Fast	greater than 3 gpm

KEY TO WATER LEVELS

- Observed in exploration during advancement.
- Measured in exploration at completion, prior to backfilling or well installation.
- Measured in exploration after the stated stabilization period, prior to backfilling, or in well installation if noted.

DEFINITIONS OF COMMON TERMS

Sample Recovery Ratio - The length of material recovered in a drive or push type sampler over the length of sampler penetration, in inches (e.g. 18/24).

Standard Penetration Test (*SPT*) - An in-situ test where a standard split-spoon sampler is driven a distance of 12 or 18 inches (after an initial 6-inch seating interval) using a 140-lb. hammer falling 30 inches for each blow.

SPT Blows - The number of hammer blows required to drive a split-spoon sampler each consecutive 6-inch interval during a *Standard Penetration Test*. If no discernable advancement of a split spoon sampler is made after 50 consecutive hammer blows, 50/X indicates *sampler refusal* and is the number of blows required to drive the sampler X inches.

SPT N-Value (*N*) - The uncorrected blow count representation of a soil's penetration resistance over a 12-inch interval after an initial 6-in. seating interval, reported in blows per foot (bpf). The N-value is correlated to soil engineering properties.

Auger Refusal - No discernable advancement of the auger over a period of 5 minutes with full rig down pressure applied.

Casing Refusal (Driven) - Casing penetration of less than 6 inches after a minimum 50 blows of a drop hammer weighing 300 lbs. or a minimum 100 blows of a drop hammer weighing 140 lbs.

PID Measurement - A measurement (electronic reading) taken in the field using a photoionization detector (PID) to detect the presence of volatile organic compounds in a soil sample. Values are reported as benzene equivalent units in parts per million (ppm) unless noted otherwise.

Rock Quality Designation (RQD) - A qualitative index measure of the degree of jointing and fracture of a rock core taken from a borehole. The RQD is defined as the sum length of solid core pieces 4 inches or longer divided by the run (cored) length, expressed as a percentage. Higher RQD values may indicate fewer joints and fractures in the rock mass.

Fill (Made Ground) - A deposit of soil and/or artificial waste materials that has been placed or altered by human processes.

LABORATORY TESTS AND FIELD MEASUREMENTS

MC	Moisture Content	IC	1D Incremental Consolidation
OC	Organic Content	VS	Laboratory Vane Shear
PL	Plastic Limit	US	Unconfined Compression
LL	Liquid Limit	TC	Triaxial Compression
GC	Gravel Content	PP	Pocket (Hand) Penetrometer
SC	Sand Content	TV	Torvane (Hand Vane)
FC	Fines Content	PID	Photoionization Detector
DS	Direct Shear	FID	Flame Ionization Detector

BORING ADVANCEMENT METHODS

Hollow-Stem Auger Drilling - Utilizes continuous flight auger sections with hollow stems to advance the borehole. Drill rods and a plug are inserted into the auger stem to prevent the entrance of soil cuttings into the augers.

Rotary Wash Drilling - Utilizes downward pressure and rotary action applied to a non-coring bit while washing the cuttings to the surface using a circulating fluid injected down the drill rods. The borehole is supported with either steel casing or the drilling fluid. Where a casing is used, the borehole is advanced sequentially by driving the casing to the desired depth and then cleaning out the casing. The process of driving and cleaning the casing is commonly referred to as the 'drive-and-wash' technique.

Continuous Sampling - Includes a variety of methods and procedures during which the borehole is advanced via continuous recovery of soil samples. *Direct Push* sampling is a common method that uses static downward pressure combined with percussive energy to drive a steel mandrel into the ground at continuous intervals while recovering soil samples in disposable acetate liners.

Rock Coring - Utilizes downward pressure and rotary action applied to a core barrel equipped with a diamond-set or tungsten carbide coring bit. During conventional coring, the entire barrel is retrieved from the hole upon completion of a core run. Wireline coring allows for removal of the inner barrel assembly containing the actual core while the the drill rods and outer barrel remain in the hole. Various types and sizes of core barrels and bits are used.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 2
SOIL DESCRIPTION

SOIL CONSTITUENTS

Naturally occurring soils consist of one or more of the following matrix constituents defined in terms of particle size.

Constituent		U.S. Sieve Size			Observed Size (in.)		
Gravel	(Coarse)	3/4 in.	-	3 in.	3/4	-	3
Gravel	(Fine)	No. 4	-	3/4 in.	1/5	-	3/4
Sand	(Coarse)	No. 10	-	No. 40	1/16	-	1/5
Sand	(Medium)	No. 40	-	No. 10	1/64	-	1/16
Sand	(Fine)	No. 200	-	No. 40	1/300	-	1/64
Fines	(Silt or Clay)	Smaller than		No. 200	Less than		1/300

SOIL IDENTIFICATION

Soil identification refers to the grouping of soils with similar physical characteristics into a category defined by a **group name** and corresponding **group symbol** based on estimation of the matrix soil constituents to the nearest 5% and simple manual tests. Proportions of cobbles, boulders, and other non-matrix soil materials are not considered during this procedure but are included in the overall soil description if observed or thought to be present. Refer to the following descriptions and tables adapted from ASTM D2488.

Coarse-Grained Soil - Coarse-grained soils contain fewer than 50% fines and are identified based on the following table.

Primary Constituent	Fines Percent	Type of Fines and Gradation		Group Symbol	Group Name [1]
GRAVEL *% gravel > % sand*	≤ 5%	well graded		GW	Well graded gravel
		poorly graded		GP	Poorly graded gravel
	10%	clayey fines	well graded	GW-GC	Well graded gravel with clay
			poorly graded	GP-GC	Poorly graded gravel with clay
		silty fines	well graded	GW-GM	Well graded gravel wth silt
			poorly graded	GP-GM	Poorly graded gravel with silt
	15% to 45%	clay fines		GC	Clayey gravel
		silt fines		GM	Silty gravel
SAND *% sand ≥ % gravel*	≤ 5%	well graded		SW	Well graded sand
		poorly graded		SP	Poorly graded sand
	10%	clayey fines	well graded	SW-SC	Well graded sand with clay
			poorly graded	SP-SC	Poorly graded sand with clay
		silty fines	well graded	SW-SM	Well graded sand with silt
			poorly graded	SP-SM	Poorly graded sand with silt
	15% to 45%	clay fines		SC	Clayey sand
		silt fines		SM	Silty sand

[1] If soil is a gravel and contains 15% or more sand, add "with sand" to the group name. If soil is a sand and contains 15% of more gravel, add "with gravel" to the group name.

Inorganic Fine-Grained Soil - Fine-grained soils contain 50% or more fines and are identified based on the following table.

Plasticity Criteria	Dry Strength	Coarse Fraction S = Sand, G = Gravel		Group Symbol	Group Name [1]
Medium	Medium to high	< 15% S + G		CL	Lean clay
		≥ 30%	% S ≥ % G	CL	Sandy lean clay
		S + G	% S < % G	CL	Gravelly lean clay
Non-plastic	None to low	< 15% S + G		ML	Silt
		≥ 30%	% S ≥ % G	ML	Sandy silt
		S + G	% S < % G	ML	Gravelly silt
High	High to very high	< 15% S + G		CH	Fat clay
		≥ 30%	% S ≥ % G	CH	Sandy fat clay
		S + G	% S < % G	CH	Gravelly fat clay
Low to Medium	Low to medium	< 15% S + G		MH	Elastic silt
		≥ 30%	% S ≥ % G	MH	Sandy elastic silt
		S + G	% S < % G	MH	Gravelly elastic silt

[1] If soil contains 15% to 25% sand or gravel, add "with sand" or "with gravel" to the group name.

Organic Fine-Grained Soil - Fine-grained soils that contain enough organic particles to influence the soil properties are identified as Organic Soil and assigned the group symbol **OL** or **OH**.

Highly Organic Soil (Peat) - Soils composed primarily of plant remains in various stages of decomposition are identified as Peat and given the group symbol **PT**. Peat usually has an organic odor, a dark brown to black color, and a texture ranging from fibrous (original plant structure intact or mostly intact) to amorphous (plant structure decomposed to fine particles).

SOIL DESCRIPTION

Soils are *described* in the following general sequence. Deviations may occur in some instances.

Identification Components

(1) Group Name and Group Symbol

Description Components

(2) Consistency (Fine-Grained) or Apparent Density (Coarse-Grained)
(3) Color (*note, the term "to" may be used to indicate a gradational change*)
(4) Soil Moisture
(5) Matrix Soil Constituents (Gravel, Sand, Fines)
  └► Proportion (*by weight*), particle size, plasticity of fines, angularity, etc.
(6) Non-Matrix Soil Materials and Proportions (*by volume*)
(7) Other Descriptive Information (Unusual Odor, Structure, Texture, etc.)
(8) [Geologic Formation Name or Soil Survey Unit]

SPT N-VALUE CORRELATIONS

Consistency	SPT N-Value	Apparent Density	SPT N-Value
Very soft	0 - 2	Very loose	0 - 5
Soft	2 - 4	Loose	5 - 10
Medium stiff	4 - 8	Medium dense	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very stiff	15 - 30	Very dense	> 50
Hard	> 30		

SOIL MOISTURE

Dry..... Apparent absence of moisture; dry to the touch.
Moist..... Damp but no visible water.
Wet..... Visible free water; saturated.

PROPORTIONS / PERCENTAGES

Proportions of gravel, sand, and fines (excluding cobbles, boulders, and other constituents) are stated in the following terms indicating a range of percentages by weight (to nearest 5%) of the minus 3-in. soil fraction and add up to 100%.

Mostly ..... 50% - 100%
Some ..... 30% - 45%
Little ..... 15% - 25%
Few ..... 5% - 10%
Trace..... Less than 5%

Proportions of cobbles, boulders, and other non-matrix soil materials including artificial debris, roots, plant fibers, etc. are stated in the following terms indicating a range of percentages by volume (to the nearest 5%) of the total soil.

Numerous ..... 40% - 50%
Common ..... 25% - 35%
Occasional ..... 10% - 20%
Trace..... Less than 5%

PLASTICITY (FINES ONLY)

Non-plastic.....Dry specimen ball falls apart easily. Cannot be rolled into thread at any moisture content.
Low.....Dry specimen ball easily crushed with fingers. Can be rolled into 1/8-in. thread with some difficulty.
Medium.....Difficult to crush dry specimen ball with fingers. Easily rolled into 1/8-in. thread.
High.....Cannot crush dry specimen ball with fingers. Easily rolled and re-rolled into 1/8-in. thread.

COBBLES AND BOULDERS

Cobbles - Particles of rock that will pass a 12-in. square opening and be retained on a 3-in. sieve.

Boulders - Particles of rock that will not pass a 12-in. square opening.

Note: Where the percentage (by volume) of cobbles and/or boulders cannot be accurately or reliably estimated, the terms "with cobbles", "with boulders", or "with cobbles and boulders" may be used to indicate observed or inferred presence.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 3
ROCK DESCRIPTION

ROCK DEFINITION

Where reported on an exploration log, *rock* is defined as any naturally formed aggregate of mineral matter occurring in larges masses or fragments. This definition of rock should not be taken as a replacement for any definitions relating to rock and/or rock excavation defined in construction documents. Intensely weathered or decomposed rock that is friable and can be reduced to gravel size particles or smaller by normal hand pressure is identified and described as soil. Poorly indurated formational materials which display both rock-like and soil-like properties are identified and described as rock followed by the soil description. In such cases, the term "poorly indurated" or "weakly cemented" is added to the rock name (e.g. weakly cemented sandstone).

ROCK IDENTIFICATION

Rock is identified by a combination of *rock type* (igneous, metamorphic, or sedimentary) followed by the the *rock name* (e.g. granite, schist, sandstone).

ROCK DESCRIPTION

Rock descriptions are presented in the following general sequence. The detail of description is dictated by the complexity and objectives of the project.

Identification Components

(1) Rock Type and Name

Description Components

(2) Rock Grain Size (*for clastic sedimentary rock*)
(3) Crystal Size (*for igneous and metamorphic rock*)
(4) Bedding Spacing (*for sedimentary rock*)
(5) Color
(6) Hardness and Weathering Descriptors
(7) Fracture Density
(8) [Geologic Formation Name]

ROCK QUALITY DESIGNATION

$$\text{RQD (\%)} = \frac{\Sigma \text{ Length of intact core pieces} \geq 4 \text{ inches}}{\text{Total length of core run (inches)}} \times 100$$

The RQD should correlate with the fracture density in most cases. Higher RDQ values generally indicate fewer joints and fractures.

GRAIN / CRYSTAL SIZE

Grain Size for Clastic Sedimentary Rock

The names of clastic sedimentary rocks are generally based on their predominant clast or grain size (e.g. fine sandstone, medium sandstone, coarse gravel conglomerate, cobble conglomerate, siltstone, claystone).

Crystal Size for Igneous and Metamorphic Rock

Grain Size Description	Average Crystal Size (in.)
Very coarse grained (pegmatitic)	Greater than or equal to 3/8
Coarse-grained	Between 3/16 and 3/8
Medium-grained	Between 1/32 and 3/16
Fine-grained	Between 1/250 and 1/32
Aphanitic	Less than or equal to 1/250

BEDDING SPACING

Bedding Description	Thickness / Spacing
Massive	Less than 10 ft.
Very thickly bedded	3 ft. to 10 ft.
Thickly bedded	1 ft. to 3 ft.
Moderately bedded	4 in. to 1 ft.
Thinly bedded	1 in. to 4 in.
Very thinly bedded	1/4 in. to 1 in.
Laminated	Less than 1/4 in.

Note: Bedding is generally only applicable to sedimentary or bedded volcanic rocks.

HARDNESS

Hardness	Criteria
Extremely hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows.
Very hard	Cannot be scratched with a pocketknife or sharp pick with difficulty. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with with a pocketknife or sharp pick with difficulty. Breaks with heavy hammer blows.
Moderately hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows.
Moderately soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick. Breaks with light to moderate manual pressure.
Very soft	Can be readily indented, grooved, or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

WEATHERING (INTACT ROCK)

Weathering Description	Discoloration and/or Oxidation	General Characteristics
Fresh	Body of rock and fracture surfaces are not discolored or oxidized.	Rock texture unchanged. Hammer rings when crystalline rocks are struck.
Slightly weathered	Discoloration or oxidation limited to surface of, or short distance from, fractures. Most surfaces exhibit minor to complete discoloration.	Rock texture preserved. Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately weathered	Discoloration or oxidation extends usually throughout. Fe-Mg minerals appear rusty. All fracture surfaces are discolored or oxidized.	Rock texture generally preserved. Hammer does not ring when rock is struck. Body of rock slightly weakened.
Intensely weathered	Discoloration or oxidation throughout. Feldspar and Fe-Mg minerals altered to clay to some extent. All fracture surfaces are discolored or oxidized and friable.	Rock texture altered by chemical disintegration. Can usually be broken with moderate to heavy manual pressure or by light hammer blow . Body of rock is significantly weakened.
Decomposed	Discoloration or oxidation throughout but resistant minerals such as quartz may be unaltered. All feldspar and Fe-Mg minerals are completely altered to clay.	Resembles a soil; partial or complete remnant rock structure may be preserved. Can be granulated by hand. Resistant minerals may present as stringers or dikes.

FRACTURE DENSITY

Description	Observed Fracture Density
Unfractured	No fractures
Very slightly fractured	Core lengths greater than 3 ft.
Slightly fractured	Core lengths mostly from 1 ft. to 3 ft.
Moderately fractured	Core lengths mostly from 4 in. to 1 ft.
Intensely fractured	Core lengths mostly from 1 in. to 4 in.
Very intensely fractured	Mostly chips and fragments

Note: Fracture density is based on the fracture spacing in recovered core, measured along the core axis (excluding mechanical breaks).

Attachment C

August 2025 Test Pit Logs

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-1

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.7 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 4.9 ft.**	GROUND EL:	**123.8 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**5.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2933223 ± / E:705397 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 4 inches thick.		
			Silty sand with gravel (SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, little non plastic fines. **[FILL]**		
			Well graded gravel with sand (GW) - Brown to gray; dry to wet; mostly fine to coarse GRAVEL, little fine to coarse sand, trace non plastic fines.		
			2-inch clay pipe exposed in sidewall of test pit at 1 foot BGS.		
5	G			119	**Exploration ended at 5.0 ft.**
				114	

TEST PIT PHOTOGRAPHS

Bottom View

Sidewall View

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-2

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 8.0 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 6.8 ft.**	GROUND EL:	**126.1 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**6.9 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2933153 ± / E:705488 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Sand.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Poorly graded sand (SP) - Light white; dry; mostly fine to medium SAND, trace non plastic fines. **[FILL]**		
			Silty sand with gravel (SM) - Brown; dry; some fine to medium SAND, some fine to coarse gravel, little non plastic fines. **[FILL]**		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles and boulders.		
5				122	
					Exploration ended at 6.9 ft.
				117	

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-2A

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Devin Saunders**	PLAN DIMENSIONS:	**Length: 4.0 ft. , Width: 3.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**127.4 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**4.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2933151 ± / E:705501 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 4 inches thick.		
	G		**Poorly graded gravel with sand (GP)** - Brown; dry; mostly fine to coarse GRAVEL, some fine to coarse sand, trace non plastic fines; trace roots. **[FILL]**		
	G				
	G				
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; trace to occasional cobbles.		
	G				
					Exploration ended at 4.0 ft.
				123	
5					
				118	

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-3

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 8.8 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**130.9 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**8.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932952 ± / E:705555 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 6 inches thick.		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles and boulders.		
5				126	
					Exploration ended at 8.0 ft.

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-3A

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.5 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**131.4 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**9.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932964 ± / E:705567 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 6 inches thick.		
	G		**Well graded gravel with silt and sand (GW-GM)** - Brown; dry; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines; trace to occasional cobbles and boulders.		
5	G			127	
	G				
	G				
				122	**Exploration ended at 9.0 ft.**

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-4

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.5 ft. , Width: 3.8 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**129.9 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**8.3 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932873 ± / E:705527 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 4 inches thick.		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines. **[FILL]** *~2 feet of 2-inch PVC pipe and three wires observed along northeast corner of test pit at 1 foot BGS*		
5			**Well graded sand with silt and gravel (SW-SM)** - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles and boulders. *2-inch silt seam observed 4 feet BGS*	125	
					Exploration ended at 8.3 ft.

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-5

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 8.9 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 8.2 ft.**	GROUND EL:	**128.8 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**8.3 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932803 ± / E:705525 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 10 inches thick.		
	G		**Well graded sand with silt and gravel (SW-SM)** - Light brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines. **[FILL]**		
			Poorly graded gravel with sand (GP) - Dark brown; dry; mostly fine to coarse GRAVEL, some fine to coarse sand, trace organic non plastic fines; numerous fine roots. **[BURIED TOPSOIL].**		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional cobbles.		
5				124	
					Exploration ended at 8.3 ft.
				119	

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-6

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.0 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 7.3 ft.**	GROUND EL:	**125.0 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**7.3 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932820 ± / E:705632 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 9 inches thick.		
			Silty sand with gravel (SM) - Light brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, little non plastic fines; trace debris (glass, plastic). **[FILL]**		
	G		**Poorly graded sand with silt and gravel (SP-SM)** - Dark brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; numerous fine roots. **[BURIED TOPSOIL].**		
5			**Well graded sand with silt and gravel (SW-SM)** - Brown to gray; dry to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles.	120	
					Exploration ended at 7.3 ft.

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Attachment D

Important Information about This Geotechnical-Engineering Report

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

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APPENDIX I

Supplemental Geotechnical Explorations, November 2025

December 9, 2025

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

Town of Wellesley
c/o Ms. Cassie Bethoney, RLA
Weston & Sampson
100 Foxborough Boulevard, Suite 250
Foxborough, MA 02035

RE: November 2025 Supplemental Geotechnical Explorations
Proposed Morses Pond Beach Area Improvements
Wellesley, Massachusetts

Dear Cassie:

Weston & Sampson Engineers, Inc. (Weston & Sampson) is pleased to present this supplemental letter summarizing results of our recent supplemental geotechnical borings and our understanding of the site and proposed improvements currently being considered for the Morses Pond Beach Area located in Wellesley, Massachusetts. The site location is shown in *Figure 1.*

Additional geotechnical borings were completed on November 3, 2025 for the express purpose of subsurface evaluation and undocumented fill delineation within the area of the proposed bathhouse and administration buildings on the southern end of the site. Previous explorations at the site encountered undocumented fill and analysis of historical aerial imagery indicates a history of fill placement at the site (See *Figures 3A* and *3B*).

This supplemental letter is not intended to be a standalone report but, rather, supplemental to our Preliminary Geotechnical Report for the Proposed Morses Pond Improvements dated November 23, 2021 and our Supplemental Geotechnical Explorations letter dated September 19, 2025. Refer to these documents for previous recommendations, the attached document titled “Important Information about this Geotechnical Engineering Report” by Geoprofessional Business Association (GBA), Inc., and the Limitations section of this letter report.

CURRENT PROJECT UNDERSTANDING

Our current understanding of the proposed project is based on our correspondence with the project team and a November 2025 conceptual site plan for the project. A copy of this plan is included in *Attachment A*. Existing conditions plans, along with explorations completed by Weston & Sampson to date are shown on *Figures 2A* and *2B*.

The new single-story bathhouse and administration buildings are proposed at the south of the site, consistent with the design option referred to as “Alternative A” in our September 2025 Supplemental Geotechnical Report. The proposed bathhouse will have plan dimensions of approximately 46 feet by 20 feet and administration building will have plan dimensions of approximately 42 feet by 30 feet. Both proposed buildings will have overhead canopy structures which extend beyond the footprint of the building. The approximate footprints of each building are depicted in *Figure 2A* and in *Attachment A*.

Other proposed features at the site include ADA parking south of the proposed buildings, a new playground area and open lawn area to the north, a new sand volleyball court at the approximate location of the existing playground,

and new landscaped areas and walking paths. A new ADA accessible beach path is proposed to the west of the new bathhouse and administration buildings. The existing single-story brick bathhouse will be demolished.

Proposed grading was not made available to us at the time of this report however we assume that grade changes will generally be limited to within approximately 2 ft. of existing grades. Structural loading information also was not made available to us at the time of this report.

SUBSURFACE CONDITIONS

Previous Subsurface Explorations

Weston & Sampson previously explored subsurface conditions at the site by advancing five (5) borings (B-1 through B-5) to depths ranging between 6 and 21 feet on September 1, 2021 and eight (8) test pits (TP-1 through TP-6, TP-2A, and TP-3A) to depths ranging between 4 and 9 feet on August 21, 2025. The 2021 borings are described in our 2021 Preliminary Geotechnical Report and the August 2025 test pits are described in our September 2025 supplemental geotechnical report. Copies of the boring and test pit logs are included in *Attachment B* and *Attachment C*, respectively. Approximate locations of the previous subsurface explorations are shown in *Figures 2A* and *2B*.

Recent Subsurface Exploration Program

Weston & Sampson further explored subsurface conditions at the site of the proposed bathhouse and administration buildings on November 3, 2025 by advancing six (6) borings (B-6 through B-11). Approximate locations of the recent borings are shown in *Figure 2A*. Weston & Sampson geotechnical engineering staff monitored explorations in the field and prepared logs for each boring.

The borings were completed by Geosearch, Inc. of Sterling, MA. Standard penetration tests (SPTs) were conducted in each boring at 2- to 5-foot intervals by driving a split spoon sampler with an automatic hammer in general accordance with ASTM D1586. Additional details are provided on the Guide to Subsurface Exploration Logs included in *Attachment D*. Each of the borings were backfilled with drill cuttings upon completion.

Encountered Subsurface Conditions

Subsurface conditions encountered in the November 2025 borings were generally consistent with those encountered in our previous explorations at the site and consisted of 6 to 8 inches of topsoil or wood chips over fill and variable native sand and gravel to the depths explored.

Subsurface soil and groundwater conditions described below have been interpreted based on a limited number of borings that were observed by Weston & Sampson. Variations may occur and should be expected between locations. The strata boundaries shown in our logs are based on our interpretations and the actual transitions may be gradual. Refer to the boring logs included in *Attachment D* for detailed descriptions of the soil samples collected. The general Unified Soil Classification System (USCS) designation(s) for each stratum is included in the descriptions below in parentheses. Depths provided below are relative to the existing ground surface at the time of drilling.

Topsoil – Approximately 6 to 8 inches of topsoil was encountered at the ground surface in each of the borings except for B-6.

Wood Chips – Approximately 6 inches of wood chips was encountered at the ground surface in B-6 which was completed within the existing play area.

Possible Fill – Possible undocumented fill was encountered below the surficial wood chips in B-6. The possible fill consisted of loose to medium dense fine to coarse sand with some coarse gravel and few nonplastic fines. This material was identified as possible fill due to the loose consistency and gradation of the material which contrasts from the native material at the site. It is possible that this material is native, however, further in-situ review is required to better evaluate.

Native Sand and Gravel – Medium dense to very dense, native sand and gravel was encountered below the surficial materials or possible fill in each boring. The native sand and gravel generally consisted of gravel with some fine to coarse sand and trace to few nonplastic fines (GW, GW-GM, GP-GM) or sand with little to some fine to coarse gravel and trace to few nonplastic fines (SW-SM, SM, SW, SP). Intermittent auger grinding was noted within the native sand and gravel in each boring. Auger grinding may represent the presence of gravel, cobbles, boulders, and/or dense soils. Additionally, cobbles were observed in the auger cuttings of B-8 through B-11. Therefore, the presence of frequent gravel, cobbles and boulders is expected within the native sand and gravel.

Groundwater – Depth to water was measured in B-6 through B-9 and B-11 at depths between 8.8 and 12.5 ft. (El. 119.8 to 120.6). Groundwater was not encountered in B-10 which extended to a depth of 10 feet (El. 122.2). The observed water levels are consistent with those observed in our previous borings and test pits at the site. We anticipate that groundwater levels at the site will fluctuate with water levels of Morses Pond and Ice House Pond and with season, variations in precipitation, construction in the area, and other factors. Perched groundwater conditions could exist close to the ground surface, especially during and after extended periods of wet weather.

GEOTECHNICAL DESIGN AND CONSTRUCTION RECOMMENDATIONS

General

The subsurface conditions proximate to the proposed bathhouse and administration buildings based upon the borings and test pits observed by Weston & Sampson as described above generally consist of surface materials overlying fill and native sand and gravel. Fill was encountered in 5 of the 14 explorations completed in this area and generally extended up to 4 feet below existing grade except in B-6, where the fill may extend as deep as 8 feet.

In general, our recommendations provided in the 2021 preliminary geotechnical report remain valid based on results of subsequent explorations in August and November 2025. Namely, that the proposed bathhouse and administration buildings can be supported on shallow spread footings following removal of existing fill from within the zone-of-influence (ZOI) beneath proposed foundations and other structural elements. We anticipate that most of the fill will be removed during excavation to the bottom of the footings; however, deeper excavation may be required on the eastern side of the administration building where B-6 was advanced.

We recommend that a geotechnical engineer familiar with the project and site be retained during construction to observe foundation subgrade preparation prior to placement of forms and rebar to evaluate the soils and verify whether fill is present. We recommend the project budget include a contingency for localized excavation and replacement of loose, granular fill soils in the vicinity of B-6.

Groundwater

Observed groundwater elevations in the November 2025 borings were consistent with those observed in our previous explorations and can be expected to be similar to the water levels in Morses Pond and Ice House Pond. Normal pool elevation of Morses Pond is approximately El. 120.5. Based on our understanding of the proposed improvements, we do not anticipate excavations deeper than about 4 feet will be required for construction of the proposed administration and bathhouse buildings. Correspondingly, we do not anticipate dewatering will be needed. If deeper excavations are necessary, and groundwater is encountered, rapid seepage and caving should be expected.

Excavation

Variable density (loose to dense) granular soils were encountered within the expected excavation depths for building foundations as well as cobbles (in auger cuttings) and intermittent auger grinding. Difficult excavation, cobbles, and boulders should be expected in foundation excavations. If cobbles or boulders are present at proposed foundation subgrade elevation, they should be overexcavated and replaced with compacted structural fill.

Boardwalk

We understand a new boardwalk walkway structure may be included to the west of the new bathhouse building between the access road and ADA parking to the beach area. B-8 was completed in the vicinity of the proposed boardwalk and encountered 8 inches of topsoil over medium dense to dense native sand and gravel. We assume the boardwalk can tolerate some differential settlement and frost heaving and thus can be supported on sleepers (laterally oriented at-grade support beams). Sleepers should be supported on a minimum 6 inches of compacted crushed stone overlying native, inorganic, granular soils following removal of topsoil and loose, organic, or otherwise unsuitable soils. If a sleeper foundation system is selected, the boardwalk should be designed to tolerate movement.

Alternatively, if a more robust foundation system less susceptible to movement is required, the proposed boardwalk structure may be supported on helical piers following the recommendations in our 2021 preliminary geotechnical report.

LIMITATIONS

This letter is subject to the limitations included in our 2021 Preliminary Geotechnical Report.

It has been a pleasure assisting you with this project and we look forward to our continued involvement. Please call if you have any questions.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

Matthew J. Zanchi, PE (NH)
Geotechnical Project Manager

Jennifer MacGregor, PE (MA)
Technical Leader

Attachments:
Figure 1 – Locus Plan
Figures 2A & 2B – Site Plan
Figures 3A & 3B – Historic Aerial Imagery
Attachment A – November 2025 Conceptual Site Plans
Attachment B – September 2021 Boring Logs
Attachment C – August 2025 Test Pit Logs
Attachment D – November 2025 Boring Logs
Attachment E – Important Information about This Geotechnical-Engineering Report

MJZ:JACM

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FIGURES

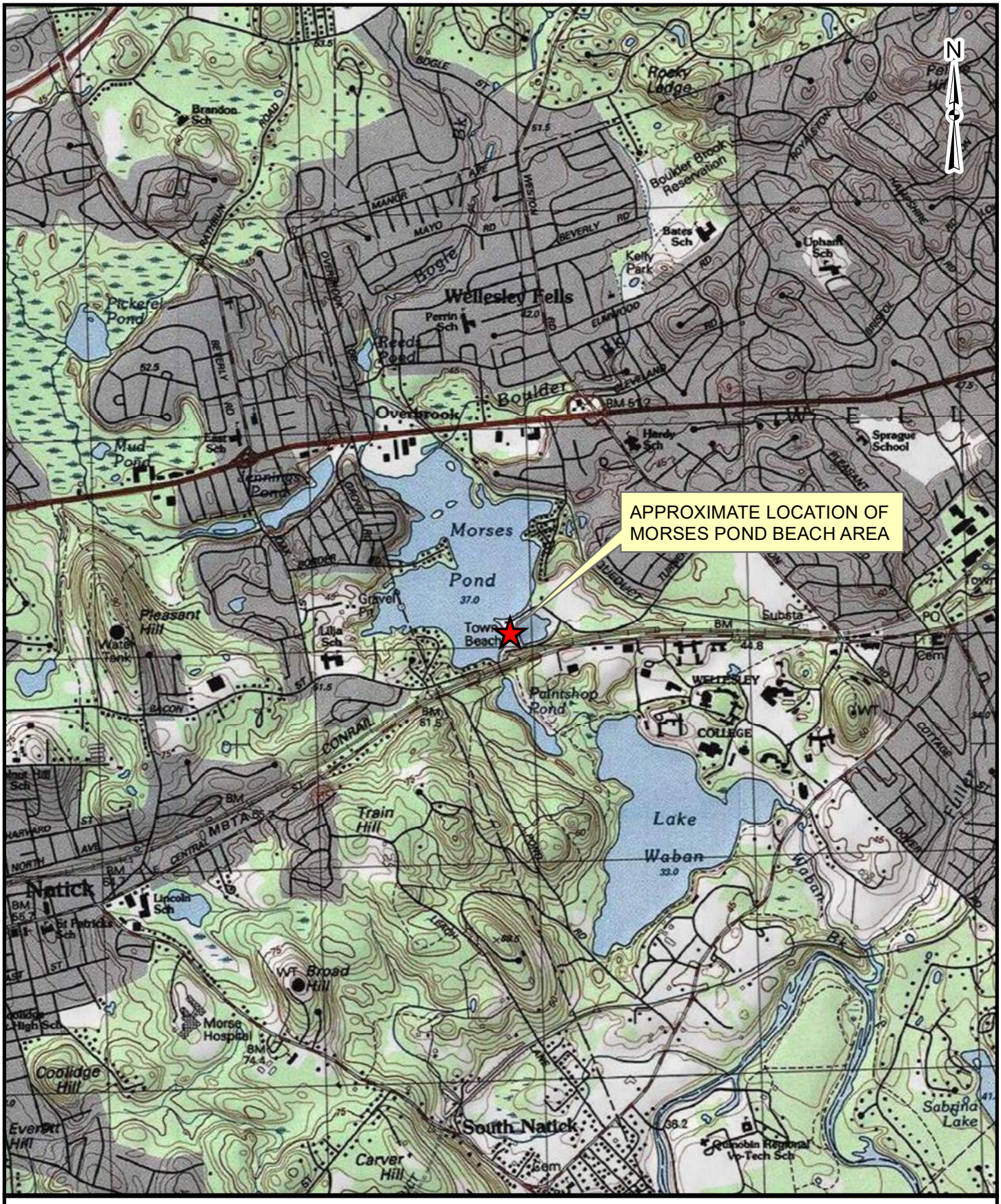


FIGURE 1
PROJECT LOCUS

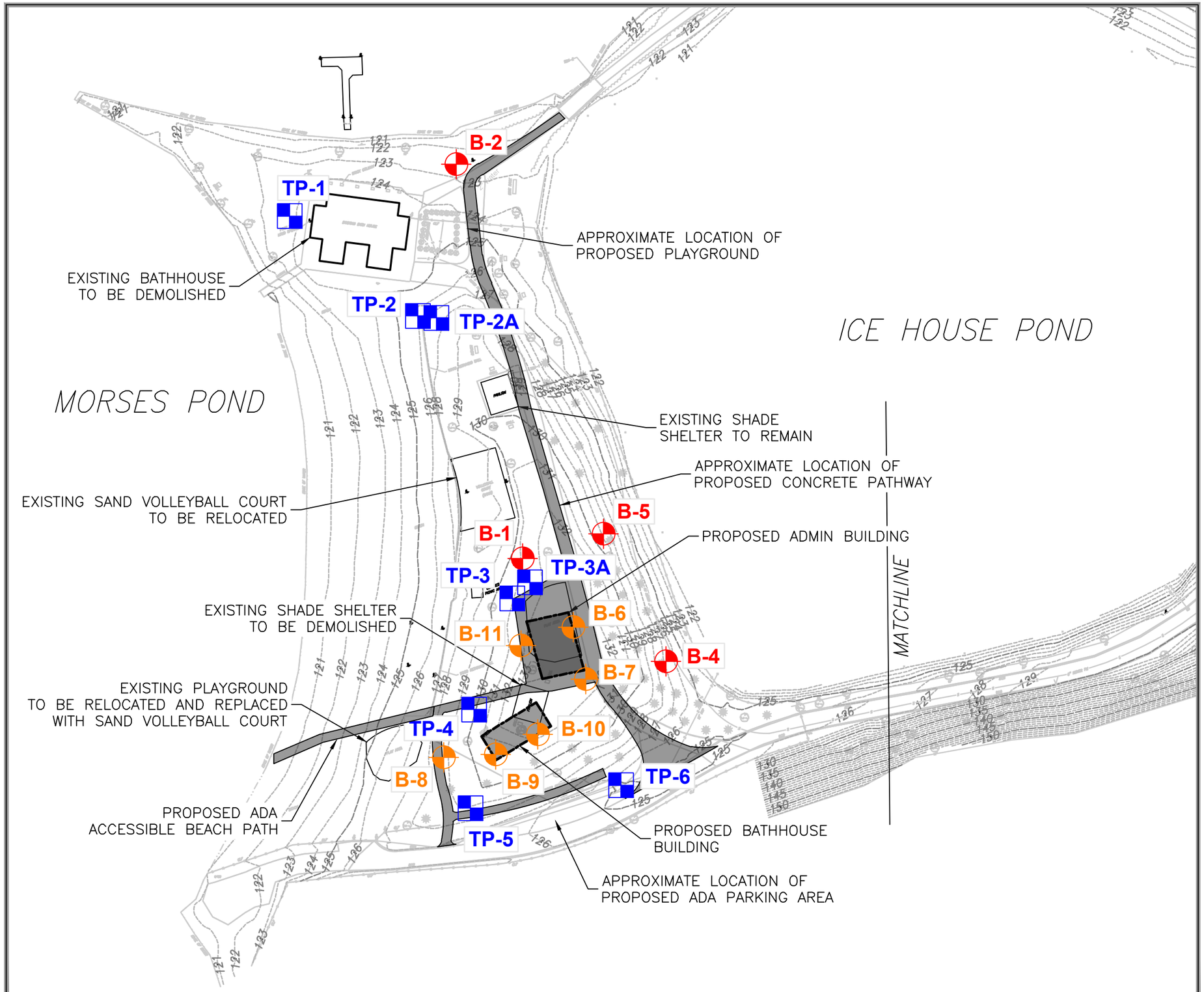
MORSES POND BEACH AREA FEASIBILITY STUDY
WELLESLEY, MASSACHUSETTS

2,000 0 2,000

Scale In Feet

Weston & Sampson

Path: P:\MA\Wellesley MA\Morses Pond Beach Area Feasibility Study\Geotech\Plans\GIS\Figure 1. Project Locus.mxd **User:** ZanchiM **Saved:** 8/26/2021 4:39:12 PM **Opened:** 8/26/2021 4:39:50 PM



Weston & Sampson℠

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www.westonandsampson.com

NOTES

1. THIS PLAN IS BASED ON AN EXISTING CONDITIONS SURVEY OF MORSES POND BEACH PREPARED BY BRENNAN CONSULTING DATED OCTOBER 2021.
2. BORINGS B–1 THROUGH B–5 WERE COMPLETED BY TECHNICAL DRILLING SERVICES, INC. OF STERLING, MA ON SEPTEMBER 1, 2021.
3. BORINGS B–6 THROUGH B–11 WERE COMPLETED BY GEOSEARCH, INC. OF STERLING, MA ON NOVEMBER 3, 2025.
4. TEST PITS WERE COMPLETED BY THE TOWN OF WELLESLEY, MA DEPARTMENT OF PUBLIC WORKS ON AUGUST 21, 2025.
5. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON GEOTECHNICAL ENGINEER.
6. BORING AND TEST PIT LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
7. ELEVATIONS ARE IN FEET AND REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-1	DESIGNATION AND APPROXIMATE LOCATION OF BORING DRILLED SEPTEMBER 2021
TP-1	DESIGNATION AND APPROXIMATE LOCATION OF AUGUST 2025 TEST PIT
B-6	DESIGNATION AND APPROXIMATE LOCATION OF BORING DRILLED NOVEMBER 2025

GRAPHIC SCALE

70 35 0 70 140

SCALE: 1"=70'

ORIENTATION

TITLE

SITE PLAN – WEST

PROJECT

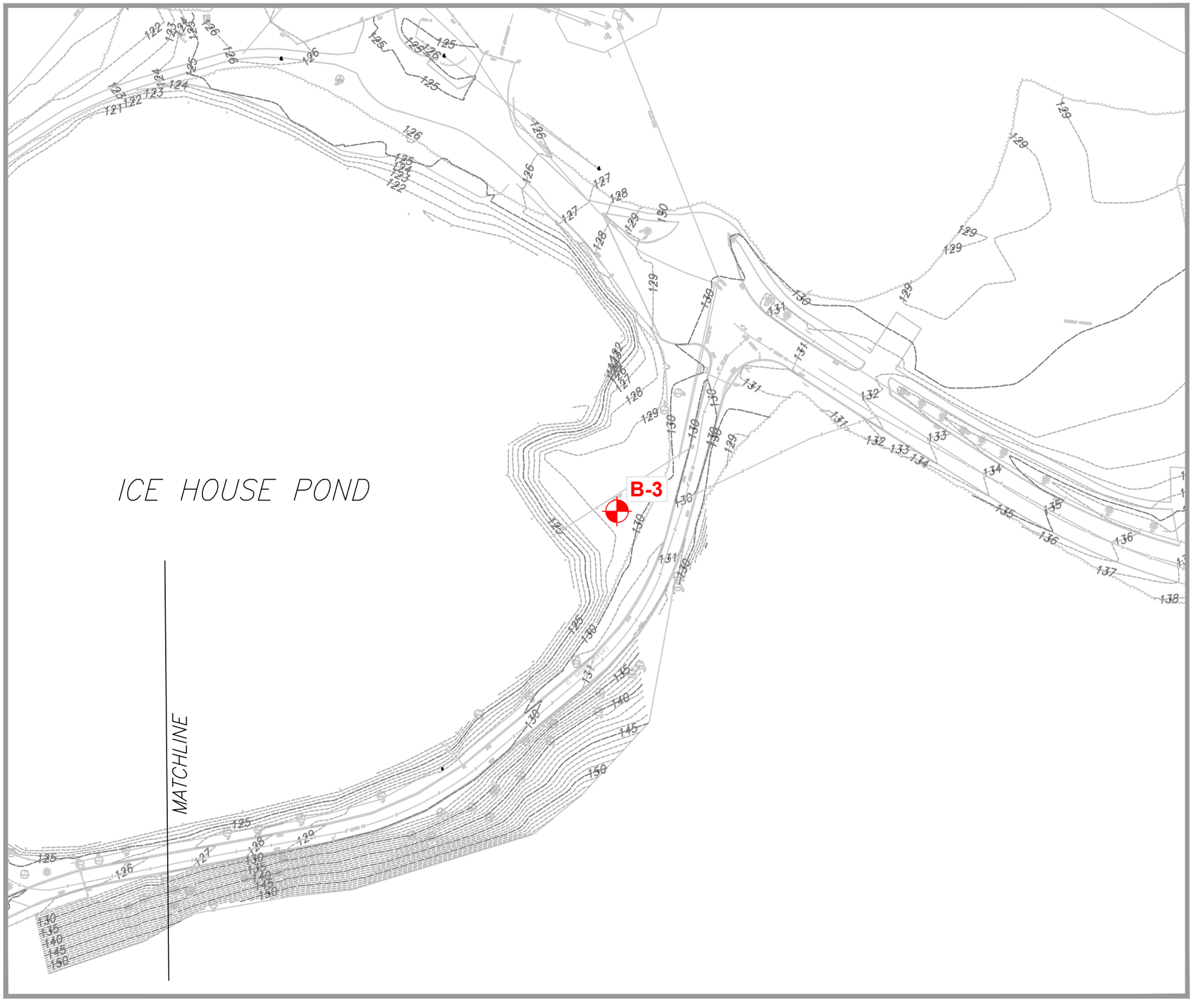
MORSES POND BEACH AREA
WELLESLEY, MA 02482

DATE	12/2025
DRWN BY	AJC
CHKD BY	WZ
PRJ. NO.	ENG25-0709
REV. NO.	-

FIGURE

FIGURE 2A

\\wse03.local\WSE\Projects\MA\Wellesley MA\25-1067-Morses Pond Beach Area & Bathhouse Supplemental Feasibility Study\07-DesignMaterials\02-Geotechnical\3.0 Figures\CAD\Morses Pond Site Plan_.dwg



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LEGEND

B-1 DESIGNATION AND APPROXIMATE LOCATION OF BORING DRILLED SEPTEMBER 2021

GRAPHIC SCALE

70 35 0 70 140

SCALE: 1"=70'

ORIENTATION	TITLE
N	SITE PLAN – EAST
	PROJECT: MORSES POND BEACH AREA, WELLESLEY, MA 02482
DATE 12/2025	FIGURE
DRWN BY AJC	
CHKD BY MZ	FIGURE 2B
PRJ. NO. ENG25-0709	
REV. NO. -	

P:\MA\Wellesley MA\25-1067-Morses Pond Beach Area & Bathhouse Supplemental Feasibility Study\07-DesignMaterials\02-Geotechnical\3.0 Figures\CAD\Morses Pond Site Plan_.dwg

Figure 3A. 1938 Aerial Image of Morses Pond Beach Area w/ Ice House Pond shoreline in red. Image captured by USGS and sourced via EDR.

Figure 3B. 2023 Aerial Image of Morses Pond Beach Area w/ 1938 Ice House Pond shoreline overlain in red. Image captured by USDA/NAIP and sourced via EDR.

Attachment A

November 2025 Conceptual Site Plans

EXISTING TRAIL PATH
TOWN OF WELLESLEY
WATER DEPARTMENT
MORSES POND
NORTH ENTRY PATH
ACCESSIBLE
PATHWAY TO DOCK
NEW DELINEATED
DROP OFF ROUTE
MILL & OVERLAY
SOUTHERN ACCESS
ROAD
ICE HOUSE POND
GRAVEL PARKING LOT
(APPROX. 140-150
SPACES)
OPEN LAWN
AREA
NEW PLAYGROUND
PICNIC AREA
EXISTING SHADE
SHELTER
APPROX. 10' WIDE
PEDESTRIAN PATHWAY / FIRE
ACCESS WITH EXTENDED
UTILITY CONNECTIONS TO
NEW BUILDINGS
REMOVE EX.
PLAYGROUND,
REPLACE WITH
SAND VOLLEYBALL
COURT
PROPOSED ADMIN BUILDING
ADA BEACH MAT
PATHWAY
SOUTHERN ACCESS ROAD
NEW EMERGENCY VEHICLE
TURNAROUND
PROPOSED BATHHOUSE
BUILDING
ACCESSIBLE
PARKING (6 SPOTS)
MBTA COMMUTER RAIL
CENTRAL STREET
0
50
100
150
SCALE: 1"=50'

Attachment B

September 2021 Boring Logs

Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-1

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
			● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
	S-1 12/24	9 17 16 17	33		Topsoil- 4 inches thick. Well graded gravel with silt and sand (GW-GM) - Medium dense to dense; light brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines.	
	S-2 6/24	8 10 9 8	19			[2.0 - 21.0] Intermittent auger grinding.
5	S-3 10/24	11 6 6 11	12		Silty sand (SM) - Medium dense; brown; moist; mostly fine to coarse SAND, little non plastic fines, few fine gravel. 2-inch seam of fine sand	[4.0] GC: 9%, SC: 74%, FC: 17%
					Silty sand with gravel (SM) - Dense; brown; moist; mostly fine to coarse SAND, some fine gravel, little non plastic fines.	
10	S-4 6/24	21 23 20 16	43			
					Poorly graded gravel with silt (GP-GM) - Very dense; brown; wet; mostly coarse GRAVEL, few fine to coarse sand, few non plastic fines.	[12.5] Estimated water level at time of drilling based on changes in sample moisture.
15	S-5 6/24	20 24 32 46	>> 56		Sample is primarily gravel-sized rock fragments	
	S-6 12/12				Silty sand (SM) - Brown; wet; mostly fine to medium SAND, some non plastic fines, few fine gravel.	[16.0] Split spoon advanced 12 inches to obtain sample but blow counts not recorded.
20	S-7 9/24	19 17 19 33	36		Silty gravel with sand (GM) - Dense; brown; wet; mostly fine to coarse GRAVEL, some medium to coarse sand, little non plastic fines.	
						Exploration ended at 21.0 ft.

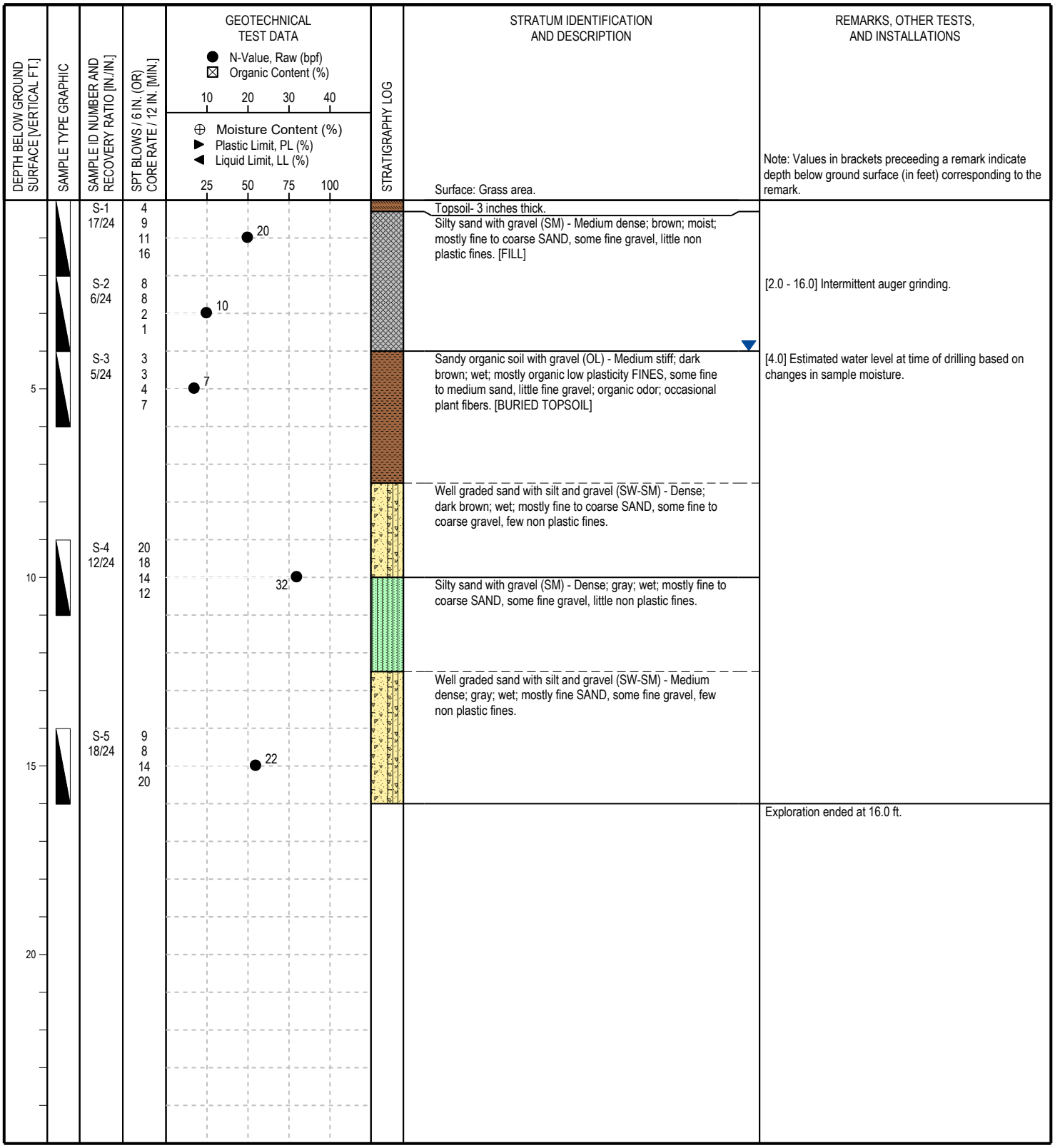
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-2

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-3

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
				N-Value, Raw (bpf); Organic Content (%); 10 20 30 40; Moisture Content (%); Plastic Limit, PL (%); Liquid Limit, LL (%); 25 50 75 100		Surface: Forest debris.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 8/24	3 9 6 6	15		Topsoil- 5 inches thick.	
						Silty sand with gravel (SM) - Loose to medium dense; brown; moist; mostly fine SAND, some fine to coarse gravel, little non plastic fines.	
		S-2 10/24	5 4 5 5	9			[2.0 - 16.0] Intermittent auger grinding.
5		S-3 9/24	8 10 14 12	24		Well graded sand with silt and gravel (SW-SM) - Medium dense; light brown; moist to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines.	
10		S-4 8/24	14 14 12 9	26		▼	[10.0] Estimated water level at time of drilling based on changes in sample moisture.
15		S-5 15/24	8 8 11 22	19			
							Exploration ended at 16.0 ft.
20							

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

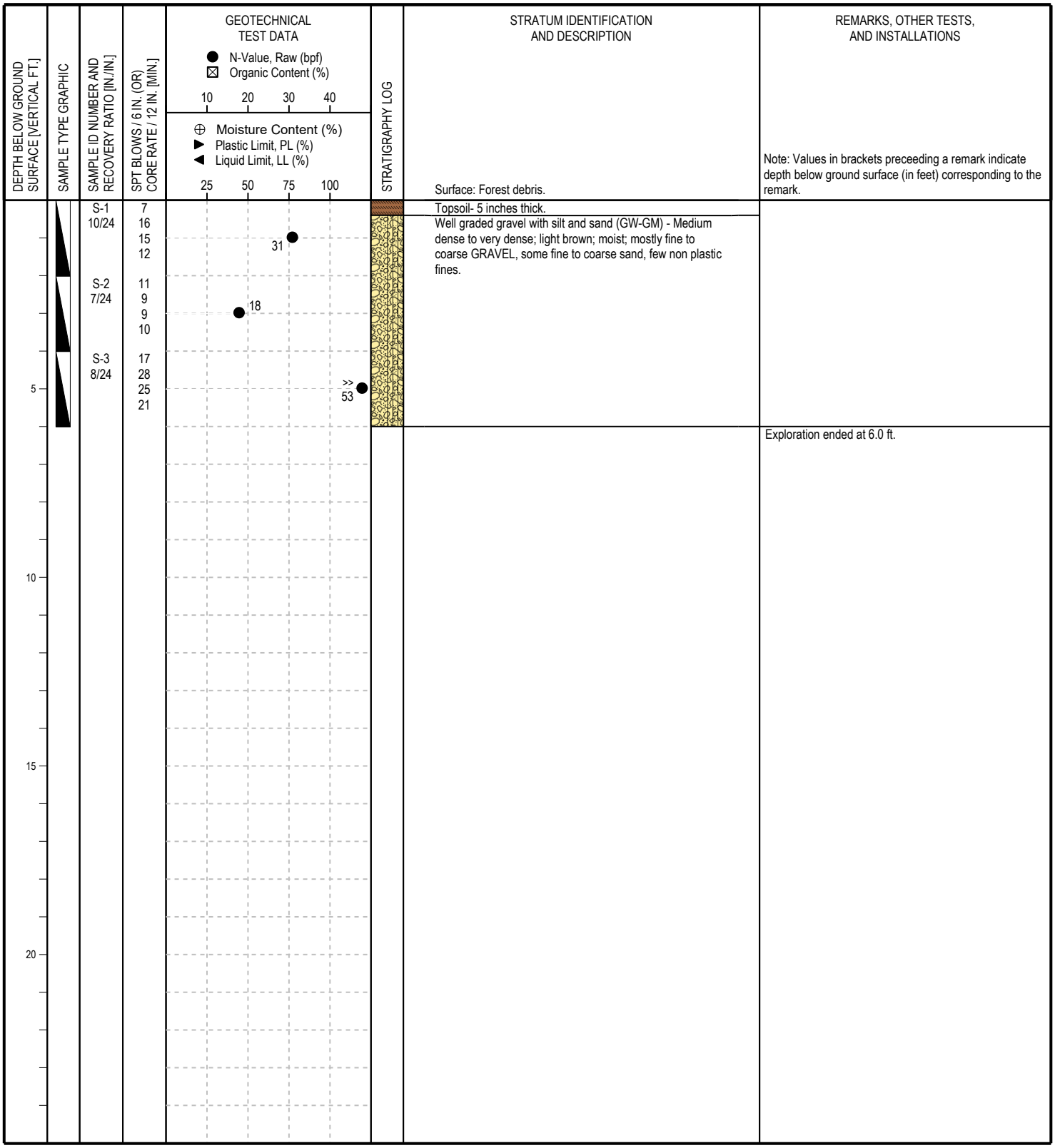
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-4

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	6.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



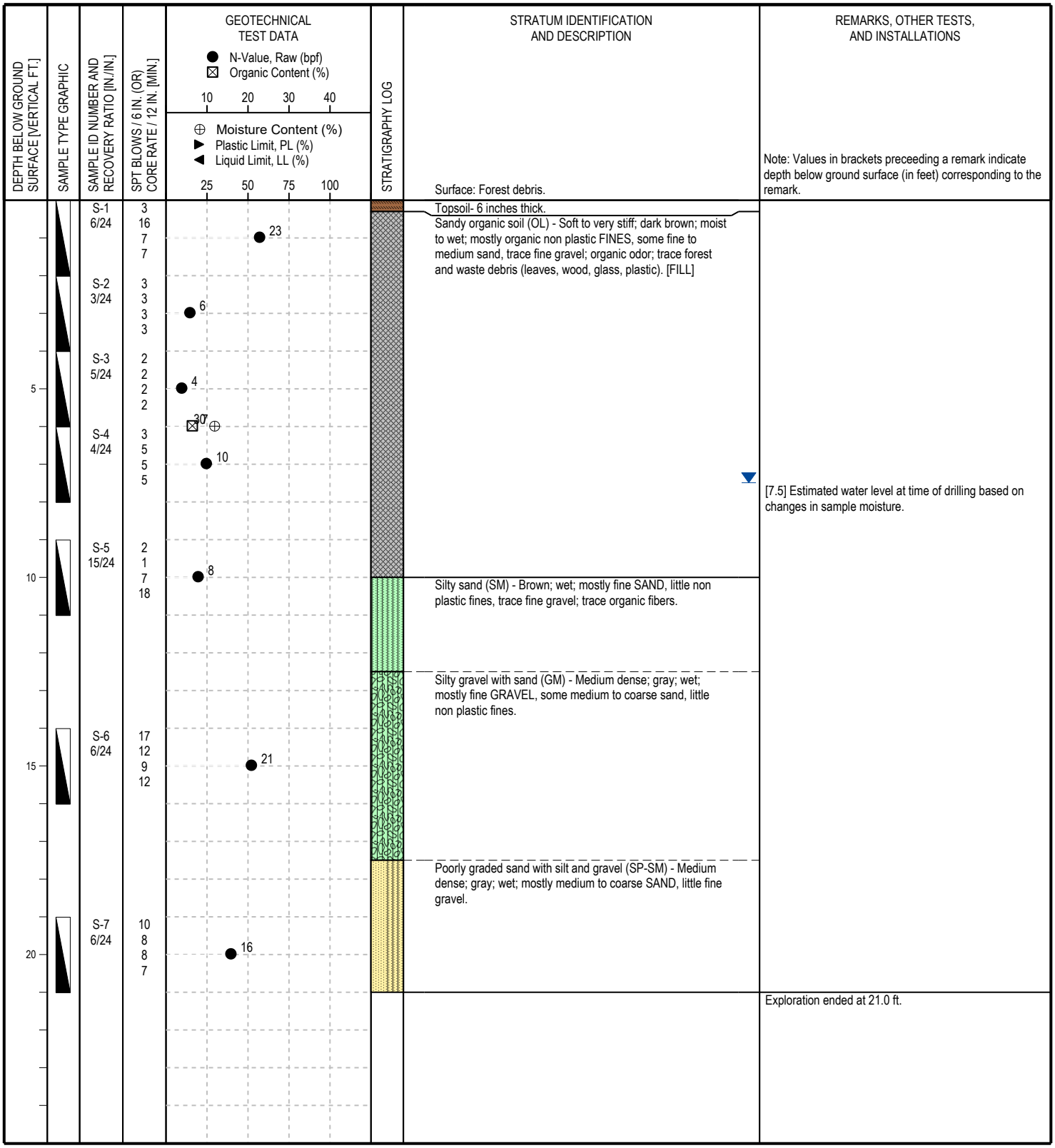
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-5

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



Attachment C

August 2025 Test Pit Logs

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-1

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.7 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 4.9 ft.**	GROUND EL:	**123.8 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**5.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2933223 ± / E:705397 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 4 inches thick.		
			Silty sand with gravel (SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, little non plastic fines. **[FILL]**		
			Well graded gravel with sand (GW) - Brown to gray; dry to wet; mostly fine to coarse GRAVEL, little fine to coarse sand, trace non plastic fines.		
			2-inch clay pipe exposed in sidewall of test pit at 1 foot BGS.		
5	G			119	**Exploration ended at 5.0 ft.**
				114	

TEST PIT PHOTOGRAPHS

Bottom View

Sidewall View

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-2

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 8.0 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 6.8 ft.**	GROUND EL:	**126.1 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**6.9 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2933153 ± / E:705488 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Sand.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Poorly graded sand (SP) - Light white; dry; mostly fine to medium SAND, trace non plastic fines. **[FILL]**		
			Silty sand with gravel (SM) - Brown; dry; some fine to medium SAND, some fine to coarse gravel, little non plastic fines. **[FILL]**		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles and boulders.		
5				122	
					Exploration ended at 6.9 ft.
				117	

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-2A

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Devin Saunders**	PLAN DIMENSIONS:	**Length: 4.0 ft. , Width: 3.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**127.4 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**4.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2933151 ± / E:705501 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 4 inches thick.		
	G		**Poorly graded gravel with sand (GP)** - Brown; dry; mostly fine to coarse GRAVEL, some fine to coarse sand, trace non plastic fines; trace roots. **[FILL]**		
	G				
	G				
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; trace to occasional cobbles.		
	G				
					Exploration ended at 4.0 ft.
				123	
5					
				118	

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-3

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 8.8 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**130.9 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**8.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932952 ± / E:705555 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 6 inches thick.		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles and boulders.		
5				126	
					Exploration ended at 8.0 ft.

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-3A

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.5 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**131.4 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**9.0 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932964 ± / E:705567 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 6 inches thick.		
	G		**Well graded gravel with silt and sand (GW-GM)** - Brown; dry; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines; trace to occasional cobbles and boulders.		
5	G			127	
	G				
	G				
				122	**Exploration ended at 9.0 ft.**

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-4

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.5 ft. , Width: 3.8 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**No Seepage Observed**	GROUND EL:	**129.9 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**8.3 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932873 ± / E:705527 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 4 inches thick.		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines. **[FILL]** *~2 feet of 2-inch PVC pipe and three wires observed along northeast corner of test pit at 1 foot BGS*		
5			**Well graded sand with silt and gravel (SW-SM)** - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles and boulders. *2-inch silt seam observed 4 feet BGS*	125	
					Exploration ended at 8.3 ft.

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-5

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 8.9 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 8.2 ft.**	GROUND EL:	**128.8 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**8.3 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932803 ± / E:705525 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 10 inches thick.		
	G		**Well graded sand with silt and gravel (SW-SM)** - Light brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines. **[FILL]**		
			Poorly graded gravel with sand (GP) - Dark brown; dry; mostly fine to coarse GRAVEL, some fine to coarse sand, trace organic non plastic fines; numerous fine roots. **[BURIED TOPSOIL].**		
			Well graded sand with silt and gravel (SW-SM) - Brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional cobbles.		
5				124	
					Exploration ended at 8.3 ft.
				119	

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach and Bath House

TEST PIT ID: TP-6

WSE Project: ENG21-0701

Morses Pond Access Road, Wellesley, MA

CONTRACTOR:	**Excavated by Town DPW**	TEST PIT LOCATION:	**See Attached Figure**	DATE START:	**August 21, 2025**
OPERATOR:	**Judd Joyce**	PLAN DIMENSIONS:	**Length: 6.0 ft. , Width: 4.0 ft.**	DATE FINISH:	**August 21, 2025**
LOGGED BY:	**Nicole King**	SEEPAGE REMARKS:	**Slow Seepage at 7.3 ft.**	GROUND EL:	**125.0 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	CAVING REMARKS:	**No Caving Observed**	FINAL DEPTH:	**7.3 ft.**
EQUIPMENT:	**Hydraulic Excavator, Compact**	BACKFILL MATERIAL:	**Excavated Soil**	GRID COORDS:	**N:2932820 ± / E:705632 ±**
BUCKET TYPE:	**Toothed, 24-in. (6.4 cubic-ft.)**	OTHER COMMENTS:		GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
			Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
			Topsoil- 9 inches thick.		
			Silty sand with gravel (SM) - Light brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, little non plastic fines; trace debris (glass, plastic). **[FILL]**		
	G		**Poorly graded sand with silt and gravel (SP-SM)** - Dark brown; dry; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; numerous fine roots. **[BURIED TOPSOIL].**		
5			**Well graded sand with silt and gravel (SW-SM)** - Brown to gray; dry to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines; occasional to numerous cobbles.	120	
					Exploration ended at 7.3 ft.

TEST PIT PHOTOGRAPHS

Sidewall View

Bottom View

Attachment D

November 2025 Boring Logs

Weston & Sampson

Morses Pond Beach Improvements
Morses Pond Access Road, Wellesley, MA

BORING ID: B-6

WSE Project: ENG25-0709

CONTRACTOR:	**Geosearch, Inc.**	BORING LOCATION:	**See Attached Figure**	DATE START:	**November 3, 2025**
FOREMAN:	**Donny Watson**	ADVANCE METHOD:	**Hollow-Stem Auger Drilling**	DATE FINISH:	**November 3, 2025**
LOGGED BY:	**Tyler Beresford**	AUGER DIAMETER:	**4-1/4" ID (Stem), 7-5/8" OD (Flights)**	GROUND EL:	**132.3 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	SUPPORT CASING:	**N/A**	FINAL DEPTH:	**15.0 ft.**
EQUIPMENT:	**Deidrich D-50, ATV Mounted**	CORING METHOD:	**N/A**	GRID COORDS:	**N:2932931.9 ± / E:705598.0 ±**
SPT HAMMER:	**Automatic (140-lb.)**	BACKFILL MATERIAL:	**Drill Cuttings**	GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA (N-Value, Raw (bpf); Organic Content (%); Moisture Content (%); Plastic Limit, PL (%); Liquid Limit, LL (%))	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
					Surface: Forest debris.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
	S-1 8/24	1 1 8 11	9		Wood chips - 6" thick. **[FILL]**		
					Well graded sand with silt and gravel (SW-SM) - Loose to medium dense; gray to brown; moist; mostly fine to coarse SAND, some coarse gravel, few nonplastic fines; **[POSSIBLE FILL].**		
	S-2 10/24	10 8 6 6	14				
	S-3 0/24	4 3 2 3	5			128	[4.0 - 12.0] Intermittent auger grinding. [4.0] Cobble blocked opening of sampler, no recovery.
5	S-4 7/24	3 2 3 13	5				
	S-5 7/24	10 25 27 20	>> 52		**Poorly graded gravel with silt and sand (GP-GM)** - Medium dense to very dense; reddish brown to light gray; moist to wet; mostly coarse GRAVEL, some fine to coarse sand, few nonplastic fines.	123	
10	S-6 12/24	19 13 21 17	34				
							[12.5] Estimated water level at time of drilling based on changes in sample moisture.
	S-7 5/24	7 8 10 11	18			118	
15							**Exploration ended at 15.0 ft.**
						113	
20							
						108	

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

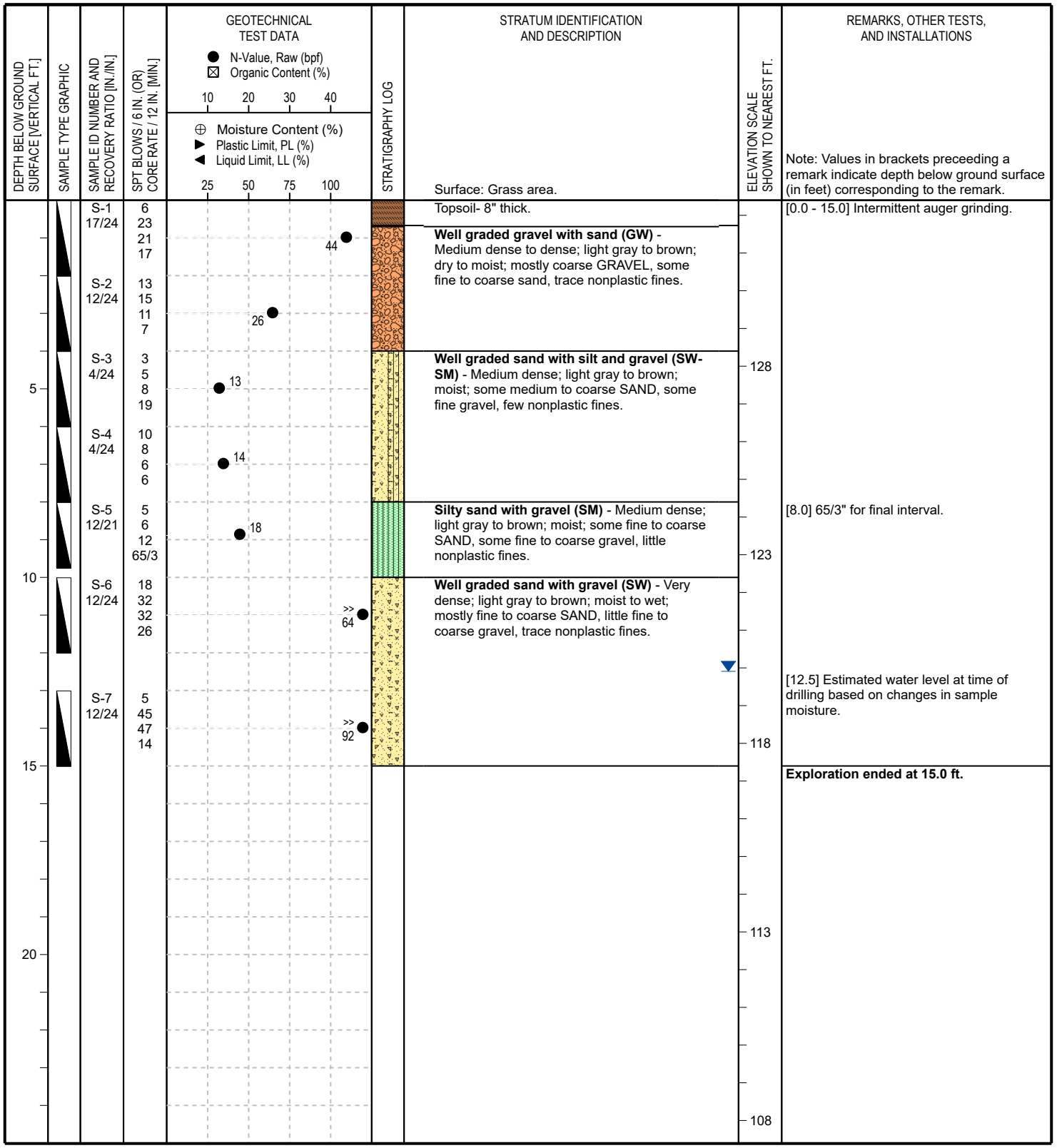
Weston & Sampson

Morses Pond Beach Improvements
Morses Pond Access Road, Wellesley, MA

BORING ID: B-7

WSE Project: ENG25-0709

CONTRACTOR:	Geosearch, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	November 3, 2025
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	November 3, 2025
LOGGED BY:	Tyler Beresford	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	132.4 ± (NAVD88)
CHECKED BY:	Matt Zanchi, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	15.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N:2932895.3 ± / E:705606.6 ±
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	NAD83 State Plane (MA)



Surface: Grass area.

Topsoil- 8" thick.

Well graded gravel with sand (GW) - Medium dense to dense; light gray to brown; dry to moist; mostly coarse GRAVEL, some fine to coarse sand, trace nonplastic fines.

Well graded sand with silt and gravel (SW-SM) - Medium dense; light gray to brown; moist; some medium to coarse SAND, some fine gravel, few nonplastic fines.

Silty sand with gravel (SM) - Medium dense; light gray to brown; moist; some fine to coarse SAND, some fine to coarse gravel, little nonplastic fines.

Well graded sand with gravel (SW) - Very dense; light gray to brown; moist to wet; mostly fine to coarse SAND, little fine to coarse gravel, trace nonplastic fines.

Exploration ended at 15.0 ft.

Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.

[0.0 - 15.0] Intermittent auger grinding.

[8.0] 65/3" for final interval.

[12.5] Estimated water level at time of drilling based on changes in sample moisture.

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

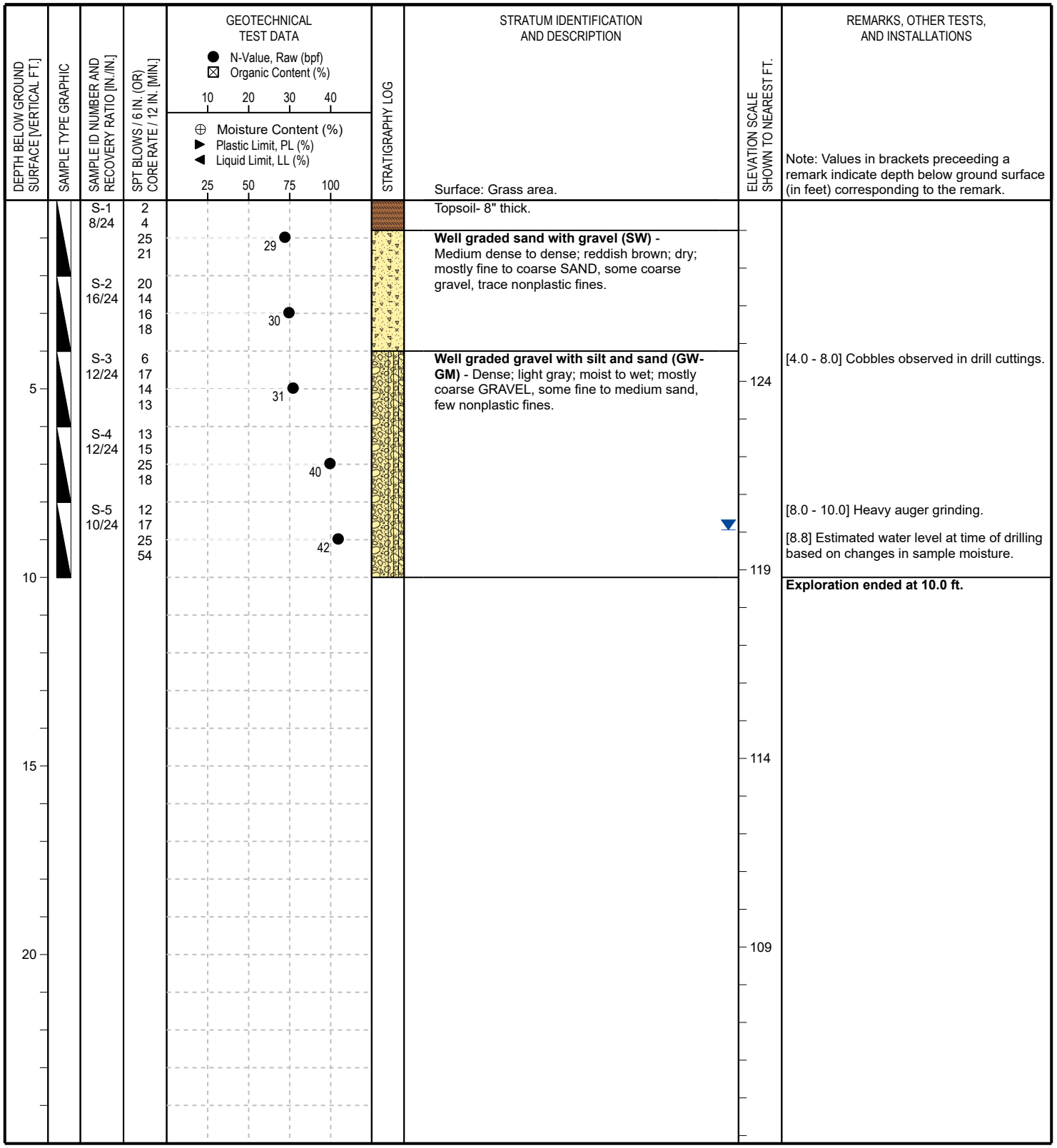
Weston & Sampson

Morses Pond Beach Improvements
Morses Pond Access Road, Wellesley, MA

BORING ID: B-8

WSE Project: ENG25-0709

CONTRACTOR:	Geosearch, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	November 3, 2025
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	November 3, 2025
LOGGED BY:	Tyler Beresford	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	128.8 ± (NAVD88)
CHECKED BY:	Matt Zanchi, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	10.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N:2932839.4 ± / E:705506.2 ±
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	NAD83 State Plane (MA)



Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach Improvements
Morses Pond Access Road, Wellesley, MA

BORING ID: B-9

WSE Project: ENG25-0709

CONTRACTOR:	**Geosearch, Inc.**	BORING LOCATION:	**See Attached Figure**	DATE START:	**November 3, 2025**
FOREMAN:	**Donny Watson**	ADVANCE METHOD:	**Hollow-Stem Auger Drilling**	DATE FINISH:	**November 3, 2025**
LOGGED BY:	**Tyler Beresford**	AUGER DIAMETER:	**4-1/4" ID (Stem), 7-5/8" OD (Flights)**	GROUND EL:	**130.6 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	SUPPORT CASING:	**N/A**	FINAL DEPTH:	**22.0 ft.**
EQUIPMENT:	**Deidrich D-50, ATV Mounted**	CORING METHOD:	**N/A**	GRID COORDS:	**N:2932841.7 ± / E:705543.0 ±**
SPT HAMMER:	**Automatic (140-lb.)**	BACKFILL MATERIAL:	**Drill Cuttings**	GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
				● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 16/24	7 16 24 17	40		Topsoil- 6" thick.		
		S-2 12/24	12 15 14 14	29		**Well graded gravel with sand (GW) -** Medium dense to dense; reddish brown to gray; dry to moist; mostly fine to coarse GRAVEL, some fine to coarse sand, trace nonplastic fines.		[1.0 - 10.0] Cobbles observed in drill cuttings. [2.0 - 8.0] Intermittent auger grinding.
5		S-3 8/24	11 14 14 9	28			126	
		S-4 12/24	7 10 11 11	21				
		S-5 6/24	10 10 10 8	20		**Well graded sand with gravel (SW) -** Medium dense; light brown to gray; moist; mostly fine to coarse SAND, some fine to coarse gravel, trace nonplastic fines.	121	[10.0] Estimated water level at time of drilling based on changes in sample moisture.
10								
15		S-6 18/24	3 3 7 7	10		**Poorly graded sand with gravel (SP) -** Medium dense; light brown to reddish brown; wet; mostly fine to coarse SAND, little fine gravel, trace nonplastic fines.	116	
20		S-7 12/24	10 13 15 12	28			111	**Exploration ended at 22.0 ft.**
							106	

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach Improvements
Morses Pond Access Road, Wellesley, MA

BORING ID: B-10

WSE Project: ENG25-0709

CONTRACTOR:	**Geosearch, Inc.**	BORING LOCATION:	**See Attached Figure**	DATE START:	**November 3, 2025**
FOREMAN:	**Donny Watson**	ADVANCE METHOD:	**Hollow-Stem Auger Drilling**	DATE FINISH:	**November 3, 2025**
LOGGED BY:	**Tyler Beresford**	AUGER DIAMETER:	**4-1/4" ID (Stem), 7-5/8" OD (Flights)**	GROUND EL:	**132.2 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	SUPPORT CASING:	**N/A**	FINAL DEPTH:	**10.0 ft.**
EQUIPMENT:	**Deidrich D-50, ATV Mounted**	CORING METHOD:	**N/A**	GRID COORDS:	**N:2932855.9 ± / E:705573.4 ±**
SPT HAMMER:	**Automatic (140-lb.)**	BACKFILL MATERIAL:	**Drill Cuttings**	GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
				● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 18/24	3 15 20 22	35		Topsoil- 6" thick. **Well graded gravel with sand (GW)** - Dense; light gray to brown; dry to moist; mostly coarse GRAVEL, some fine to coarse sand, trace nonplastic fines.		
		S-2 12/24	22 16 20 13	36				[2.0 - 8.0] Intermittent auger grinding.
5		S-3 6/24	6 6 6 7	12		**Well graded sand with silt and gravel (SW-SM)** - Medium dense; reddish brown; moist; mostly fine to coarse SAND, some coarse gravel, few nonplastic fines.	128	[4.0 - 6.0] Cobbles observed in drill cuttings.
		S-4 9/24	10 6 10 7	16		**Well graded gravel with sand (GW)** - Medium dense; reddish brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, trace nonplastic fines.		
		S-5 12/24				**Well graded gravel with silt and sand (GW-GM)** - Reddish brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few nonplastic fines.	123	[8.0] Switch to 3" sampler, no blow counts recorded.
10								**Exploration ended at 10.0 ft.**
15							118	
							113	
20								
							108	

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

Weston & Sampson

Morses Pond Beach Improvements
Morses Pond Access Road, Wellesley, MA

BORING ID: B-11

WSE Project: ENG25-0709

CONTRACTOR:	**Geosearch, Inc.**	BORING LOCATION:	**See Attached Figure**	DATE START:	**November 3, 2025**
FOREMAN:	**Donny Watson**	ADVANCE METHOD:	**Hollow-Stem Auger Drilling**	DATE FINISH:	**November 3, 2025**
LOGGED BY:	**Tyler Beresford**	AUGER DIAMETER:	**4-1/4" ID (Stem), 7-5/8" OD (Flights)**	GROUND EL:	**131.8 ± (NAVD88)**
CHECKED BY:	**Matt Zanchi, P.E.**	SUPPORT CASING:	**N/A**	FINAL DEPTH:	**13.0 ft.**
EQUIPMENT:	**Deidrich D-50, ATV Mounted**	CORING METHOD:	**N/A**	GRID COORDS:	**N:2932918.7 ± / E:705561.2 ±**
SPT HAMMER:	**Automatic (140-lb.)**	BACKFILL MATERIAL:	**Drill Cuttings**	GRID SYSTEM:	**NAD83 State Plane (MA)**

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA (● N-Value, Raw (bpf); ⊠ Organic Content (%); ⊕ Moisture Content (%); ▶ Plastic Limit, PL (%); ◀ Liquid Limit, LL (%))	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	ELEVATION SCALE SHOWN TO NEAREST FT.	REMARKS, OTHER TESTS, AND INSTALLATIONS
				10 20 30 40 / 25 50 75 100		Surface: Grass area.		Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 15/24	9 19 18 17	● 37		Topsoil- 6" thick.		
						Well graded gravel with sand (GW) - Dense to very dense; gray to light brown; dry to moist; mostly fine to coarse GRAVEL, some fine to coarse sand, trace nonplastic fines.		[1.0 - 11.0] Cobbles observed in drill cuttings.
		S-2 8/24	16 27 28 22	● >> 55				[2.0 - 4.0] Auger grinding.
5		S-3 10/24	23 25 25 17	● >> 50			127	
		S-4 5/24	13 15 17 43	● 32				
		S-5 8/24	19 21 17 15	● 38		**Well graded gravel with silt and sand (GW-GM)** - Dense; gray; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few nonplastic fines.	122	
10		S-6 12/24	16 14 14 9	● 28		**Well graded sand with silt and gravel (SW-SM)** - Medium dense; gray; moist to wet; mostly fine to coarse SAND, some fine gravel, few nonplastic fines. ▼		[11.8] Estimated water level at time of drilling based on changes in sample moisture.
								Exploration ended at 13.0 ft.
15							117	
20							112	

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 1 GENERAL INFORMATION

GENERAL NOTES AND USE OF LOGS

1.) Explorations were made by ordinary and conventional methods and with care adequate for Weston & Sampson's study and/or design purposes. The exploration logs are part of a specific report prepared by Weston & Sampson for the referenced project and client, and are an integral part of that report. Information and interpretations are subject to the explanations and limitations stated in the report. Weston & Sampson is not responsible for any interpretations, assumptions, projections, or interpolations made by others.

2.) Exploration logs represent general conditions observed at the point of exploration on the date(s) stated. Boundary lines separating soil and rock layers (strata) represent approximate boundaries only and are shown as solid lines where observed and dashed lines where inferred based on drilling action. Actual transitions may be gradual and changes may occur over time.

3.) Soil and rock descriptions are based on visual-manual examination of recovered samples, direct observation in test pits (when permissible), and laboratory testing (when conducted).

4.) Water level observations were made at the times and under the conditions stated. Fluctuations should be be expected to vary with seasons and other factors. Use of fluids during drilling may affect water level observations. The absence of water level observations does not necessarily mean the exploration was dry or that subsurface water will not be encountered during construction.

5.) Standard split spoon samplers may not recover particles with any dimension larger than 1-3/8 inches. Reported gravel conditions or poor sample recovery may not reflect actual in-situ conditions.

6.) Sections of this guide provide a general overview of Weston & Sampson's practices and procedures for *identifying* and *describing* soil and rock. These procedures are predominantly based on ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)*, the International Society of Rock Mechanics (ISRM) standards, and the *Engineering Geology Field Manual* published by the Bureau of Reclamation. Not all aspects of this guide relating to description and identification procedures of soil and rock may be applicable in all circumstances.

SAMPLER GRAPHICS

- Split Spoon (Standard) 2" OD, 1-3/8" ID
- Split Spoon (Oversize) 3" OD, 2-3/8" ID
- Shelby or Piston Tube 3" OD, 2-7/8" ID
- Double-Tube Rock Core Barrel 2" Core Diameter
- Direct Push with Acetate Liner Various Liner Sizes
- A — Auger Sample *(from cuttings or hand auger)*
- G — Grab Sample *(manual, from discrete point)*
- C — Composite Sample *(multiple grab samples)*

WELL GRAPHICS

- Cement concrete seal around casing or riser pipe
- Bentonite seal around casing or riser pipe
- Cement grout seal around casing or riser pipe
- Soil backfill around riser pipe or beneath screen
- Gravel backfill around screen or riser pipe
- Sand backfill around screen or riser pipe (filter sand)
- Solid-wall riser; Sch. 40 PVC, 1" ID unless noted otherwise
- Slotted screen; Sch. 40 PVC, 1" ID with machined slots

CAVING / SEEPAGE TERMS

The following caving and/or seepage terms may appear on a test pit log.

Caving Term	Criteria
Minor	less than 1 cubic ft.
Moderate	1 to 3 cubic ft.
Severe	greater than 3 cubic ft.

Seepage Term	Criteria
Slow	less than 1 gpm
Moderate	1 to 3 gpm
Fast	greater than 3 gpm

KEY TO WATER LEVELS

- Observed in exploration during advancement.
- Measured in exploration at completion, prior to backfilling or well installation.
- Measured in exploration after the stated stabilization period, prior to backfilling, or in well installation if noted.

DEFINITIONS OF COMMON TERMS

Sample Recovery Ratio - The length of material recovered in a drive or push type sampler over the length of sampler penetration, in inches (e.g. 18/24).

Standard Penetration Test (*SPT*) - An in-situ test where a standard split-spoon sampler is driven a distance of 12 or 18 inches (after an initial 6-inch seating interval) using a 140-lb. hammer falling 30 inches for each blow.

SPT Blows - The number of hammer blows required to drive a split-spoon sampler each consecutive 6-inch interval during a *Standard Penetration Test*. If no discernable advancement of a split spoon sampler is made after 50 consecutive hammer blows, 50/X indicates *sampler refusal* and is the number of blows required to drive the sampler X inches.

SPT N-Value (*N*) - The uncorrected blow count representation of a soil's penetration resistance over a 12-inch interval after an initial 6-in. seating interval, reported in blows per foot (bpf). The N-value is correlated to soil engineering properties.

Auger Refusal - No discernable advancement of the auger over a period of 5 minutes with full rig down pressure applied.

Casing Refusal (Driven) - Casing penetration of less than 6 inches after a minimum 50 blows of a drop hammer weighing 300 lbs. or a minimum 100 blows of a drop hammer weighing 140 lbs.

PID Measurement - A measurement (electronic reading) taken in the field using a photoionization detector (PID) to detect the presence of volatile organic compounds in a soil sample. Values are reported as benzene equivalent units in parts per million (ppm) unless noted otherwise.

Rock Quality Designation (RQD) - A qualitative index measure of the degree of jointing and fracture of a rock core taken from a borehole. The RQD is defined as the sum length of solid core pieces 4 inches or longer divided by the run (cored) length, expressed as a percentage. Higher RQD values may indicate fewer joints and fractures in the rock mass.

Fill (Made Ground) - A deposit of soil and/or artificial waste materials that has been placed or altered by human processes.

LABORATORY TESTS AND FIELD MEASUREMENTS

MC	Moisture Content	IC	1D Incremental Consolidation
OC	Organic Content	VS	Laboratory Vane Shear
PL	Plastic Limit	US	Unconfined Compression
LL	Liquid Limit	TC	Triaxial Compression
GC	Gravel Content	PP	Pocket (Hand) Penetrometer
SC	Sand Content	TV	Torvane (Hand Vane)
FC	Fines Content	PID	Photoionization Detector
DS	Direct Shear	FID	Flame Ionization Detector

BORING ADVANCEMENT METHODS

Hollow-Stem Auger Drilling - Utilizes continuous flight auger sections with hollow stems to advance the borehole. Drill rods and a plug are inserted into the auger stem to prevent the entrance of soil cuttings into the augers.

Rotary Wash Drilling - Utilizes downward pressure and rotary action applied to a non-coring bit while washing the cuttings to the surface using a circulating fluid injected down the drill rods. The borehole is supported with either steel casing or the drilling fluid. Where a casing is used, the borehole is advanced sequentially by driving the casing to the desired depth and then cleaning out the casing. The process of driving and cleaning the casing is commonly referred to as the 'drive-and-wash' technique.

Continuous Sampling - Includes a variety of methods and procedures during which the borehole is advanced via continuous recovery of soil samples. *Direct Push* sampling is a common method that uses static downward pressure combined with percussive energy to drive a steel mandrel into the ground at continuous intervals while recovering soil samples in disposable acetate liners.

Rock Coring - Utilizes downward pressure and rotary action applied to a core barrel equipped with a diamond-set or tungsten carbide coring bit. During conventional coring, the entire barrel is retrieved from the hole upon completion of a core run. Wireline coring allows for removal of the inner barrel assembly containing the actual core while the the drill rods and outer barrel remain in the hole. Various types and sizes of core barrels and bits are used.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 2
SOIL DESCRIPTION

SOIL CONSTITUENTS

Naturally occurring soils consist of one or more of the following matrix constituents defined in terms of particle size.

Constituent		U.S. Sieve Size			Observed Size (in.)		
Gravel	(Coarse)	3/4 in.	-	3 in.	3/4	-	3
Gravel	(Fine)	No. 4	-	3/4 in.	1/5	-	3/4
Sand	(Coarse)	No. 10	-	No. 40	1/16	-	1/5
Sand	(Medium)	No. 40	-	No. 10	1/64	-	1/16
Sand	(Fine)	No. 200	-	No. 40	1/300	-	1/64
Fines	(Silt or Clay)	Smaller than		No. 200	Less than		1/300

SOIL IDENTIFICATION

Soil identification refers to the grouping of soils with similar physical characteristics into a category defined by a **group name** and corresponding **group symbol** based on estimation of the matrix soil constituents to the nearest 5% and simple manual tests. Proportions of cobbles, boulders, and other non-matrix soil materials are not considered during this procedure but are included in the overall soil description if observed or thought to be present. Refer to the following descriptions and tables adapted from ASTM D2488.

Coarse-Grained Soil - Coarse-grained soils contain fewer than 50% fines and are identified based on the following table.

Primary Constituent	Fines Percent	Type of Fines and Gradation		Group Symbol	Group Name [1]
GRAVEL *% gravel > % sand*	≤ 5%	well graded		GW	Well graded gravel
		poorly graded		GP	Poorly graded gravel
	10%	clayey fines	well graded	GW-GC	Well graded gravel with clay
			poorly graded	GP-GC	Poorly graded gravel with clay
		silty fines	well graded	GW-GM	Well graded gravel wth silt
			poorly graded	GP-GM	Poorly graded gravel with silt
	15% to 45%	clay fines		GC	Clayey gravel
		silt fines		GM	Silty gravel
SAND *% sand ≥ % gravel*	≤ 5%	well graded		SW	Well graded sand
		poorly graded		SP	Poorly graded sand
	10%	clayey fines	well graded	SW-SC	Well graded sand with clay
			poorly graded	SP-SC	Poorly graded sand with clay
		silty fines	well graded	SW-SM	Well graded sand with silt
			poorly graded	SP-SM	Poorly graded sand with silt
	15% to 45%	clay fines		SC	Clayey sand
		silt fines		SM	Silty sand

[1] If soil is a gravel and contains 15% or more sand, add "with sand" to the group name. If soil is a sand and contains 15% of more gravel, add "with gravel" to the group name.

Inorganic Fine-Grained Soil - Fine-grained soils contain 50% or more fines and are identified based on the following table.

Plasticity Criteria	Dry Strength	Coarse Fraction S = Sand, G = Gravel		Group Symbol	Group Name [1]
Medium	Medium to high	< 15% S + G		CL	Lean clay
		≥ 30%	% S ≥ % G	CL	Sandy lean clay
		S + G	% S < % G	CL	Gravelly lean clay
Non-plastic	None to low	< 15% S + G		ML	Silt
		≥ 30%	% S ≥ % G	ML	Sandy silt
		S + G	% S < % G	ML	Gravelly silt
High	High to very high	< 15% S + G		CH	Fat clay
		≥ 30%	% S ≥ % G	CH	Sandy fat clay
		S + G	% S < % G	CH	Gravelly fat clay
Low to Medium	Low to medium	< 15% S + G		MH	Elastic silt
		≥ 30%	% S ≥ % G	MH	Sandy elastic silt
		S + G	% S < % G	MH	Gravelly elastic silt

[1] If soil contains 15% to 25% sand or gravel, add "with sand" or "with gravel" to the group name.

Organic Fine-Grained Soil - Fine-grained soils that contain enough organic particles to influence the soil properties are identified as Organic Soil and assigned the group symbol **OL** or **OH**.

Highly Organic Soil (Peat) - Soils composed primarily of plant remains in various stages of decomposition are identified as Peat and given the group symbol **PT**. Peat usually has an organic odor, a dark brown to black color, and a texture ranging from fibrous (original plant structure intact or mostly intact) to amorphous (plant structure decomposed to fine particles).

SOIL DESCRIPTION

Soils are *described* in the following general sequence. Deviations may occur in some instances.

Identification Components

(1) Group Name and Group Symbol

Description Components

(2) Consistency (Fine-Grained) or Apparent Density (Coarse-Grained)
(3) Color (*note, the term "to" may be used to indicate a gradational change*)
(4) Soil Moisture
(5) Matrix Soil Constituents (Gravel, Sand, Fines)
  └► Proportion (*by weight*), particle size, plasticity of fines, angularity, etc.
(6) Non-Matrix Soil Materials and Proportions (*by volume*)
(7) Other Descriptive Information (Unusual Odor, Structure, Texture, etc.)
(8) [Geologic Formation Name or Soil Survey Unit]

SPT N-VALUE CORRELATIONS

Consistency	SPT N-Value	Apparent Density	SPT N-Value
Very soft	0 - 2	Very loose	0 - 5
Soft	2 - 4	Loose	5 - 10
Medium stiff	4 - 8	Medium dense	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very stiff	15 - 30	Very dense	> 50
Hard	> 30		

SOIL MOISTURE

Dry..... Apparent absence of moisture; dry to the touch.
Moist..... Damp but no visible water.
Wet..... Visible free water; saturated.

PROPORTIONS / PERCENTAGES

Proportions of gravel, sand, and fines (excluding cobbles, boulders, and other constituents) are stated in the following terms indicating a range of percentages by weight (to nearest 5%) of the minus 3-in. soil fraction and add up to 100%.

Mostly ..... 50% - 100%
Some ..... 30% - 45%
Little ..... 15% - 25%
Few ..... 5% - 10%
Trace..... Less than 5%

Proportions of cobbles, boulders, and other non-matrix soil materials including artificial debris, roots, plant fibers, etc. are stated in the following terms indicating a range of percentages by volume (to the nearest 5%) of the total soil.

Numerous ..... 40% - 50%
Common ..... 25% - 35%
Occasional ..... 10% - 20%
Trace..... Less than 5%

PLASTICITY (FINES ONLY)

Non-plastic.....Dry specimen ball falls apart easily. Cannot be rolled into thread at any moisture content.
Low.....Dry specimen ball easily crushed with fingers. Can be rolled into 1/8-in. thread with some difficulty.
Medium.....Difficult to crush dry specimen ball with fingers. Easily rolled into 1/8-in. thread.
High.....Cannot crush dry specimen ball with fingers. Easily rolled and re-rolled into 1/8-in. thread.

COBBLES AND BOULDERS

Cobbles - Particles of rock that will pass a 12-in. square opening and be retained on a 3-in. sieve.

Boulders - Particles of rock that will not pass a 12-in. square opening.

Note: Where the percentage (by volume) of cobbles and/or boulders cannot be accurately or reliably estimated, the terms "with cobbles", "with boulders", or "with cobbles and boulders" may be used to indicate observed or inferred presence.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 3
ROCK DESCRIPTION

ROCK DEFINITION

Where reported on an exploration log, *rock* is defined as any naturally formed aggregate of mineral matter occurring in larges masses or fragments. This definition of rock should not be taken as a replacement for any definitions relating to rock and/or rock excavation defined in construction documents. Intensely weathered or decomposed rock that is friable and can be reduced to gravel size particles or smaller by normal hand pressure is identified and described as soil. Poorly indurated formational materials which display both rock-like and soil-like properties are identified and described as rock followed by the soil description. In such cases, the term "poorly indurated" or "weakly cemented" is added to the rock name (e.g. weakly cemented sandstone).

ROCK IDENTIFICATION

Rock is identified by a combination of *rock type* (igneous, metamorphic, or sedimentary) followed by the the *rock name* (e.g. granite, schist, sandstone).

ROCK DESCRIPTION

Rock descriptions are presented in the following general sequence. The detail of description is dictated by the complexity and objectives of the project.

Identification Components

(1) Rock Type and Name

Description Components

(2) Rock Grain Size (*for clastic sedimentary rock*)
(3) Crystal Size (*for igneous and metamorphic rock*)
(4) Bedding Spacing (*for sedimentary rock*)
(5) Color
(6) Hardness and Weathering Descriptors
(7) Fracture Density
(8) [Geologic Formation Name]

ROCK QUALITY DESIGNATION

$$\text{RQD (\%)} = \frac{\Sigma \text{ Length of intact core pieces} \geq 4 \text{ inches}}{\text{Total length of core run (inches)}} \times 100$$

The RQD should correlate with the fracture density in most cases. Higher RDQ values generally indicate fewer joints and fractures.

GRAIN / CRYSTAL SIZE

Grain Size for Clastic Sedimentary Rock

The names of clastic sedimentary rocks are generally based on their predominant clast or grain size (e.g. fine sandstone, medium sandstone, coarse gravel conglomerate, cobble conglomerate, siltstone, claystone).

Crystal Size for Igneous and Metamorphic Rock

Grain Size Description	Average Crystal Size (in.)
Very coarse grained (pegmatitic)	Greater than or equal to 3/8
Coarse-grained	Between 3/16 and 3/8
Medium-grained	Between 1/32 and 3/16
Fine-grained	Between 1/250 and 1/32
Aphanitic	Less than or equal to 1/250

BEDDING SPACING

Bedding Description	Thickness / Spacing
Massive	Less than 10 ft.
Very thickly bedded	3 ft. to 10 ft.
Thickly bedded	1 ft. to 3 ft.
Moderately bedded	4 in. to 1 ft.
Thinly bedded	1 in. to 4 in.
Very thinly bedded	1/4 in. to 1 in.
Laminated	Less than 1/4 in.

Note: Bedding is generally only applicable to sedimentary or bedded volcanic rocks.

HARDNESS

Hardness	Criteria
Extremely hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows.
Very hard	Cannot be scratched with a pocketknife or sharp pick with difficulty. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with with a pocketknife or sharp pick with difficulty. Breaks with heavy hammer blows.
Moderately hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows.
Moderately soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick. Breaks with light to moderate manual pressure.
Very soft	Can be readily indented, grooved, or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

WEATHERING (INTACT ROCK)

Weathering Description	Discoloration and/or Oxidation	General Characteristics
Fresh	Body of rock and fracture surfaces are not discolored or oxidized.	Rock texture unchanged. Hammer rings when crystalline rocks are struck.
Slightly weathered	Discoloration or oxidation limited to surface of, or short distance from, fractures. Most surfaces exhibit minor to complete discoloration.	Rock texture preserved. Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately weathered	Discoloration or oxidation extends usually throughout. Fe-Mg minerals appear rusty. All fracture surfaces are discolored or oxidized.	Rock texture generally preserved. Hammer does not ring when rock is struck. Body of rock slightly weakened.
Intensely weathered	Discoloration or oxidation throughout. Feldspar and Fe-Mg minerals altered to clay to some extent. All fracture surfaces are discolored or oxidized and friable.	Rock texture altered by chemical disintegration. Can usually be broken with moderate to heavy manual pressure or by light hammer blow . Body of rock is significantly weakened.
Decomposed	Discoloration or oxidation throughout but resistant minerals such as quartz may be unaltered. All feldspar and Fe-Mg minerals are completely altered to clay.	Resembles a soil; partial or complete remnant rock structure may be preserved. Can be granulated by hand. Resistant minerals may present as stringers or dikes.

FRACTURE DENSITY

Description	Observed Fracture Density
Unfractured	No fractures
Very slightly fractured	Core lengths greater than 3 ft.
Slightly fractured	Core lengths mostly from 1 ft. to 3 ft.
Moderately fractured	Core lengths mostly from 4 in. to 1 ft.
Intensely fractured	Core lengths mostly from 1 in. to 4 in.
Very intensely fractured	Mostly chips and fragments

Note: Fracture density is based on the fracture spacing in recovered core, measured along the core axis (excluding mechanical breaks).

Attachment E

Important Information about This Geotechnical-Engineering Report

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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APPENDIX J

ASTM Phase I Environmental Site Assessment Report, September 2025

Weston & Sampson[SM]

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REPORT

September 2025

TOWN OF WELLESLEY

ASTM PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Morses Pond Beach Area
99 Turner Road
Wellesley, Massachusetts

TABLE OF CONTENTS

EXECUTIVE SUMMARY....1

1.0 INTRODUCTION....2
- 1.1 Purpose....2
- 1.2 Scope of Work....2
- 1.3 Significant Assumptions....3
- 1.4 Limitations and Exceptions....3
- 1.5 Deviations....4
- 1.6 Special Terms and Conditions....4
- 1.7 Reliance....4

2.0 SUBJECT PROPERTY DESCRIPTION....5
- 2.1 Location and Legal Description....5
- 2.2 Subject Property and Vicinity Description....5
- 2.3 Current Use of the Subject Property....5
- 2.4 Description of Structures and Other Improvements....5
- 2.5 Adjoining Property Information....6

3.0 SITE RECONNAISSANCE....7
- 3.1 Methodology and Limiting Conditions....7
- 3.2 General Setting....7
- 3.3 Site Reconnaissance Findings....7

4.0 USER-PROVIDED INFORMATION....9
- 4.1 Owner, Property Manager, and Occupant Information....9
- 4.2 Environmental Liens....9
- 4.3 Activity and Use Limitations....9
- 4.4 Specialized Knowledge....9
- 4.5 Commonly Known or Reasonably Ascertainable Information....9
- 4.6 Valuation Reduction for Environmental Issues....9
- 4.7 Degree of Obviousness of Contamination....9
- 4.8 Reason For Performing Phase I ESA....9
- 4.9 User-Provided Documents....10

5.0 RECORDS REVIEW....11
- 5.1 Physical Setting Records Review....11
  - 5.1.1 Topography....11
  - 5.1.2 Geology....11
    - 5.1.2.1 Soil....11
    - 5.1.2.2 Bedrock....12
  - 5.1.3 Hydrogeology....12
    - 5.1.3.1 Groundwater....12

DRAFT

TABLE OF CONTENTS

5.1.3.2 Surface Water....12
5.2 Historical Records Review....12
5.2.1 Sanborn Fire Insurance Maps....12
5.2.2 Topographic Maps....13
5.2.3 Aerial Photos....14
5.2.4 City Directories....15
5.2.5 Other Land Use Records....15
5.2.6 Historical Records Review Summary....15
5.3 Standard Environmental Records Review....15
5.4 Local Records....18
5.4.1 Tax Assessor....18
5.4.2 Fire Department....18
5.4.3 Health Services Department....19
5.4.4 Inspectional Services Department....19
5.4.5 Electric Utility....19
5.5 Other Environmental Records....19

6.0 INTERVIEWS....20
6.1 Current Owner....20
6.2 Key Site Manager....20
6.3 Current Occupants....20
6.4 Current Operators....20
6.5 Past Owners....20
6.6 Local Government Officials....20
6.7 Other Individuals....20

7.0 OTHER ENVIRONMENTAL CONSIDERATIONS....21

8.0 DATA GAPS....22

9.0 FINDINGS AND OPINIONS....23

10.0 CONCLUSIONS....25

11.0 SIGNATURES OF THE ENVIRONMENTAL PROFESSIONAL....26

12.0 REFERENCES....27

DRAFT

TABLE OF CONTENTS

FIGURES

Figure 1 - Locus Map..... 29
Figure 2 - Site Plan v2..... 30

LIST OF APPENDICES

Appendix A: Scope of Services.....31
Appendix B: Photograph Log.....34
Appendix C: Questionnaires / Checklists..... 38
Appendix D: User-Provided Documents..... 47
Appendix E: Sanborn Fire Insurance Maps..... 79
Appendix F: Topographic Maps..... 86
Appendix G: Aerial Photographs.....106
Appendix H: City Directories..... 124
Appendix I: Environmental Data Resources, Inc. Radius Report..... 153
Appendix J: Local Records..... 598
Appendix K: Other Environmental Records..... 756
Appendix L: Qualifications of Environmental Professional..... 1059

DRAFT

EXECUTIVE SUMMARY

Weston & Sampson Engineers, Inc. (Weston & Sampson), on behalf of the Town of Wellesley (the Town), has prepared this Phase I Environmental Site Assessment (ESA) for an approximate five (5)-acre property known as Morses Pond Beach and located at 99 Turner Road in Wellesley, Massachusetts (the Subject Property).

Findings of the Phase I ESA are as follows:

- The Subject Property was occupied by an ice house between 1888 and 1930 and has been used as a Town beach since the 1930s. The Subject Property includes the approximate 4.5-acre Ice House Pond on the eastern portion, the main beach area with a Bathhouse on the west side of Ice House Pond extending westward to Morses Pond, and a strip of land supporting an asphalt-paved walking path between the north side of Ice House Pond and Morses Pond. A portion of this path is supported by a pedestrian bridge where Ice House Pond and Morses Pond are connected by a small waterway. The paths connect to a trail network located east and northeast of the Subject Property.

- The area surrounding the Subject Property has historically consisted of Morses Pond to the north and west; a portion of the ice house operations from the late 1800s through early 1930s followed by the Town pump house and conservation areas to the east; and wooded land followed by railroad tracks and Central Street to the south since at least the late 1800s.

- A small portion of the southwestern corner of the Subject Property is associated with Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-11653. The release, which was assessed by MassDEP in the late 1990s, was associated with the improper storage/emplacement of paint wastes containing heavy metals in the early 1900s. A Time Critical Removal Action (TCRA) was performed by the US Environmental Protection Agency (EPA) in 2001/2002. Since the TCRA did not document a Permanent Solution under the Massachusetts Contingency Plan (MCP), MassDEP required additional assessment activities. The Disposal Site Boundary (DSB) was separated into Areas 1, 2, and 3. Area 1 and 3 were south and southwest of the Subject Property and Area 2 includes the southwestern corner of the Subject Property.

- The Area 2 TCRA included the removal of sediment containing elevated metals. Up to four (4) feet of gravel was backfilled to restore the cove bottom. Post-TCRA sampling results submitted to MassDEP in 2014 indicated that a level of No Significant Risk (NSR) existed for Area 2 based on Method 1 Risk Characterization and Method 3, Stage 1 Environmental Screening, and a Class A-2 RAO (Permanant Solution with No Conditions) was achieved for Area 2. A Class A-2 RAO is the historical MCP assignment used for a release where remediation work was completed, but contamination may remain above background but below Method 1 Cleanup Standards or otherwise at NSR. The documented presence of hazardous substances (metals) in, on, or at the Subject Property due to the release to the environment associated with RTN 3-11653, which achieved regulatory closure with unrestricted use, is considered a Historical Recognized Environmental Condition (HREC).

- Areas 1 and 3, which are not associated with the Subject Property, currently have a Temporary Solution regulatory status. Based on the information obtained and reviewed during this Phase I ESA, the DSB (RTN 3-11653) area located adjacent to the Subject Property (Areas 1 and 3), is not considered a Recognized Environmental Condition (REC).

It is Weston & Sampson's opinion that additional investigation is not appropriate to further evaluate the HREC identified in this Phase I ESA; however, if construction is proposed in the southwestern portion of the Subject Property where residual impacts are still present, soil sampling and analysis is recommended to inform construction costs and implications associated with managing impacted soil.

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1.0 INTRODUCTION

Weston & Sampson Engineers, Inc. (Weston & Sampson), on behalf of the Town of Wellesley (the Town), has prepared this Phase I Environmental Site Assessment (ESA) for an approximately five (5)-acre property known as Morses Pond Beach and located at 99 Turner Road in Wellesley, Massachusetts (the Subject Property).The Subject Property is developed with a one (1)-story approximately 2,572 square foot (sf) building (Bathhouse), two (2) pavilions (Pavillion No. 1 and Pavillion No. 2), playgrounds, beach volleyball pit, town beach, Ice House Pond (a portion of Morses Pond) and surrounding recreational areas including a section of a walking path (Morses Pond Trail). The Subject Property is utilized for recreation. Topography is generally level. Groundcover consists primarily of sand (beach), landscaped areas, and woods. Figure 1 shows the general location of the Subject Property in Wellesley, Massachusetts. Figure 2 is a Site Plan showing pertinent details and surrounding area.

This ESA was performed in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Site Assessment Process, Designation E1527-21 (the ASTM Standard Practice) and conforms with the EPA All Appropriate Inquiry (AAI) Rule. The Phase I ESA was performed to assess the Subject Property with respect to the range of potential contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA; 42 U.S.C. §9601). This Phase I ESA was also conducted in accordance with applicable portions of the Oil and Hazardous Material Release Prevention and Response Act - Massachusetts General Law Chapter 21E (MGL c. 21E). This practice is intended to help the Town meet any obligations detailed in Section 4.8.

1.1 Purpose

Weston & Sampson was requested by the Town to complete an ASTM Phase I ESA of the Subject Property to guide redevelopment of the Subject Property. This practice is intended to permit the Town to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability; that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the Subject Property consistent with good commercial or customary practice" as defined in 42 U.S.C. § 9601(35)(B).

The purpose of the Phase I ESA is to identify Recognized Environmental Conditions (RECs) in connection with the Subject Property at the time of the Subject Property evaluation. The term Recognized Environmental Condition refers to "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of future release to the environment."

The ASTM definition of REC does not include de minimis conditions, which generally do not present a threat to human health or the environment and would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies.

The identification of RECs in connection with the Subject Property may impose an environmental liability on owners or operators of the Subject Property, reduce its value, or restrict its use or marketability. Further investigation may be warranted to evaluate the scope and extent of potential environmental liabilities.

Any significant scope-of-work additions, deletions or deviations to ASTM Practice E1527-21 are noted below or in pertinent sections of this report.

1.2 Scope of Work

This Phase I ESA was conducted using a standard of good commercial and customary practice consistent with the ASTM Standard Practice and included the following tasks:

- Review of previous environmental records and reports (if available)
- Regulatory records review

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- Interviews (in-person, via phone, or via questionnaire)
- A Subject Property visit
- Evaluation of information and preparation of the report

Any significant scope-of-work additions, deletions, or deviations to the ASTM Standard Practice are noted below or in the corresponding sections of this report. A copy of the scope of services between Weston & Sampson and the Town specifying the work to be performed and responsibilities of the User, is included in Appendix A.

Releases of contaminants not defined as hazardous substances under CERCLA, but for which state or tribal regulations may require cleanup (including "emerging contaminants"), if documented, are discussed in appropriate sections throughout this report and as findings in Section 9. In accordance with the ASTM Standard Practice, if such a release presents a "risk which can have material environmental or environmentally driven impact on the business associated the current or planned use," it is further defined as a Business Environmental Risk (BER) in Section 9.

Unless requested, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. Although this Phase I ESA considers releases to all environmental media, including soil vapor, a formal vapor encroachment screening is not required by the Standard Practice, and is not included in this report.

1.3 Significant Assumptions

There is a possibility that, even with the proper application of these methodologies, there may exist Subject Property conditions that were not reasonably identifiable. Weston & Sampson believes that the information obtained from the record review and the interviews is reliable; however, Weston & Sampson cannot, and does not, warrant or guarantee that the information provided by third-party sources is accurate or complete. The methodologies of this assessment are not intended to produce all-inclusive or comprehensive results, but to provide the Town with information relating to the presence or likely presence of RECs in connection with the Subject Property.

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1.4 Limitations and Exceptions

The findings, opinions, and conclusions provided by Weston & Sampson are based solely on the information provided in this document. Future investigations and/or information that was not available to Weston & Sampson may result in a modification of the report findings. Should additional information become available, that information should be provided to Weston & Sampson for review so that the report conclusions may be modified if necessary. The report conclusions are based on conditions observed at the Subject Property at the time of the investigation, information provided by the Town, information provided by Environmental Data Resources, Inc. (EDR), and information provided by federal, state, and local agencies.

This report has been prepared in accordance with the ASTM Standard Practice and generally accepted engineering and geological practices. No other warranty, express or implied, is made. This assessment did not include a review or audit of operational environmental compliance issues, or of any environmental management systems (EMS) that may exist at the Subject Property.

Section 4.6.2 of ASTM E1527-21 identifies five (5) components of a Phase I ESA that must be conducted or updated within 180 days prior to the date of acquisition, or the transaction, to maintain continued viability of the Report. The five (5) components and the dates on which they were conducted for this Phase I ESA are:

1) Interviews with owners, operators, and occupants — August 2025
2) Searches for recorded environmental cleanup liens - User responsibility
3) Reviews of federal, tribal, state, and local government records - July 31, 2025
4) Visual inspections of the Subject Property and adjoining properties -July 21, 2025
5) The declaration of the environmental professional responsible for the assessment or update - September 23, 2025

1.5 Deviations

Except for the limitations and exceptions discussed in Section 1.4, this Phase I ESA complies with the ASTM Standard Practice. Weston & Sampson did not deviate from the scope outlined in Section 1.2.

1.6 Special Terms and Conditions

Authorization was given by the Town in August 2025. Instructions as to the location of the Subject Property, access, and an explanation of the Subject Property and facilities to be assessed were provided by the Town.

1.7 Reliance

This report may be distributed and relied upon only by the Town. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of Weston & Sampson and the Town.

2.0 SUBJECT PROPERTY DESCRIPTION

2.1 Location and Legal Description

The Subject Property is located at 99 Turner Road, in Wellesley, Massachusetts, and is identified by parcel identification number: 184-1-99. Refer to the Norfolk County Registry of Deeds Book 1926 and Page 173 for a legal description of the Subject Property. The approximate center of the Subject Property is located at:

- Latitude: 42.298038 North
- Longitude: -71.309150 West

2.2 Subject Property and Vicinity Description

The Subject Property is developed with a one (1)-story approximately 2,572 square foot (sf) building (Bathhouse), two (2) pavilions (Pavillion No. 1 and Pavillion No. 2), playgrounds, beach volleyball pit, town beach, and surrounding recreational areas including a section of a walking path (Morses Pond Trail). The Subject Property is used for recreation. Topography is generally level. Groundcover consists primarily of sand (beach), landscaped areas, and woods. The Subject Property is accessed from the east via Morses Pond Access Road, which is the western end of Turner Road past its intersection with Halsey Road.

The surrounding area is primarily recreational and residential with a Massachusetts Bay Transporation Authority (MBTA) commuter rail line to the south followed by Central Street and Wellesley College.

2.3 Current Use of the Subject Property

The Subject Property is zoned SR15-Single Residence and is currently a recreational area utilized as a town beach (Morses Pond Beach) overseen jointly by the Wellesley Natural Resource Commission (NRC) and Wellesley Recreational Commission. The beach is open seasonally between mid-June and August and is operated by the Wellesley Recreational Commission. Recreational activities at the Subject Property during the summer season, include swimming, boating, and other activities associated with the beach (grilling, pavilion rentals, volleyball, playground, etc.). In addition, freshwater vegetation is removed from the adjoining Morses Pond using a conveyor system that stores the removed vegetation in a container located near the beach. A portion of a walking trail (Morses Pond Trail) that connects conservation areas surrounding Morses Pond also traverses the Subject Property.

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2.4 Description of Structures and Other Improvements

The Subject Property has served as a Wellesley Town Beach since approximately 1935 and includes the approximately 4.5-acre Ice House Pond on the eastern part of the Subject Property, the main beach area on the west side of Ice House Pond extending westward to Morses Pond, and an approximately 25 to 50 ft. wide strip of land supporting an asphalt-paved walking path between the north side of Ice House Pond and Morses Pond. A portion of this path is supported by a pedestrian bridge where Ice House Pond and Morses Pond are connected by a small waterway.

The Subject Property building (Bathhouse) was constructed in the 1930s with several renovations and additions occurring between the 1930s and present. It is approximately 2,572 sf with a slab-on-grade foundation, wood framing, and shingled roofing. Interior spaces include bathrooms, guardroom, storage, and mechanical areas while the exterior uses include a covered porch and lifeguard break area. A swimming area is located along the western border with Morses Pond, a playground structure and boat ramp south of the swimming area, two approximately 27 ft. by 23 ft. canopy shade structures (Pavillion No. 1 and Pavillion No. 2) east of the swimming area and several benches and asphalt-paved walking paths. A swim dock is present within the swimming area and a similar boat dock is present to the north of the existing Bathhouse. Handicapped and maintenance vehicle access is via an asphalt-paved access drive along the south side of Ice House Pond. A temporary storage container is located on the Subject Property to store beach equipment.

The Town supplies municipal drinking water. Sanitary wastewater is discharged to the municipal sanitary sewer system. Electricity is provided by the Wellesley Municipal Light Plant (WMLP). Natural gas is provided by National Grid.

2.5 Adjoining Property Information

Weston & Sampson identified the following information regarding adjoining properties:

Adjoining Properties			
Compass Direction	**Occupant**	**Apparent Use**	**Comments**
North	Morses Pond	Recreational	Residential properties are located around Morses Pond, which is approximately 100 acres in size. The pond provides recreational activities to the Town such as swimming, boating, and fishing.
East	Conservation Land	Woods	Conservation areas are located to the east and include the Morses Pond Trail that connects to the Crosstown Trail. A parking lot and maintenance building is also located east of the Subject Property.The Town of Wellesley Morses Pond Pump Station and Water Treatment Facility is present to the northeast of the site and is encompassed by a drinking water protection area.
South	MBTA/Educational	Mixed Use	The Fitchburg/Worcester MBTA commuter rail line is immediately south of the Subject Property followed by Central Street and Wellesley College.
West	Morses Pond	Recreational	Residential properties (Bacon Street and College Road) are located across Morses Pond.

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3.0 SITE RECONNAISSANCE

Jill Ready, PG, of Weston & Sampson, conducted the Site Reconnaissance on August 21, 2025, and was accompanied by Glenn Remick, Town Facilities Manager with the Town of Wellesley.

3.1 Methodology and Limiting Conditions

Weston & Sampson conducted the Site Reconnaissance in accordance with Section 9 of the Standard Practice. The Site Reconnaissance consisted of observing the Subject Property boundaries from adjacent thoroughfares and/or accessible properties and systematically traversing the Subject Property to provide an overlapping field of view, wherever possible.

Weston & Sampson observed the peripheries and interior of structures. Photographs of taken during the Site Reconnaissance are provided in Appendix B. No limiting conditions were encountered during the Site Reconnaissance.

3.2 General Setting

The Subject Property is approximately five (5)-acres and is utilized as the Town's public beach. It is developed with an approximately 2,572 sf building used as the bathhouse, two (2) pavilions (Pavillion No. 1 and Pavillion No. 2), playgrounds, beach volleyball pit, town beach, storage container, dumpster, and surrounding recreational areas including a section of a walking path (Morses Pond Trail). The Subject Property is utilized for recreation. Topography is generally level. Groundcover consists primarily of sand (beach), landscaped areas, and woods. The Subject Property is accessed from the east via Morses Pond Access Road, which is the western end of Turner Road past its intersection with Halsey Road.

The surrounding area is primarily recreational and residential with a Massachusetts Bay Transporation Authority (MBTA) commuter rail line to the south followed by Central Street and Wellesley College.

3.3 Site Reconnaissance Findings

During the site reconnaissance, which was conducted on August 21, 2025, the weather was partly cloudy with temperatures in the mid 60s (Fahrenheit), a slight breeze, and no precipitation. The following table contains a summary of the site reconnaissance findings: The following table contains a summary of the Site Reconnaissance findings.

Site Reconnaissance Findings Summary		
Condition / Feature	**Observed**	**Comments**
Hazardous Substances	Yes	Approximately twenty containers of routine cleaning and maintenance supplies ranging in size from one (1) quart to two (2)-gallons and containing de minimis quantities of hazardous substances and/or petroleum products were observed.
Petroleum Products	Yes	Approximately twenty containers of routine cleaning and maintenance supplies ranging in size from one (1) quart to two (2)-gallons and containing de minimis quantities of hazardous substances and/or petroleum products were observed.
Underground Storage Tanks (USTs)	No	
Aboveground Storage Tanks (ASTs)	No	
Drums	No	
Other Suspect Containers	Yes	Approximately twenty containers of routine cleaning and maintenance supplies ranging in size from one (1) quart to two (2)-gallons and containing de minimis quantities of hazardous substances and/or petroleum products were observed.

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Condition / Feature	Observed	Comments
Odors	No	
Equipment Likely to Contain Polychlorinated Biphenyls (PCBs)	Yes	Fluorescent lightening with ballasts was observed within the interior of the bathhouse. No indication of broken tubes or ballasts were noted.
Interior Staining and Corrosion	No	
Heating and Cooling Equipment	No	
Drains and Sumps	Yes	Floor drains were observed within the bathhouse and are reportedly connected to municipal sewer.
Pits, Ponds, and Lagoons	Yes	Ice House Pond is located on the eastern portion of the Subject Property and Morses Pond adjoins the Subject Property. No indication of hazardous substances and/or petroleum products (ex. chemical or petroleum-type odors, sheen, or other visual observations) were observed on the surface of the ponds.
Pools of Liquid	No	
Solid Waste Dumping and Landfills	No	
Stained Soil and Stressed Vegetation	No	
Wells	Yes	At least nine (9) groundwater monitoring wells were observed within the sloped bank near the southwestern corner of the Subject Property. These MWs are discussed further in Section 5.5.
Wastewater and Septic Systems	Yes	Lids to subsurface utilities were noted near the bathhouse and are indicative of municipal storm or sewer access points.

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4.0 USER-PROVIDED INFORMATION

The information requested in the User Questionnaire is intended to assist the User in meeting their obligations under the ASTM Standard Practice and to assist the Environmental Professional in gathering evidence to identify RECs. The Town was identified as the User of the report and Brandon Schmitt, Director of the Wellesley NRC, provided the User responses. A copy of the User Questionnaire is provided in Appendix C. The following subsections summarize User responses.

4.1 Owner, Property Manager, and Occupant Information

The Wellesley NRC, with offices at 888 Worcester Street in Wellesley, Massachusetts owns and co-operates the Subject Property along with the Town Recreation Department. Glenn Remick, Town Facilities Manager, is the Key Site Manager and has been associated with the Subject Property for the past approximately ten years. Glenn Remick conducted the tour of the Subject Property, along with Weston & Sampson, on August 21, 2025. As previously noted, the Subject Property is occupied by the Town beach, which is operated seasonally between approximately mid June and August each summer season. A portion of a recreational walking path is also located on the Subject Property.

4.2 Environmental Liens

Glenn Remick reported no environmental cleanup liens filed against the Subject Property.

4.3 Activity and Use Limitations

Glenn Remick reported no Activity and Use Limitations (AUL) for the Subject Property.

4.4 Specialized Knowledge

Glenn Remick reported the following specialized knowledge as it relates to the current and/or former use of the Subject Property:

- The Subject Property has been utilized as a Town beach for decades.
- Glenn Remick oversees Town facilities.

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4.5 Commonly Known or Reasonably Ascertainable Information

Glenn Remick reported no commonly known or reasonably ascertainable information about the Subject Property that would be indicative of releases or threatened releases.

4.6 Valuation Reduction for Environmental Issues

Glenn Remick reported that this Phase I ESA is being performed for reasons other than a property transfer. As such, there is no purchase price to which to compare the value of the Subject Property.

4.7 Degree of Obviousness of Contamination

Glenn Remick reported no obvious indicators that point to the presence or likely presence of contamination at the Subject Property.

4.8 Reason For Performing Phase I ESA

Glenn Remick indicated that the Phase I ESA is being conducted in conjunction with the proposed Morse Pond Town beach renovation project.

4.9 User-Provided Documents

Glenn Remick did not provide any additional documents for review pertinent to the identification of RECs at the Subject Property.

5.0 RECORDS REVIEW

Performance of a Phase I ESA in accordance with the ASTM Standard Practice requires the review of practically reviewable publicly available records to define the regulatory history, physical setting, and history of use of the Subject Property, adjoining properties, and pertinent surrounding properties. The regulatory review is performed to understand the nature of any releases that have occurred within approximate minimum search distances of the Subject Property that have the potential to impact environmental media (i.e. soil, groundwater, and vadose zone) at the Subject Property. Physical setting information is reviewed to evaluate the general soil conditions and the presence and movement of groundwater. Historical information sources are evaluated to develop the historical Subject Property uses, to the extent feasible, back to the first development Site or 1940, whichever is earlier. These reviews help identify the likelihood that past releases and/or uses have led to RECs.

Weston & Sampson used a third-party data provider, Environmental Data Resources (EDR) of Shelton, Connecticut, to develop this information and meet the requirements of the ASTM Standard Practice. All data sources are defined in the following sections of this report and are referenced in Appendices E, F, G, H, and I.

Weston & Sampson may have reviewed other records. Any additional records that are reviewed are cited in the appropriate section of the report and in Section 12.0.

5.1 Physical Setting Records Review

In accordance with the ASTM Standard Practice, physical setting sources were reviewed to understand the nature of the topography, geology (soil and bedrock), and hydrogeology of the Subject Property. In addition, observations made during the Subject Property reconnaissance, test pit activities associated with a geotechnical investigation, and information provided by EDR were consulted. In general, Weston & Sampson reviewed available topographic, soil, and geologic maps, as well as Massachusetts Office of Geographic Information (MassGIS) records, and online environmental reports on the MassDEP Searchable Sites website.

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5.1.1 Topography

Topography of the Subject Property is generally level with a gradual slope toward the west-northwest. Figure 1 depicts the Subject Property and surrounding topography based on the United States Geological Survey (USGS) Quadrangle 7.5-minute series topographic map. According to Weston & Sampson's Preliminary Geotechnical Report dated November 2021, water surface elevations in Morses and Ice House Ponds are generally between about elevation (El) 120 to El 121. The ground surface between these two ponds rises to approximately El 133 near the south shade structure and grass-covered area. The site is generally gently sloping downwards towards Morses Pond to the west with slopes up to the swimming area. To the east side of the beach area, the site generally slopes down to Ice House Pond. Grades increase steeply along the southern edge of Ice House Pond and between the access drive and MBTA ROW. Elevations described herein are in feet (ft) and reference the North American Vertical Datum of 1988 (NAVD88).

5.1.2 Geology

Overburden soil and bedrock geology sources included observation during the Subject Property reconnaissance, the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) information provided by EDR, and Surficial Materials Map of the Natick Quadrangle, Massachusetts compiled by Janet R. Stone and Byron D. Stone.

5.1.2.1 Soil

According to information provided within Weston & Sampson's Preliminary Geotechnical Report (dated 2021), subsurface conditions encountered below surficial topsoil generally consisted of native sand, silty sand or undocumented fill over variable sand and gravel.

5.1.2.2 Bedrock

According to the Massachusetts Office of Geographic Information (MassGIS) OLIVER system, bedrock at the Subject Property is mapped as granite at depths between approximately 50 and 100 ft. The nearest bedrock outcrops to the Subject Property are mapped approximately ½-mile to the northeast. No bedrock outcrops were observed during our site reconnaissance.

5.1.3 Hydrogeology

The direction of local groundwater flow was inferred from a review of local surface topography. Weston & Sampson reviewed topographic maps to identify the nearest surface water bodies and Weston & Sampson's 2001 Preliminary Geotechnical Report records for reports and MassDEP records for groundwater elevations and groundwater flow direction.

5.1.3.1 Groundwater

Depth to groundwater ranged between approximately 4 to 12.5 ft below ground surface during Weston & Sampson's 2001 geotechnical investigation. Groundwater levels likely fluctuate with water levels of Morses Pond and Ice House Pond and with season, variations in precipitation, construction in the area, and other factors. Perched groundwater conditions could exist close to the ground surface, especially during and after extended periods of wet weather.

5.1.3.2 Surface Water

The nearest surface water is the Morses Pond to the north and west of the Subject Property and Ice House Pond, which is located in the eastern portion of the Subject Property.

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5.2 Historical Records Review

For this Phase I ESA, historical property information was compiled and analyzed to develop a history of the previous uses of the Subject Property, adjoining properties and surrounding area to help identify the likelihood of past uses having led to a REC for the subject property. EDR provided the following historical sources: Sanborn fire insurance maps, aerial photographs, topographic maps, and city directories.

5.2.1 Sanborn Fire Insurance Maps

Sanborn fire insurance maps were reviewed and are summarized in the table below. Fire insurance maps are included in Appendix E.

Sanborn Fire Insurance Maps Summary			
Year	**Subject Property Comments**	**Adjoining Properties Comments**	**Surrounding Area Comments**
1927	The eastern portion of the Subject Property is occupied by the Boston Ice Company and utilized as an ice house. Operations include an ice run that extends from the east side of the Ice Pond portion of Morses Pond to an ice house that is located on a portion of this part of the Subject Property. Three small sheds are located on the Subject Property near the ice run. One is depicted as a tool shed and one appears to be desginated "electric meter". Two railroad spurs extend arcoss oa portion of the northern part of the	The area east of the Subjec Property consists of the remaining operational portions of the Boston Ice Company. B & R Railroad adjoins to the south followed by Central Street.	Coverage not identified.

Year	Subject Property Comments	Adjoining Properties Comments	Surrounding Area Comments
	eastern portion of the Subject Property.		
1949, 1962	Morses Pond is depicted on the eastern portion of the Subject Property. Two railroad spurs extend across a portion of the northern part of the eastern portion of the Subject Property.	A Wellesley Pumping Station is depicted near the northeastern boundary of the Subject Property. An small building is located east of the Subject Property. B & R Railroad adjoins to the south followed by Central Street.	Coverage not identified.

5.2.2 Topographic Maps

Topographic maps were reviewed and are summarized in the table below. Topographic maps are included in Appendix F.

Topographic Maps Summary				
Year	**Quad**	**Subject Property Comments**	**Adjoining Properties Comments**	**Surrounding Area Comments**
1894, 1915	Framingham	The Subject Property is depicted as undeveloped. Ice House Pond is not depicted.	Morses Pond to the north and west, undeveloped land to the east, and railroad tracks to the south.	
1918	Framingham	The Subject Property is depicted as undeveloped. Ice House Pond is not depicted. A portion of a building is located near the southeastern corner of the Subject Property and may be Lake Crossing Station, which is depicted near the building.	Morses Pond to the north and west, undeveloped land to the east, and railroad tracks to the south.	
1943, 1950, 1958, 1970	Natick	Ice House Pond is located in the eastern portion of the Subject Property. A small structure is depicted in the northwestern corner of the Subject Property. The remaining portions of the Subject Property appear undeveloped.	Morses Pond Access Road is depicted to the east and railroad tracks followed by Central Street and Wellesley College to the south, and Morses Pond to the north and west of the Subject Property.	Residential dwellings are constructed throughout the surrounding area. In 1970, Paint Shop Pond is located south of the Subject Property across the railroad tracks and Central Street.
1987	Framingham	The Subject Property consists of Ice House Pond in the eastern portion and a town beach along Morses Pond in the northern and western portions. A small building is also locteded in the northern portion. Access drives are located in the northern and southern portions of the Subject Property and enter from the east via Turner Road.	Morses Pond to the north and west, undeveloped land with a small building to the east, and railroad tracks followed by Central Street to the south.	Paint Shop Pond is located south of the Subject Property across the railroad tracks and Central Street.

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Year	Quad	Subject Property Comments	Adjoining Properties Comments	Surrounding Area Comments
2012, 2015, 2018, 2021	Natick	The Subject Property consists of Ice House Pond in the eastern portion and vacant land in the remaining portions. Walking paths are depicted in 2018 and 2021.	Morses Pond to the north and west, undeveloped land with a small building and access road to the east, and railroad tracks followed by Central Street to the south.	

5.2.3 Aerial Photos

Aerial photographs were reviewed and are summarized in the table below. Aerial photographs are included in **Appendix G.**

Aerial Photos Summary			
Year	Subject Property Comments	Adjoining Properties Comments	Surrounding Area Comments
1938	The Subject Property consists of a building in the northwestern portion, Ice House Pond in the eastern, and undeveloped areas to the south, west and southwest. Small buildings are also located along the eastern boundary.	Morses Pond to the north and west, cleared land with access roads and a small building to the east, and railroad tracks followed by Central Street to the south.	
1955, 1957, 1960, 1969	The Subject Property consists of a building in the northwestern portion with a beach (sandy area), Ice House Pond in the eastern, and undeveloped areas to the south, west and southwest.	Morses Pond to the north and west, cleared land with access roads and a small building to the east, and railroad tracks followed by Central Street to the south.	
1978, 1980, 1985, 1995	The Subject Property consists of a building in the northwestern portion with a beach (sandy area) that exends across the western boundary from north to south that includes two structures (covered pavillions), Ice House Pond in the eastern, and undeveloped areas to the south.	Morses Pond to the north and west, cleared land with access roads and a small building to the east, and railroad tracks followed by Central Street to the south.	
2006, 2010, 2014, 1018, 2023	The Subject Property consists of a building in the northwestern portion with a beach (sandy area) that exends across the western boundary from north to south that includes two structures (covered pavillions) and a dock jetting from the beach into Morses Pond, Ice House Pond in the eastern, and undeveloped areas to the south.	Morses Pond to the north and west, cleared land with access roads and a larg building to the east, and railroad tracks followed by Central Street to the south.	

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5.2.4 City Directories

City directories were reviewed for the following years 1970, 1975, 1984, 1989, 1992, 1995, 2000, 2005, 2010, 2014, and 2022. The Subject Property address (99 Turner Road) was not listed. Nearby properties were noted as residential. City directories are included in Appendix H**.**

5.2.5 Other Land Use Records

Additional land use records were obtained from the Wellesley Historical Society's website (www.wellesleyhistoricalsociety.org) and Weston & Sampson's Morses Pond Beach & Bathhouse Feasibility Study dated May 7, 2024. Copies are provided in Appendix K. According to information provided, "Morses Pond was used as a location of ice harvesting in the winter. The pond was owned by the Russell Ice Company in 1888, and then by the Boston Ice Company in 1902. Icehouse workers carved blocks of ice out of the pond and loaded them onto a large conveyor belt which brought them to the warehouse atop the pond's bank. Ice was stored in the warehouse through the summer, and it was loaded nightly onto rail cars as needed. The Boston Ice Company remained a profitable business for about 20 years, and at its peak in 1923, the ice house was assessed by the town at over $250,000; however, with the advent of refrigeration and the impending Depression, the Boston Ice Company quickly declined in value and eventually closed. In 1931, the land was bought by the Town for $3,000, and the initiative to convert it to a public beach began. Additional information obtained from the historical society and feasibility study has been incorporated into its respective section(s) of this report.

5.2.6 Historical Records Review Summary

The following historical use summary has been compiled from a review of Sanborn Fire Insurance Maps, aerial photographs, topographic maps, city directories, and other historical records referenced in this section.

The Subject Property was owned by the Russell Ice Company in 1888, and then by the Boston Ice Company in 1902. Between 1888 and 1930, an icehouse operated on the Subject Property and included Ice House Pond, which was created in the eastern portion of the Subject Property off of Morse Pond, a large ice warehouse, a covered ice run extending from Ice House Pond to the warehouse, and smaller buildings including a tool shed. Two railroad spurs were located in the northern part of the eastern portion of the Subject Property. Ice was harvested from Ice House pond in the winter buy carving out blocks of ice, placing them on a covered conveyor belt (ice run), and storing the ice in the warehouse. Ice was transported using the railroad spurs. The Town redeveloped the Subject Property for use as a public beach with a Bathhouse and beach in the early 1930s with access from the east. The western and southern portions consisted of undeveloped wooded land prior to approximately the 1960s when the Town beach was expanded to incorporate the western portion of the Subject Property. Additional Town beach structures were added between the 1960s and 1978 and included two covered pavillions, playground equipment, and docks. Trails, which are associated with a larger network of paths, cross the Subject Property.

The Subject Property area has primarily consisted of Morses Pond to the north and west since at least the late 1800s, a portion of the ice house operations from the late 1800s through early 1930s followed by the Town pump house and recreational/conservations areas to the east, wooded land followed by railroad tracks and Central Street to the south since at least the late 1800s.

5.3 Standard Environmental Records Review

A review of standard regulatory databases maintained by federal, state, and tribal offices was completed through EDR. The databases were searched for properties with reported environmental conditions located within approximate minimum search distances as specified by the ASTM Standard Practice. As a part of this regulatory review, other non-ASTM standard database listings reported by EDR may have also been evaluated. In these cases, this section includes a supplemental discussion of any findings and our opinion as it relates to the identification of RECs. The detailed EDR Radius report, including the mapping of results and limitations of the search criteria, is contained in Appendix I.

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The databases use geocoded information to identify the coordinates of the properties or to check the street addresses of practically reviewable non-geocoded orphan properties located within the same zip code. The EDR report defines acronyms that are not explicitly defined in this discussion, lists the names of all of the databases that were searched, the date information was last updated by EDR, and the date information was last updated by the original source.

Plotted locations of all database listings are not always accurate. For listings that are suspected to be inaccurate, Weston & Sampson uses the best available data when evaluating listing locations.

The table below summarizes the number of properties identified for each database. Available records for each of the identified listings were reviewed to assess the potential to impact the Subject Property. In general, releases with sources that are proximate to, and hydraulically upgradient of, the Subject Property have the greatest potential to impact it. Weston & Sampson reviewed the location of each listing to determine if it met these criteria. If one or more of the following conditions were met, the database listing may have been excluded from further consideration:

- Hydrogeologically isolated from the Subject Property (e.g., opposite bank of a river);
- At such distance that migration of contaminants to the Subject Property is unlikely (i.e. greater than 0.25-mile upgradient for hazardous substance sites and greater than 500 feet for petroleum sites); or
- Groundwater flow from the listed property is away from the Subject Property.

Those listings that were not excluded were evaluated in more detail to assess if they pose a threat. For these listings, summary tables are provided that include Weston & Sampson's opinion as to whether the Subject Property is likely to be impacted. References to MassDEP reports that were reviewed are included in Section 12.0.

The Subject Property was identified not identified within the Standard Environmental databases searched by EDR; however, the Subject Property was identified in the following databases searched by EDR: Resource Conservation and Recovery Act (RCRA) Non-Generator/NLR, Independent Commodity Intelligence Services (ICIS), Facility Index System/Facility Registry System (FINDS), and Enforcement and Compliance History (ECHO).

No other listings, including unmapped 'orphan' listings, were identified by Weston & Sampson as likely to have current or former releases with the potential to migrate to the Subject Property.

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Map Findings Summary								
Database	**Target Property**	**Search Distance (Miles)**	**Listings <1/8-mile**	**Listings 1/8-1/4-mile**	**Listings 1/4-1/2-mile**	**Listings 1/2-1-mile**	**Listings >1-mile**	**Total Listings**
NPL	0	1	0	0	0	0	NR	0
Proposed NPL	0	1	0	0	0	0	NR	0
NPL LIENS	0	1	0	0	0	0	NR	0
Delisted NPL	0	1	0	0	0	0	NR	0
FEDERAL FACILITY	0	0.5	0	0	0	NR	NR	0
SEMS	0	0.5	0	0	0	NR	NR	0
SEMS-ARCHIVE	0	0.5	1	0	0	NR	NR	1
CORRACTS	0	1	0	0	0	0	NR	0
RCRA-TSDF	0	0.5	0	0	0	NR	NR	0
RCRA-LQG	0	0.25	0	0	NR	NR	NR	0
RCRA-SQG	0	0.25	1	0	NR	NR	NR	1
RCRA-VSQG	0	0.25	0	0	NR	NR	NR	0
LUCIS	0	0.5	0	0	0	NR	NR	0
US ENG CONTROLS	0	0.5	0	0	0	NR	NR	0
US INST CONTROLS	0	0.5	0	0	0	NR	NR	0
ERNS	0	TP	NR	NR	NR	NR	NR	0
LUCIS	0	0.5	0	0	0	NR	NR	0

Database	Target Property	Search Distance (Miles)	Listings <1/8-mile	Listings 1/8-1/4-mile	Listings 1/4-1/2-mile	Listings 1/2-1-mile	Listings >1-mile	Total Listings
FEMA UST	0	0.25	0	0	NR	NR	NR	0
MA UST	0	0.25	0	0	NR	NR	NR	0
MA LUST	0	0.5	0	0	0	NR	NR	0
MA SHWS	0	1	2	2	3	52	NR	59
MA INST CONTROL	0	0.5	0	0	1	NR	NR	1
MA SWF/LF	0	0.5	0	0	0	NR	NR	0
MA BROWNFIELDS	0	0.5	0	0	0	NR	NR	0
MA LAST	0	0.5	0	0	2	NR	NR	2
MA AST	0	0.25	0	0	NR	NR	NR	0
INDIAN LUST	0	0.5	0	0	0	NR	NR	0
INDIAN UST	0	0.25	0	0	NR	NR	NR	0
INDIAN VCP	0	0.5	0	0	0	NR	NR	0

Subject Property

Site Name	Morses Pond Culvert Site
Databases	RCRA-NONGEN, ICIS, FINDS, and ECHO
Address	99 Turner Pond Road
Distance (ft.)	Subject Property and Adjoining Properties
Direction	Subject Property and Adjoining Properties
Elevation	Same
Comments	According to the information provided, Morses Pond Culvert Site, which was identified for the Subject Property address (99 Turner Road) was identified as a RCRA-NONGEN, ICIS, FINDS, and ECHO location is associated with MassDEP Release Tracking Number (RTN) 3-11653. According to information obtained from MassDEP, paint wastes containing heavy metals from the Henry Wood Son's Paint Factory (currently occupied by Wellesley College), which was historically located south of the Subject Property across the railroad tracks and Central Street, were likely placed around the culvert underneath the railroad tracks just southwest of the Subject Property in approximately the early 1900s. Paint chips were reportedly observed in subsurface soil during historical investigations. The release was assessed by MassDEP in the late 1990s, and a Time Critical Removal Action (TCRA) was performed by the US Environmental Protection Agency (EPA) in 2001 and 2002. Since the TCRA did not document the attainment of a Permanent Solution under the MCP, additional assessment activities were completed by APU (a successor of the Bostan & Albany Railroad and identified as a potentially responsible party by MassDEP) to determine what actions were necessary to document a Permanent or Temporary Solution per the MCP. A combined MCP Phase II Comprehensive Site Assessment Report and Phase III Remedial Action Plan was submitted to MassDEP in June 2011. This report detailed the findings of the Phase II field investigations and included a Method 1 Risk Characterization and Method 3, Stage 1 Environmental Screening. The Disposal Site Boundary (DSB) was separated into three (3) areas (Area 1, 2, and 3). Area 1 is located west of the Subject Property. It is the western portion of the DSB and includes a private residence located at 1 Bacon Street (west/southwest of the Subject Property). Area 2 is the Morses Pond Cove located at the southern outlet of Morse's Pond, where it discharges into Paintshop Pond (includes the southwestern corner of the Subject Property). Area 3 is the upland area around and downgradient of the cove (south/southwest of the Subject Property). Area 2, which includes portions of the Subject Property and adjoining area, was associated with a TCRA in 2001 that included the removal and disposal of approximately 1,953 tons of sediment containing elevated concentrations of chromium, lead, and nickel. Gravel was used as backfill to restore the cove bottom to its pre-excavation elevation. Post TCR sampling performed by Environmental Strategies & Management (ES&M) and described within the April 2014 Phase IV Final Inspection Report & Response Action

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Comments	Outcome (RAO) Report submitted to MassDEP, indicated that a level of No Significant Risk (NSR) existed for Area 2; therefore, a Class A-2 RAO-P (Permanant Solution) was achieved for Area 2, whihc includes the portion of the Disposal Site associated with the Subject Property. As noted in Section 3.3, groundwater monitoring wells associated with this release and subsequent investigations, were observed in the south/southwestern corner of the Subject Property. During supplemental geotechnical test pit activities performed on the Subject Property by Weston & Sampson in August 2025, no visual or olfactory indications (ex. sheen, petroleum/chemical odors, stained or discolored soil, paint chips) of petroleum products and/or hazardous substances were observed. Areas 1 and 3, which are not located on or near the Subject Property boundaries, currently have a Temporary Solution regulatory status. A soil excavation program was completed for Area 1 in 2013. As documented in the associated RAO report, metals-impacted soil was removed from Area 1 to address two hot spots identified. Although the soil removal program was successful at achieving MCP Method 1 Residential Standards in soil, concentrations of metals in groundwater remain above applicable MCP Method 1, GW-1 Standards. For this reason, Area 1 of the DSB has achieved a Temporary Solution rather than a Permanent Solution. For Area 3, a Phase IV Remedy Implementation Plan (RIP) Addendum was submitted to MassDEP on December 27, 2013, to describe a limited in-situ chemical reduction program to treat source material and impacted groundwater in Area 3. The program included injection of aqueous calcium polysulfide into impacted soils in the culvert area in May 2015. Since 2015, PTS Status Reports have been submitted every six months to MassDEP to describe monitoring data collected with the most recent submittal dated February 2025. A Periodic Review of the Temporary Solution was submitted to MassDEP in May 2024. In order to achieve a Permanent Solution for Area 3, concentrations of chromium in soil need to be reduced to below Method 3 Ceiling Limits and reduce chromium concentrations in groundwater to meet GW-1 Standards. Due to physical constraints, such as the presence of the railroad tracks and the steep slope near the Morses Pond Culvert, the residual paint wastes are not accessible. The outcome of the Periodic Review was that no technology or combination of technologies is capable of attaining a Permanent Solution, and that Temporary Solution Status remains appropriate for Areas 1 and 3. Therefore, both Areas 1 and 3 remain in a Temporary Solution regulatory status.

5.4 Local Records

Freedom of Information Act (FOIA) requests were facilitated by Brandon Schmitt, of the Wellesley NRC and included records obtained from the Town Assessor, Building Department, Fire Department, and Health Department. In addition, publicly available information was obtained from the Town website regarding the Morses Pond Feasibility & Design Study (www.wellesleyma.gov/1377/Morses-Pond-Bathhouse-Beach-Project). Pertinent information obtained is discussed throughout its respective section of this report (**Sections 5**).

5.4.1 Tax Assessor

FOIA requests were facilitated by Brandon Schmitt, of the Wellesley NRC, and included records obtained from the Town Assessor and were obtained online from the Town's Assessing Department website. The current use of the Subject Property was identified as Morses Pond (public beach). Copies of any records obtained are included in Appendix J.

5.4.2 Fire Department

FOIA requests were facilitated by Brandon Schmitt, of the Wellesley NRC, and included records obtained from the Fire Department. No records of potential environmental concern were obtained.

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5.4.3 Health Services Department

FOIA requests were facilitated by Brandon Schmitt, of the Wellesley NRC, and included records obtained from the Health Department. No records of potential environmental concern were obtained.

5.4.4 Inspectional Services Department

FOIA requests were facilitated by Brandon Schmitt, of the Wellesley NRC, and included records obtained from the Building Department. No records of potential environmental concern were obtained.

5.4.5 Electric Utility

Weston & Sampson did not attempt to contact the WMLP because no electric transformers were observed at the Subject Property.

5.5 Other Environmental Records

Weston & Sampson may consult other environmental records, if necessary, to develop the regulatory history of the Subject Property and surrounding area. In some cases, other records are reviewed to understand the specific nature of certain database listings. For this Phase I ESA, Weston & Sampson reviewed no other environmental records.

6.0 INTERVIEWS

To the extent practicable, Weston & Sampson interviews individuals with knowledge of current and past operations at the Subject Property. For this Phase I ESA, Weston & Sampson conducted an interview with Glen Remick, who is also the Key Site Manager and employed by the User (the Town). Brandon Schmitt, Director of the Wellesley NRC, completed both the User and Owner Questionnaires. Interviews were performed either in person, via phone/virtual, or via a written questionnaire. Questions were focused on information that would lead to the identification of RECs in connection with the Subject Property. Pertinent information garnered during the interviews is summarized in the following subsections.

6.1 Current Owner

Glenn Remick was interviewed regarding the current and former use of the Subject Property. No findings pertinent to the identification of RECs were reported.

6.2 Key Site Manager

Glenn Remick, Town Facilities Manager, was identified as the Key Site Manager and was interviewed regarding the current and former uses of the Subject Property. No findings pertinent to the identification of RECs were reported.

6.3 Current Occupants

The Town currently occupies the Subject Property. Pertinent interview responses are summarized in Section 6.1.

6.4 Current Operators

The Town currently operates the Subject Property via a collaboration between the Natural Resources Commission (NRC) and Recreation Department. Pertinent interview responses are summarized in Section 6.1.

6.5 Past Owners

Past owners were not interviewed during this Phase I ESA because they were not identified by the current Owner.

6.6 Local Government Officials

Weston & Sampson interviewed Glenn Remick, a Town employee. Freedom of Information Action (FOIA) requests were facilitated by Brandon Schmitt of the NRC. The intent of these file reviews is to procure information that might aid in the identification of RECs that might exist on the Site. Pertinent information garnered from the local file reviews is summarized in Section 5.4.

6.7 Other Individuals

Other individuals were not interviewed during this Phase I ESA because they were deemed not likely to have a direct working knowledge of past operations at the Subject Property.

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7.0 OTHER ENVIRONMENTAL CONSIDERATIONS

This section is reserved for a discussion of asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls (PCBs) in building materials. The project scope did not include the identification of these building materials.

8.0 DATA GAPS

A data gap is a lack of, or inability to obtain, required information despite good faith efforts by the Environmental Professional. Significant data gaps are data gaps that affect the ability of the Environmental Professional to identify recognized environmental conditions. No data gaps were identified.

9.0 FINDINGS AND OPINIONS

A summary of relevant environmental findings, along with Weston & Sampson's professional opinions, are provided below:

- Between 1888 and 1930, an icehouse operated on the Subject Property and included Ice House Pond, which was created in the eastern portion of the Subject Property off of Morse Pond, a large ice warehouse, a covered ice run extending from Ice House Pond to the warehouse, and smaller buildings including a tool shed. Two railroad spurs were located in the northern part of the eastern portion of the Subject Property. Ice was harvested from Ice House pond in the winter buy carving out blocks of ice, placing them on a conveyor belt (ice run), and storing the ice in the warehouse. Ice was transported using the railroad spurs. The Subject Property has been occupied by the Town beach since the Town redeveloped it in the early 1930s and includes the approximately 4.5-acre Ice House Pond on the eastern part of the Subject Property, the main beach area on the west side of Ice House Pond extending westward to Morses Pond, and a strip of land supporting an asphalt-paved walking path between the north side of Ice House Pond and Morses Pond. A portion of this path is supported by a pedestrian bridge where Ice House Pond and Morses Pond are connected by a small waterway. The paths connect to a network of trails located east and northeast.

- The Subject Property area has primarily consisted of Morses Pond to the north and west since at least the late 1800s, a portion of the ice house operations from the late 1800s through early 1930s followed by the Town pump house and recreational/conservations areas to the east, wooded land followed by railroad tracks and Central Street to the south since at least the late 1800s. Further south historically included a paint company, which is now land occupied by Wellesley College.

- The Subject Property building (Bathhouse) was constructed in the 1930s with several renovations and additions occurring between the 1930s and present. It is approximately 2,572 sf with a slab-on-grade foundation, wood framing, and shingled roofing. Interior spaces include bathrooms, guardroom, storage, and mechanical areas while the exterior uses include a covered porch and lifeguard break area. A swimming area is located along the western border with Morses Pond, a playground structure and boat ramp south of the swimming area, two approximately 27 ft. by 23 ft. canopy shade structures (Pavillion No. 1 and Pavillion No. 2) east of the swimming area and several benches and asphalt-paved walking paths. A swim dock is present within the swimming area and a similar boat dock is present to the north of the existing Bathhouse. Handicapped and maintenance vehicle access is via an asphalt-paved access drive along the south side of Ice House Pond. A temporary storage container is located on the Subject Property to store beach equipment, and a container and conveyor system is near the beach that are used to remove freshwater vegetation from the beach area.

- Morses Pond Culvert Site, which was identified for the Subject Property address (99 Turner Road) was identified as associated with MassDEP RTN 3-11653. Paint wastes containing heavy metals, from the Henry Wood Son's Paint Factory, were likely placed around the culvert underneath the railroad tracks just southwest of the Subject Property in the early 1900s. Paint chips were reportedly observed in subsurface soil during historical investigations. The release was assessed by MassDEP in the late 1990s, and a TCRA was performed by EPA in 2001 and 2002. Since the TCRA did not document the attainment of a Permanent Solution under the MCP, additional assessment activities were completed by APU (a successor of the Boston & Albany Railroad and identified as a potentially responsible party by MassDEP) to determine what actions were necessary to document a Permanent or Temporary Solution per the MCP. The DSB was separated into three (3) areas (Area 1, 2, and 3). Area 1 is located west of the Subject Property. It is the western portion of the DSB and includes a private residence located at 1 Bacon Street (west/southwest of the Subject Property). Area 2 is the Morses Pond Cove located at the southern outlet of Morse's Pond, where it discharges into Paintshop Pond (includes the southwestern corner of the Subject Property). Area 3 is the upland area around and downgradient of the cove (south/southwest of the Subject Property).

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- Area 2, which includes portions of the Subject Property and adjoining area, was associated with a TCRA in 2001 that included the removal and disposal of approximately 1,953 tons of sediment containing elevated concentrations of chromium, lead, and nickel. Post TCR sampling performed by ES&M and described within an April 2014 Phase IV Final Inspection RAO Report submitted to MassDEP, indicated that a level of NSR existed for Area 2 based on Method 1 Risk Characterization and Method 3, westonandsampson.com 1 PHASE I ESA Stage 1 Environmental Screening. Therefore, a Class A-2 RAO-P (Permanant Solution) was achieved for the DSB associated with the Subject Property. A Class A-2 RAO is the historical MCP assignment used for a release where remediation work was completed, but contamination may remain above background but below Method 1 cleanup standard or otherwise at NSR. The documented presence of hazardous substances (metals) in, on, or at the Subject Property due to the release to the environment associated with RTN 3-11653, which achieved regulatory closure with unrestricted use, is considered a Historical Recognized Environmental Condition (HREC).

- Areas 1 and 3, which are not located on or near the Subject Property boundaries, currently have a Temporary Solution regulatory status. Based on the information obtained and reviewed during the completion of this Phase I ESA, the portion of the DSB located adjacent to the Subject Property for RTN 3-11653 (Areas 1 and 3), is not considered a REC.

10.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Standard Practice of Morses Pond located at 99 Turner Road in Wellesley, Massachusetts. Any exceptions to, deletions from, this practice are described in Section 1.0. The assessment has revealed no evidence of recognized environmental conditions in connection with the Subject Property.

Weston & Sampson identified the following HREC as part of this Phase I ESA:

- The documented presence of hazardous substances (metals) in, on, or at the Subject Property due to the release to the environment associated with RTN 3-11653, which achieved regulatory closure with unrestricted use, is considered a HREC.

No Significant Data Gaps were identified as part of this Phase I ESA.

Additional Investigation

It is Weston & Sampson's opinion that additional investigation is not appropriate to further evaluate the HREC identified in this Phase I ESA; however, if construction is proposed in the southwestern portion of the Subject Property where residual impacts are still present, soil sampling and analysis is recommended to inform construction costs and implications associated with managing impacted soil.

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11.0 SIGNATURES OF THE ENVIRONMENTAL PROFESSIONAL

This ESA was overseen by [a] Qualified Environmental Professional[s] as defined in the ASTM Standard Practice, CERCLA, and the EPA AAI Final Rule. Qualifications for the Environmental Professional[s] are included in Appendix L.

Environmental Professional Statement
[I/We] declare that, to the best of [my/our] professional knowledge and belief, [I/We] meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR § 312. [I/We] have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. [I/We] have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR § 312.

Authored by: This report has not been signed.

Reviewed by: This report has not been signed.

12.0 REFERENCES

ASTM E1527-21, 2021, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, published by ASTM, West Conshohocken, PA.

Environmental Data Resources, Inc., The EDR Radius Map Report with GeoCheck, Historical Topographic Map Report, Aerial Photo Decade Package Report, City Directory Image Report, and Historical Fire Insurance Maps, Inquiry Number 8094784.2s, dated July 31, 2025.

Weston & Sampson's Preliminary Geotechnical Report dated November 2021 and Supplemental Geotechnical Addendum Letter Reported dated September 2025.

Surficial Materials Map of the Natick Quadrangle, Massachusetts compiled by Janet R. Stone and Byron D. Stone.

Massachusetts Office of Geographic Information (MassGIS) OLIVER system, bedrock information.

Morses Pond Feasibility & Design Study, online public records, www.wellesleyma.gov/1377/morese-pond-bathouse-beach-project, August and September 2025.

Historical Boston Ice Company, www.wellesleyhistoricalsociety.org, September 2025.

MassDEP, Energy & Environmental Affairs Data Portal, Various MCP Reports, RTN 3-11653, dated between 1994 and 2025.

Town of Wellesley Office (Assessing, GIS, Building, Health, and Fire Departments), August and September 2025.

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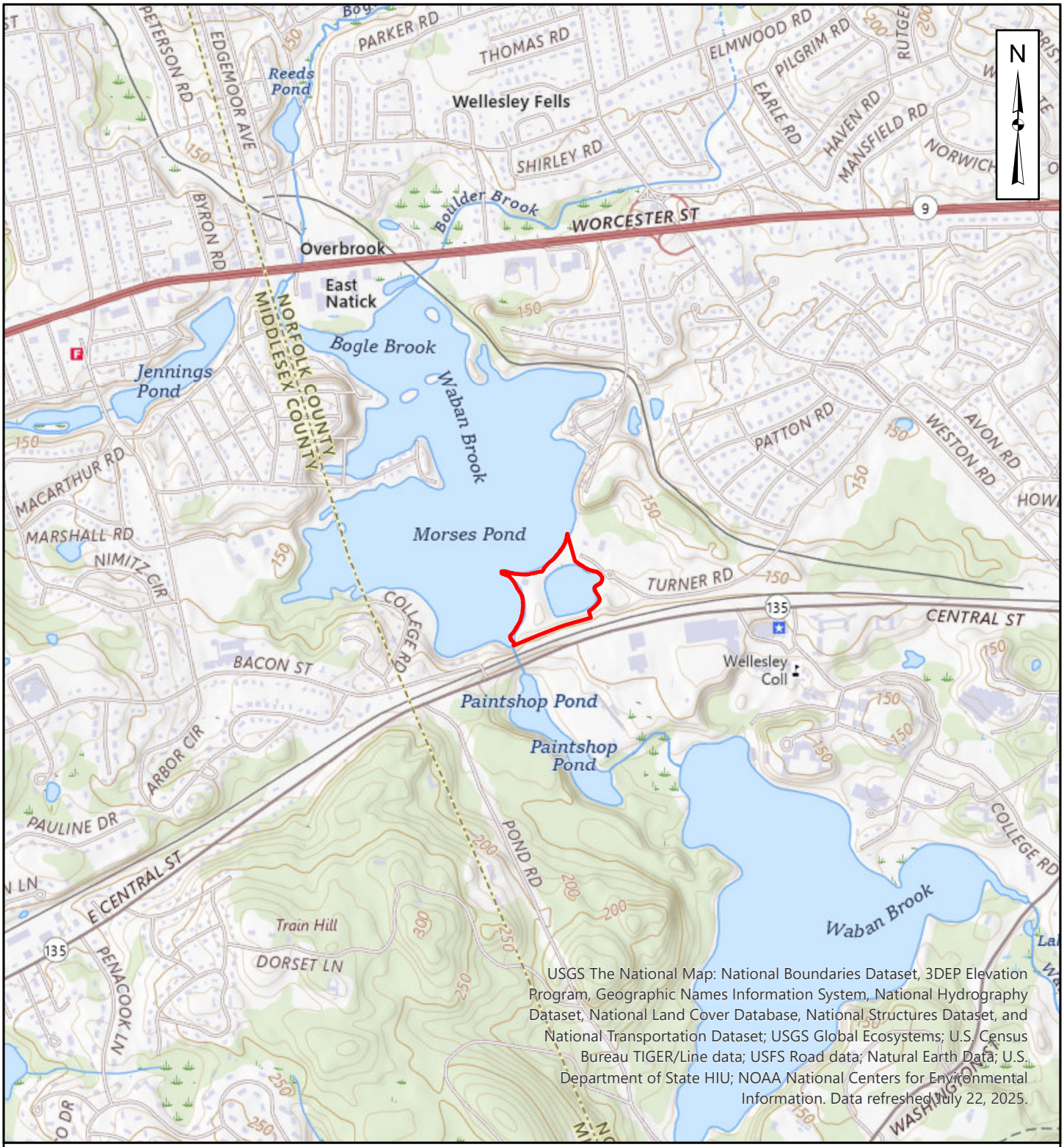
Figures



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information. Data refreshed July 22, 2025.

Legend

Subject Property

FIGURE 1
MORSES POND BEACH
99 TURNER ROAD
WELLESLEY, MASSACHUSETTS

LOCUS MAP

0 0.13 0.25 0.5 Miles

Weston & Sampson

Path: \\wse03.local\WSE\Projects\MA\Wellesley MA\Morses Pond Beach Feasibility Study (2)\GIS\PhaseIESA\PhaseIESA.aprx **User:** Li.Esther **Saved:** 9/8/2025 11:22 AM **Opened:** 9/8/2025 11:23 AM

MORSES POND

CONSERVATION AND RECREATIONAL AREA

PARKING AREA

Morses Pond Trail

Bathhouse

Morses Pond Access Road

Town Beach Area

MBTA COMMUTER RAIL

RESIDENTIAL

WELLESLEY COLLEGE

1

2

3

Legend

- Subject Property
- Tax Parcel Boundary

RTN 3-11653

- Disposal Site Boundary Areas
- Monitoring Well

250 125 0 250

Scale in Feet

FIGURE 2

MORSES POND BEACH
WELLESLEY, MASSACHUSETTS

SITE PLAN

SEPTEMBER 2025 SCALE: NOTED

Weston & Sampson

Path: \\wse03.local\WSE\Projects\MA\Wellesley MA\Morses Pond Beach Feasibility Study (2)\GIS\Phase IESA\Phase IESA.aprx **User:** LJ Esther **Saved:** 9/12/2025 4:24 PM **Opened:** 9/12/2025 4:28 PM

Appendix A:

Scope of Services

Project Approach

The Phase I ESA will be conducted in general accordance with the United States Environmental Protection Agency (EPA) All Appropriate Inquiries (AAI) Final Rule and to satisfy the performance standards set forth in ASTM Standard Practice E1527-21 (the ASTM Standard Practice). The AAI Final Rule, which incorporates ASTM Standard Practice E1527-21, is the current standard of care for Phase I ESAs in the industry. The Phase I ESA will identify Recognized Environmental Conditions (RECs) at the Subject Property, and evaluate the potential for a release of oil and/or hazardous materials (OHM) to the environment. The Phase I ESA will not include sampling of soil, groundwater or hazardous building materials or non-scope items such as asbestos, lead-based paint (LBP), universal waste, and/or polychlorinated biphenyls (PCBs) in building materials.

PHASE I ESA Scope of Work

Task 1 – Historical Review, Environmental Review, Interviews: Weston & Sampson will review existing files pertaining to historical use and regulatory issues from various sources including:

- State and federal environmental files and databases;
- Municipal Records and plans, including those of the Fire Department for underground storage tank (UST) records;
- Previous environmental reports, where available;
- Sanborn Fire Insurance Maps and city directories where available;
- Aerial photographs;
- Local topographic, surficial and bedrock geologic, and hydrologic maps, if available; and
- Interviews with individuals knowledgeable of the Subject Property.

To supplement the Phase I ESA, we will purchase a standard ASTM Phase I database search report to obtain additional information about potential documented releases at the Subject Property and surrounding areas. We will also review local records at municipal and/or county offices and will review pertinent on-line Massachusetts Department of Environmental Protection (MassDEP) files for listed releases at the Subject Property and/or on properties that adjoin the Subject Property.

Task 2 - Site Reconnaissance: Weston & Sampson will perform reconnaissance of the Subject Property and surroundings. We will document evidence of RECs such as releases of OHM, dumped solid and/or hazardous waste, stressed vegetation, and evaluate potential impacts to the Subject Property identified in the records review. A photographic log will be prepared to further document Subject Property conditions.

Task 3 – Questionnaires: Per AAI requirements, Weston & Sampson will provide you, as the user, with a User Questionnaire. In order to receive CERCLA liability protection the *user* must provide the requested information, if available. The information requested in the User Questionnaire includes the following: Environmental Liens, Activity and Use Limitations, Specialized Knowledge (e.g., specialized knowledge of RECs, historical RECs, or other potential environmental concerns in connection with the Subject Property), Commonly Known or Reasonably Ascertainable Information (i.e., any commonly known or reasonably ascertainable information about the Subject Property that would be indicative of releases or threatened releases), Valuation Reduction for Environmental Issues, and Degree of Obviousness of Contamination

In addition to the User Questionnaire, Weston & Sampson will provide the current property owner with an Environmental Questionnaire for completion. The information in the Environmental Questionnaire will generally include information regarding the environmental condition of the Subject Property including but not limited to: current use of the Subject Property, age of structures, use of abutting property(ies), liens, Subject Property limitations, previous assessments, potential presence of contamination, etc. The information from these questionnaires will be incorporated into the report and the completed forms will be attached as appendices to the Phase I ESA Report.

Task 4 - Phase I ESA Report: Weston & Sampson will prepare a Phase I ESA Report summarizing the information collected above. The report will include a summary of the work scope, narrative descriptions of the completed tasks, findings and conclusions, figures, and images as necessary to support the information. The report will include a history of the Subject Property and an evaluation of RECs.

Appendix B:

Photograph Log

1: View of the Bathhouse.

2: View of the Bathhouse from a walking path.

3: Typical view of beach area.

4: View of Ice House Pond.

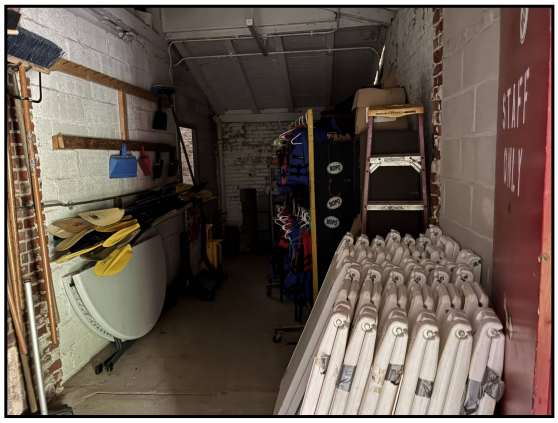
5: View of pond vegetation removal activities.

6: Storage building located on the Subject Property for beach equipment.

7: Typical interior view of the Bathhouse.

8: Restroom within the Bathhouse.

9: Electric golf car stored within the Bathhouse.



10: Storage area of the Bathhouse.

11: View of bridge connecting the eastern and western portions of the Subject Property.

12: View of groundwater monitoring well in the southwestern portion of the Subject Property.

13: View of a groundwater monitoring well near the slope up to the railroad tracks in the southwestern corner of the Subject Property.

14: View of the adjoining Morses Pond.

15: View of dumpster.

16: View of Morses Pond Culvert (s/sw) of Subject Property.

17: View of entrance gate.

18: Looking south toward the adjoining area.

Appendix C:

Questionnaires / Checklists

Phase I ESA User Questionnaire

For the Subject Property:

99 Turner Road Wellesley, MA

To qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must conduct the following inquiries required by 40 C.F.R. §§ 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The *user* should provide the following information to the *environmental professional*. Failure to conduct these inquiries could result in a determination that "*all appropriate inquiries*" is not complete.

(1.) Environmental liens that are filed or recorded against the *subject property* (40 C.F.R. § 312.25).

Did a search of *land title records* (or judicial records where appropriate, see Note 1) identify any *environmental liens* filed or recorded against the *subject property* under federal, tribal, state, or local law?

YES ☐ NO ☒

Notes: Not aware.

(2.) *Activity and use limitations (AULs)* that are in place on the *subject property* or that have been filed or recorded against the *subject property*.

Did a search of *land title records* (or judicial records where appropriate, see Note 1) identify any *AULs*, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the *subject property* and/or have been filed or recorded against the *subject property* under federal, tribal, state or local law?

YES ☐ NO ☒

Notes: Not aware.

(3.) Specialized knowledge or experience of the person seeking to qualify for the *LLP* (40 C.F.R. § 312.28).

Do you have any specialized knowledge or experience related to the *subject property* or nearby *properties*? For example, are you involved in the same line of business as the current or former *occupants* of the *subject property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

YES ☒ NO ☐

Notes: Yes, the WellesleyNRC owns the Subject Property that includes a town beach.

(4.) Relationship of the purchase price to the fair market value of the *subject property* if it were not contaminated (40 C.F.R. § 312.29).

Does the purchase price being paid for this *subject property* reasonably reflect the fair market value of the *property*?

YES ☐ NO ☐ N/A ☒

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *subject property*?

YES ☐ NO ☐ N/A ☒

Notes:

NOTE 1 - In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that *environmental liens* and *AULs* be filed in judicial records rather than in *land title records*. In such cases judicial records shall be searched for *environmental liens* and *AULs*.

Phase I ESA User Questionnaire

For the Subject Property:

99 Turner Road Wellesley, MA

(5.) Commonly known or *reasonably ascertainable* information about the *subject property* (40 C.F.R. § 312.30).

Are you aware of commonly known or *reasonably ascertainable* information about the *subject property* that would help the *environmental professional* to identify conditions indicative of *releases* or threatened *releases*?

YES ☒ NO ☐

Notes: WATER TREATMENT FACILITY ABUTS PROPERTY

Do you know the past uses of the *subject property*?

YES ☒ NO ☐

Notes: Town beach. Former ice house.

Do you know of specific chemicals that are present or once were present at the *subject property*?

YES ☐ NO ☒

Notes: Not aware

Do you know of spills or other chemical *releases* that have taken place at the *subject property*?

YES ☐ NO ☒

Notes: Not Aware

Do you know of any environmental cleanups that have taken place at the *subject property*?

YES ☐ NO ☒

Notes: NOT AWARE

(6.) The degree of obviousness of the presence or likely presence of contamination at the *subject property*, and the ability to detect the contamination by appropriate investigation (40 C.F.R. § 312.31).

Based on your knowledge and experience related to the *subject property*, are there any *obvious* indicators that point to the presence or likely presence of *releases* at the *subject property*?

YES ☐ NO ☒

Notes: NOT AWARE

Completed By:

Name: BRANDON SCHMITT

Signature: BSchmitt

Date: 8/5/25

ENVIRONMENTAL SITE RECONNAISSANCE QUESTIONNAIRE
(to be completed by an owner's representative)

Site Name: Morses Pond

Site Address: 99 Turner Road

Site Visit Date: _____

What is the current and past use(s) of the subject property?

Current		Past	
Residential – Single Family	☐	Residential – Single Family	☐
Residential – Multi-Family	☐	Residential – Multi-Family	☐
Commercial	☐	Commercial	☒
Industrial/Manufacturing	☐	Industrial/Manufacturing	☒
Unimproved/Raw Land	☐	Unimproved/Raw Land	☐
Agriculture	☐	Agriculture	☐
Municipal Use/Recreation	☒		

To the best of your knowledge, what are the current and past uses of the adjoining properties?

Adjoining Property	Current Owner	Current Use	Past Owner	Past Use
North:	Town Of Wellesley	Pond/Water Supply		
South:	MBTA	Railroad	MBTA	Railroad
East:	Town of Wellesley	Parking/Water Supply	Russell/Boston Ice Company	
West:	Town of Wellesley	Pond		

Question	Owner/Property Representative Response
Is the property used for an industrial use?	YES **NO** UNK
Is any *adjoining* property used for an industrial use?	YES **NO** UNK
Did you observe evidence or do you have any prior knowledge that the property has been used for an industrial use in the past?	YES **NO** UNK
Did you observe evidence or do you have any prior knowledge that any *adjoining* property has been used for an industrial use in the past?	YES **NO** UNK
Is the property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaner, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	YES **NO** UNK

Is any *adjoining* property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaner, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that the property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaner, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that any *adjoining* property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaner, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	YES	NO	UNK
Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons (19 Q) in volume or 50 gallons (190 Q) in the aggregate, stored on or used at the property or at the facility?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there have previously been any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of >5 gallons (19 L) in volume or 50 gallons (19 L) in the aggregate, stored on or used at the property or at the facility?	YES	NO	UNK
Are there currently any industrial drums (typically 55 gallons (208 Q)) or sacks of chemicals located on the property or at the facility?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there have previously been any industrial drums (typically 55 gallons (208 L)) or sacks of chemicals located on the property or at the facility?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?	YES	NO	UNK

Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that is of an unknown origin?	YES	NO	UNK
Are there currently any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there have previously been any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	YES	NO	UNK
Is there currently any stained soil on the Property?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there has previously been any stained soil on the property?	YES	NO	UNK
Are there currently any registered or unregistered storage tanks (above or underground) located on the property?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there have previously been any registered or unregistered storage tanks (above or underground) located on the property?	YES	NO	UNK
Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from or adjacent to any structure located on the property?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there have previously been any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	YES	NO	UNK
Is there currently evidence of leaks, spills, or staining by substances other than water, or foul odor, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	YES	NO	UNK
Did you observe evidence or do you have any prior knowledge that there have previously been any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	YES	NO	UNK

If the property is served by a private well or non-public water system, is there evidence or do you have any prior knowledge that contaminants have been identified in the well or system that exceeded guidelines applicable to the water system?	YES	NO	UNK
If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	YES	NO	UNK
Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification related to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?	YES	NO	UNK
Has the owner or occupant of the property been informed of the past existence of hazardous substances or petroleum products with respect to the property or any facility located on the property?	YES	NO	UNK
Has the owner or occupant of the facility been informed of the current existence of hazardous substance or petroleum products with respect to the property or any facility located on the property?	YES	NO	UNK
Has the owner or occupant of the property been informed of the past existence of environmental violations with respect to the property or any facility located on the property?	YES	NO	UNK
Has the owner or occupant of the property been informed of the current existence of environmental violations with respect to the property or any facility located on the property?	YES	NO	UNK
Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property, or recommended further assessment of the property?	YES	NO	UNK
Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?	YES	NO	UNK
Does the property discharge wastewater (not including sanitary waste or stormwater) onto or adjacent to the property and/or into a stormwater system?	YES	NO	UNK

Does the property discharge wastewater (not including sanitary waste or stormwater) onto or adjacent to the property and/or into a sanitary sewer system?	YES	(NO)	UNK
Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried, and/or burned on the property?	YES	(NO)	UNK
Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	YES	(NO)	UNK

The Owner Questionnaire was completed by:

Name: Brandon Schmitt

Title: Director, NRC

Firm: _____

Address: 888 Worcester Street

Phone Number: 7817086089

Date: 8/5/2025

Appendix D:

User-Provided Documents

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

November 23, 2021

Town of Wellesley
c/o Johnathan Law, RLA
Weston & Sampson
85 Devonshire Street, 3rd Floor
Boston, MA 02109

RE: Preliminary Geotechnical Report
Proposed Morses Pond Improvements
Wellesley, Massachusetts

INTRODUCTION

Weston & Sampson Engineers, Inc. (Weston & Sampson) is pleased to present this letter report summarizing our geotechnical evaluation and feasibility-level study for the proposed improvements at the Morses Pond Beach Area located along Morses Pond Access Road in Wellesley, Massachusetts. The purpose of our feasibility study was to identify preliminary geotechnical considerations for the proposed project. Our understanding of the proposed project is based on our correspondence with the project team and an August 2021 conceptual plan titled "Morses Pond Beach Area Improvements" prepared by Weston & Sampson and Maryann Thompson Architects.

EXISTING CONDITIONS

The Morses Pond Beach Area (the "site") is an approximately 11-acre parcel bound by Morses Pond to the north and west, Morses Pond Access Road to the east, and the Massachusetts Bay Transportation Authority (MBTA) Framingham/Worcester Line commuter rail right-of-way to the south, as shown on *Figure 1 – Project Locus* and *Figures 2A and 2B – Site Plan – West* and *Site Plan - East*. The site has served as a Wellesley Town Beach since approximately 1935 and includes the approximately 4.5-acre Ice House Pond on the eastern part of the site, the main beach area on the west side of Ice House Pond extending westward to Morses Pond, and an approximately 25 to 50 ft. wide strip of land supporting an asphalt-paved walking path between the north side of Ice House Pond and Morses Pond. A portion of this path is supported by a pedestrian bridge where Ice House Pond and Morses Pond are connected by a small waterway. Handicapped and maintenance vehicle access is via an asphalt-paved access drive along the south side of Ice House Pond. The Town of Wellesley Morses Pond Pump Station and Water Treatment Facility is present to the northeast of the site and is encompassed by a drinking water protection area.

The main beach area contains an approximately 70 ft. by 60 ft. single-story brick bathhouse building to the north, a swimming area along the western border with Morses Pond, a playground structure and boat ramp south of the swimming area, two approximately 27 ft. by 23 ft. canopy shade structures east of the swimming area and several benches and asphalt-paved walking paths. A swim dock is present within the swimming area and a similar boat dock is present to the north of the existing bathhouse building.

Known utilities at the site include water and electric below the walking path and strip of land to the north of Ice House Pond and force-main sewer below the access drive and beach area to the south and west of Ice House Pond. The three known utilities connect to the existing bathhouse.

Our understanding of existing grades at the site is based on our site visits and an October 2021 Existing Conditions Survey Plan prepared by Brennan Consulting. Water surface elevations in Morses and Ice House Ponds are generally between about El. 120 to El. 121. The ground surface between these two ponds rises to approximately El. 133 near the south shade structure and grass-covered area. The site is generally gently sloping downwards towards Morses Pond to the west with slopes up to about 9H:1V along the swimming area. To the east side of the beach area, the site generally slopes down to Ice House Pond at about 5H:1V. Grades increase steeply along the southern edge of Ice House Pond (generally up to 1.8H:1V) and between the access drive and MBTA ROW (generally up to about 1.4H:1V). Elevations described herein are in feet (ft.) and reference the North American Vertical Datum of 1988 (NAVD88).

PROPOSED PROJECT

Based on the conceptual plan included as *Figure 3*, we understand the proposed project includes improvements to the main beach area including new bathhouse (30 ft. by 65 ft.) and administration (40 ft. by 30 ft.) buildings connected by an overhead canopy and ADA parking areas at the southern end; a new playground area and kayak storage shed at the north end; a flush wood walkway along the existing beach area, and new landscaped areas and walking paths. The project also includes a new boardwalk crossing the southern area of Ice House Pond. The existing single-story brick bathhouse and shade canopies will be demolished.

The new administration and bathhouse buildings are proposed at the apparent high point of the site based on the existing site grades depicted in *Figures 2A* and *2B*.

Based on our experience with similar projects, we assume the proposed boardwalk will be supported on helical piers or driven timber piles and will be designed for typical pedestrian traffic loads.

Proposed grading was not made available to us at the time of this report however we assume that grade changes will generally be limited to within approximately 2 ft. of existing grades. Structural loading information was not made available to us at the time of this report.

SUBSURFACE CONDITIONS

Geologic Setting

Based on the United States Geological Survey (USGS) 2018 “Surficial Materials Map of the Natick Quadrangle, Massachusetts” compiled by Janet R. Stone and Byron D. Stone, surficial soils are anticipated to consist of coarse sand and gravel deposits. According to the Massachusetts Office of Geographic Information (MassGIS) OLIVER system, bedrock at the site is mapped as Granite at depths between approximately 50 ft. and 100 ft. The nearest bedrock outcrops to the site are mapped

approximately ½-mile to the northeast. No outcrops were observed at the site during our site reconnaissance.

Subsurface Explorations

Subsurface conditions at the site were explored on September 1, 2021, by advancing five borings (B-1 through B-5) to depths ranging from 6 to 21 ft. Approximate boring locations are shown in *Figure 2*. Weston & Sampson geotechnical engineering staff monitored explorations in the field and prepared logs for each exploration.

The borings were completed by Technical Drilling Services of Sterling, MA. Standard penetration tests (SPTs) were conducted in each boring at two- to five-foot intervals by driving a split spoon sampler with an automatic hammer in general accordance with ASTM D1586. Additional details are provided on the Guide to Subsurface Exploration Logs included in *Attachment A*. Each of the borings were backfilled with cuttings upon completion.

Subsurface conditions encountered in the explorations are described in the following section and included in *Attachment A – Boring Logs*.

Subsurface Conditions

Subsurface conditions encountered in the borings below surficial topsoil generally consisted of native sand, silty sand or undocumented fill over variable sand and gravel. The subsurface conditions encountered in the borings were generally consistent with mapped surficial geology.

Subsurface soil and groundwater conditions described below have been interpreted based on a limited number of explorations that were observed by Weston & Sampson. Variations may occur and should be expected between locations. The strata boundaries shown in our boring logs are based on our interpretations and the actual transitions may be gradual. Refer to the boring logs included in *Attachment A* for detailed descriptions of the soil samples collected. The general Unified Soil Classification System (USCS) designation(s) for each stratum is included in the descriptions below in parentheses. Depths provided below are relative to the existing ground surface at the time of drilling.

Topsoil – Approximately 3 to 6 inches of topsoil was encountered at the ground surface in each of the borings.

Undocumented Fill – Undocumented Fill was encountered below the topsoil in B-2 and B-5 and extended to depths of approximately 4 ft. and 10 ft., respectively. The undocumented fill encountered in B-2 generally consisted of medium dense fine to coarse sand with some fine gravel and little silt (SM). The undocumented fill encountered in B-5 generally consisted of soft to very stiff, dark brown, organic silt with some sand and trace gravel (OL) with trace debris including wood chips, glass, and plastic.

Review of existing information including historic imagery and maps of the site indicate previous land areas within the current bounds of Ice House Pond that no longer appear to be present. Additionally, Morses Pond dredging efforts were completed in 2012 and the Morse Pond Beach was used as a staging and dewatering area. Based on the observed organics and debris, it is possible that the thick organic fill deposit encountered in B-5 may be redistributed and graded dredge spoils sourced either from Ice House Pond or Morses Pond.

Buried Topsoil – Medium stiff, organic, buried topsoil was encountered below the fill in B-2 and extended to a depth of approximately 7.5 ft. The buried topsoil was approximately 3.5 ft. thick and generally consisted of dark brown, organic silt with some sand and little gravel (OL). An organic odor and occasional plant fibers were noted within the buried topsoil.

Native Sand and Gravel – Medium dense to very dense interbedded native sand and gravel was encountered below the surficial topsoil in B-1, B-3, and B-4; below the buried topsoil in B-2, and below the undocumented fill in B-5. The gravel layers generally consisted of mostly gravel with few to some sand and few to little silt. (GM, GP-GM, GW-GM). The sand layers generally consisted of mostly fine to coarse sand with few to some silt and trace to some fine gravel (SM, SP-SM, SW-SM). The native sand was generally siltier at shallower depths. Each of the borings were terminated in this stratum at depths between approximately 4 and 21 feet.

Groundwater – Depth to water was measured in each boring at the end of drilling and ranged from approximately 4 to 12.5 ft. below ground surface which corresponds to approximately El. 118.5 to El. 119.5. Groundwater was not encountered in B-4 (terminated at 6 ft.). We anticipate that groundwater levels at the site will fluctuate with water levels of Morses Pond and Ice House Pond and with season, variations in precipitation, construction in the area, and other factors. Perched groundwater conditions could exist close to the ground surface, especially during and after extended periods of wet weather.

Geotechnical Laboratory Testing

Select samples were submitted for geotechnical laboratory testing to confirm field descriptions and determine engineering properties of the encountered soils. Geotechnical laboratory testing was completed on two samples from the borings to confirm field descriptions and determine engineering properties of the soil. One grain size analysis (ASTM D6913) was performed on the silty sand from B-1. One moisture, ash, and organic content test (ASTM D2974) was performed on the undocumented fill from B-5. The laboratory test results are presented on the boring logs and in *Attachment B – Geotechnical Laboratory Test Results.*

PRELIMINARY GEOTECHNICAL DESIGN RECOMMENDATIONS

General

As indicated above, our project understanding and recommendations are based upon the April 2018 conceptual level plans. We understand some of the proposed design features described above are subject to change and may be modified or removed in final design. Our recommendations included herein are based on our current understanding of the project as described above and depicted in *Figure 3*. Design of proposed improvements should be in accordance with the International Building Code (IBC) as adapted by the Massachusetts State Building Code (MSBC) including supplemental Massachusetts requirements.

The proposed improvements include three buildings: administration, bathhouse, and storage shed. The administration and bathhouse buildings can be supported on shallow spread footings bearing on the natural sand encountered below the surficial topsoil. Boring B-2 completed in the vicinity of the proposed storage shed encountered undocumented granular fill overlying buried topsoil extending to about 7.5 feet below existing grade; these materials are not suitable (or allowed by the MSBC) for support of foundations, slabs, or other rigid structural site improvements that could be adversely affected by differential settlement. Therefore, we recommend

supporting storage shed on shallow spread footings following removal and replacement of these materials, or on deep foundations.

The proposed improvements also include a new boardwalk across the southern side of Ice House Pond. Boring B-5 completed in the vicinity of the proposed west boardwalk landing encountered soft to very stiff, organic, undocumented fill extending to about 10 feet below existing grade. We anticipate thick organic deposits on the bottom of Ice House Pond. We recommend supporting the boardwalk on deep foundations bearing in the natural sand below the fill and organic deposits.

These geotechnical considerations are further discussed in the following sections. Additional geotechnical explorations, analyses, and laboratory testing may be required to provide design level geotechnical recommendations once site grading has been determined and building locations and structural loadings have been finalized.

Shallow Foundations

Based on the encountered subsurface conditions and our analysis, the proposed administration and bathhouse buildings, and storage shed can be supported by shallow foundations bearing on undisturbed, medium dense (or denser) native sand or gravel or on properly constructed Structural Fill overlying such soils.

Existing undocumented fill and buried topsoil should be completely removed from within the zone-of-influence (ZOI) beneath proposed foundations and other structural elements. The ZOI is defined by planes extending horizontally away from the bottom outside edges of footings and other structural site improvements a distance of 2 ft. in all directions, then down and away at 1H:1V (horizontal: vertical) slopes to the intersection with undisturbed, native soils. Excavation to remove the fill and buried topsoil below the proposed storage shed are anticipated to extend several feet below the water level.

Footings bearing on these materials can be designed using an allowable bearing pressure of 4,000 psf. The allowable bearing pressure can be increased to 6,000 psf to resist temporary wind and seismic loads provided load eccentricities are within the middle third of the footing. Resistance to lateral loads can be obtained by a passive equivalent fluid unit weight of 250 pcf, ignoring the top 12 inches of embedment, and by a footing base friction coefficient of 0.45.

Footings should be embedded at least 4 ft. below the nearest proposed adjacent ground surface exposed to freezing. Interior footings not exposed to freezing should be embedded at least 18 inches below the lowest overlying floor slab elevation. These footings may require special frost protection measures if constructed during freezing conditions. Shallow foundations constructed as recommended herein are anticipated to undergo total and differential settlements of less than 1 inch and ½ inch, respectively.

Slabs On-Grade

Slabs for the proposed administration, bathhouse buildings, and storage buildings can be designed and constructed as slabs-on-grade supported by the undisturbed, medium dense (or denser) native sand or gravel or on properly constructed Structural Fill overlying such soils. The building slabs on-grade should be designed and constructed in accordance with recommendations contained in the latest editions of ACI Committee Reports 360R

and 302.1R. Based on subgrade preparation procedures recommended herein and the existing soil conditions, a subgrade modulus (k) of 200 pounds per cubic inch (pci) is recommended for slab-on-grade design.

Concrete slabs on-grade should be supported on a minimum of 6 inches of clean, well graded, angular crushed stone with no more than 10 percent passing a #200 sieve placed between the prepared subgrade and concrete. If the underslab stone is saturated or trapping water, the water should be removed prior to slab placement.

Some flooring manufacturers require specific slab moisture levels and/or vapor barriers to validate the warranties on their products. A properly installed and protected vapor flow retardant can reduce slab moistures. If a vapor flow retardant is used, care should be taken not to trap moisture within the overlying crushed stone and floor slab concrete.

Building slabs on-grade supporting loads up to 250 psf and bearing on the materials discussed above are expected to induce less than one inch of total settlement.

Helical Pier Foundations

As discussed above, the proposed storage shed and boardwalk can be supported on helical piers as currently sited. Up to approximately 7.5 feet of fill and buried topsoil was encountered below the proposed storage shed and up to approximately 10 ft. of existing organic fill was encountered in B-5, located at the west end of the proposed boardwalk. No borings were completed within the limits of Ice House Pond however, soft, organic pond-bottom sediment should be expected. Helical piers supporting the storage shed or boardwalk sections should extend through fill and loose, soft, or organic soils and derive support in the underlying medium dense or denser native sand or native gravel. Due to the variable nature of the site soils, actual pier lengths should be expected to vary.

We expect a helical pier design to support the storage shed and boardwalk structures will consist of vertical helical piers to resist axial loads and cross bracing or battered (angled) piers to resist lateral loads. Where sections of the boardwalk are not within Ice House Pond, buried foundation elements such as pier caps and grade beams may be viable options for resistance to lateral loads.

We can provide additional recommendations for helical piers, including minimum embedment depths and torque requirements, recommended pile design, and corresponding allowable axial capacities during final design. Ultimately, the helical pier installation contractor should provide a helical pier design for capacities required by the structural engineer. The helical pier design should be stamped by a Professional Engineer licensed in the Commonwealth of Massachusetts and include calculations that demonstrate adequate geotechnical and structural capacities including resistance to buckling.

Seismic Site Class

Seismic site class is determined in accordance with the IBC as adapted by the MSBC using a weighted average of SPT blow counts in the upper 100 ft. of soil at a site. Based on the results of explorations and analyses and depths of proposed structures, we recommend that the subject project be evaluated using parameters associated with Site Class D.

Liquefaction can occur in loose, saturated, granular soils. Strong shaking, such as that experienced during earthquakes, can cause a sudden loss of shear strength, densification, and subsequent settlement of these soils. We evaluated the potential for liquefaction in accordance with the latest provisions of the MSBC using the soil types and consistencies encountered in our explorations and interpretation of the existing subsurface information referenced above. Based on our evaluation, the risk of structurally damaging ground deformations due to liquefaction is low.

CONSTRUCTION RECOMMENDATIONS

Site Preparation

The Site should be prepared by removing all vegetation, topsoil, and existing unsuitable (e.g. soft, disturbed, or organic) soils from the ZOI beneath shallow foundations, slabs-on-grade, pavement, and fill areas as described above. Deeper stripping depths and removal of loose surficial organic soil should be anticipated in areas of trees and brush.

Root balls from trees and brush may extend several feet and grubbing operations can cause considerable subgrade disturbance. In general, roots greater than one inch in diameter should be removed as well as areas of concentrated smaller roots. All disturbed material should be removed to undisturbed subgrades.

Excavations required for site preparation and grubbing should be brought back to grade with Structural Fill as recommended below. In general, the sides of these excavations should be sloped back flatter than 1.5H:1V to allow proper compaction of the interface between existing soil and new fill.

Excavation Considerations

Excavation will be required for site preparation, foundation construction, utility construction, site grading, etc. Groundwater and surface water should be controlled during construction and prevented from eroding slopes and disturbing excavation and subgrade materials. Groundwater was observed in some of the borings at depths ranging from about 4 to 12.5 feet below existing grades. Some excavations may encounter groundwater and moderate to severe caving and possible flowing conditions should be expected where seepage is present.

Surface water should be controlled during construction and prevented from eroding temporary slopes and disturbing excavation and subgrade materials. If excavations encounter groundwater, moderate to severe caving should be expected where seepage is present. Flowing conditions are likely where granular soils and groundwater seepage are present.

Depending on excavation depths and amount of groundwater seepage, dewatering may be necessary. Flow rates for dewatering are likely to vary depending on location, soil type, and the season during which the excavation occurs. The dewatering system should be capable of lowering the groundwater table at least 2 ft. below the anticipated excavation depths and be kept operational until fill placement and compaction and concrete installation have been completed to at least 2 ft. above the groundwater table elevation. The dewatering system should be capable of handling variable flow rates and should be the responsibility of the Contractor.

All excavations should be made in accordance with applicable OSHA safety regulations. Temporary excavation support may be required depending on depths of excavations and if excavations need to approach the ZOI

beneath existing structures or other site features. Excavation support systems, if necessary, should be the responsibility of the Contractor and designed by a Professional Engineer licensed in the Commonwealth of Massachusetts. Foundations and utilities should be designed and constructed so that excavations into ZOIs below and adjacent to footings are not required.

Subgrade Preparation and Protection

Following site preparation and excavation to the required subgrade elevations, the native sand or native gravel subgrades should be proof compacted with at least four (4) complete passes of a 10-ton vibratory roller, or equivalent effort. Footing subgrades and other areas with limited access should be proof compacted with at least four (4) complete passes of a 700-pound vibratory plate compactor, or equivalent effort. Weston & Sampson should be contacted to evaluate the exposed subgrades prior to placement of foundation forms, rebar, or overlying materials.

Soft and/or disturbed areas will require re-compaction or over-excavation and backfilling with compacted angular crushed stone or compacted Structural Fill. A geosynthetic separation layer between the excavation subgrade and crushed stone backfill may also be required. We recommend that a geosynthetic used for stabilization consist of a woven geosynthetic with an AOS of #70 to #100 sieve, and a minimum puncture resistance of at least 120 pounds (such as Mirafi FW700 or equivalent).

Soils containing more than trace amounts of silt are highly susceptible to softening and disturbance by construction activity during wet or freezing weather. Subgrade protection should be the responsibility of the Contractor and special precautions and protective measures appropriate for the weather and traffic conditions during construction should be used during earthwork and foundation construction to preserve the integrity of subgrades. Construction traffic should not operate directly on prepared subgrades.

A few inches of crushed stone can be placed and compacted at the base of footing excavations to protect subgrades from disturbance during construction, particularly if footing construction occurs during wet weather conditions. If footing construction occurs during freezing conditions, insulating blankets, heaters, or other suitable measures should be employed to prevent foundation subgrades from freezing until the foundations are backfilled sufficiently to prevent frost from reaching the footing subgrade.

Fill

Imported well-graded sand and gravel with less than approximately 10 percent passing the No. 200 sieve and a maximum particle size of 3-inches (such as MassDOT M1.03.0 Gravel Borrow, type b or M2.01.7 Dense Graded Crushed Stone for Subbase) is recommended for use as Structural Fill within the ZOI beneath new foundations and slabs. Structural Fill should be placed in maximum 10-inch-thick lifts (uncompacted thickness), with each lift compacted to at least 95 percent of the materials maximum dry density as determined by ASTM D1557.

Crushed Stone may also be acceptable for use as Structural Fill with prior approval of the geotechnical engineer. Crushed stone should be compacted until dense and well-keyed with several passes of a vibratory plate compactor.

On-site granular soil meeting the grain size requirements of Structural Fill can be used as such provided they are free of organics, contamination (including metals, VOCs, SVOCs, etc.), and other deleterious materials. On-site

granular soils with less than approximately 20 percent passing the No. 200 sieve may be re-used in landscaped areas (Common Fill). Common Fill should be placed in maximum 10-inch-thick lifts (uncompacted thickness), with each lift compacted to at least 92 percent of the materials maximum dry density as determined by ASTM D1557.

Trenches

Open utility trench excavations should be completed as recommended above. Pipe bedding should be installed in accordance with the pipe manufacturers' recommendations. If groundwater seepage or standing water is present in the base of utility trench excavations, we recommend over-excavating the trench by 12 to 18 inches and placing trench stabilization material in the base. Trench stabilization material should consist of well-graded, angular crushed stone with a maximum particle size of 4 inches and free of deleterious materials. The percent passing the No. 200 Sieve should be less than 5 percent by weight when testing in accordance with ASTM C117.

Trench backfill above the pipe zone should consist of imported granular sand and gravel with less than approximately 10 percent fines such as Structural Fill or granular soils from on-site excavations meeting the above requirements. Trench backfill should be placed in 6-inch maximum loose lifts with each lift compacted to 92 percent of ASTM D1557 and to 95 percent of ASTM D1557 within 2 ft. of finished grades. Construction of overlying hard surfaces, such as pavement, should not occur before at least one week after backfilling.

Additional Explorations and Analyses

Our explorations were completed at widely spaced locations and located based on conceptual-level design layouts. Design plans are still being evaluated and the locations of structures and other site features have not been finalized. Additional explorations and geotechnical analyses may be required to develop final design recommendations for foundation support and earthwork design. We should be contacted prior to final design to review design plans and revise and/or supplement our recommendations as necessary.

LIMITATIONS

Observation of Construction

Satisfactory earthwork and foundation performance depends to a large degree on the quality of construction. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions often requires experience; therefore, qualified personnel should visit the site with sufficient frequency to evaluate whether actual subsurface conditions differ from those anticipated. In addition, full-time construction observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications.

The recommendations in this report are preliminary as actual subsurface conditions may differ from those interpreted based on our subsurface explorations. In order for our recommendations to be considered final, we must be retained to observe the actual subsurface conditions encountered during construction. Our observations will allow us to interpret the actual conditions present during construction and adapt our recommendations if needed.

Variations of Subsurface Conditions and Use of Report

We have prepared this report for use by the owner, members of the design and construction team for the subject project and site, only. The data and report can be used for estimating purposes, but our report, conclusions, and interpretations should not be construed as a warranty of the subsurface conditions and are not applicable to other sites.

Explorations indicate soil conditions only at specific locations and only to the depths penetrated. They do not necessarily reflect subsurface conditions that may exist outside or between exploration locations. If subsurface conditions differing from those described are noted during the course of excavation and construction, reevaluation will be necessary and we should be consulted.

Site development plans and design details were considered preliminary at the time this report was prepared. If changes are made in site grades, configuration, design loads, or type of construction for the structure, the conclusions and recommendations may not be applicable. We should be consulted to review final design drawings and specifications to see that our recommendations are suitably followed. If design changes are made, we should be retained to review our conclusions and recommendations and provide a written evaluation or modification. Additional geotechnical engineering analyses and explorations may be necessary.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices in this area at the time this report was prepared. No warranty or other conditions, expressed or implied, is given. For additional information on the use of this report, please refer to the document titled "Important Information about This Geotechnical-Engineering Report" included in *Attachment C*.

It has been a pleasure assisting you with this project and we look forward to our continued involvement. Please call if you have any questions.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

Matthew J. Zanchi, PE
Project Engineer

Jennifer MacGregor, PE
Technical Leader

Attachments:
Figure 1 – Project Locus
Figure 2A – Site Plan - West

Figure 2B – Site Plan - East
Figure 3 – Site Concept Plan
Attachment A – Boring Logs
Attachment B – Geotechnical Laboratory Test Results
Attachment C – Important Information about This Geotechnical-Engineering Report

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FIGURES

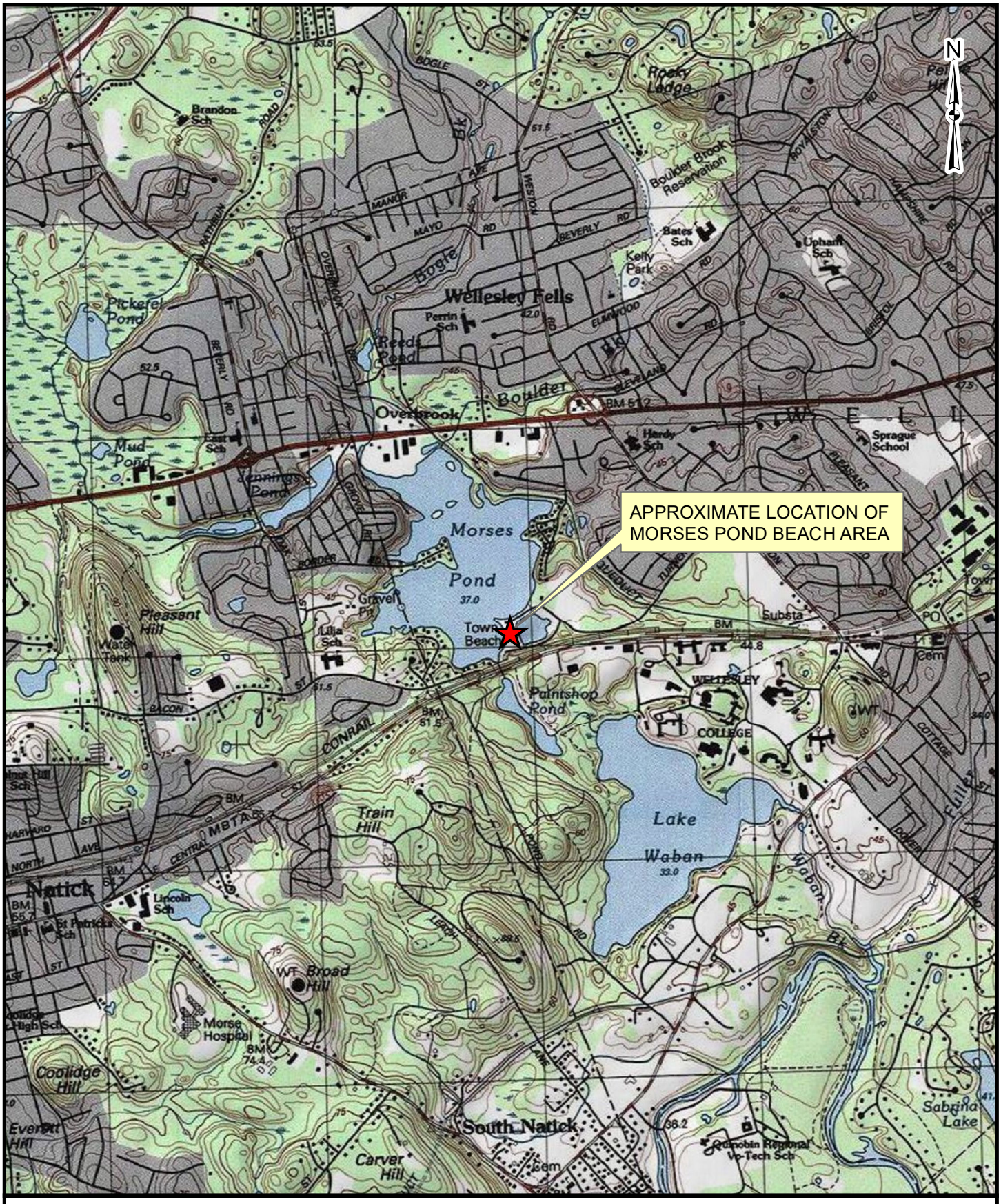

FIGURE 1
PROJECT LOCUS

MORSES POND BEACH AREA FEASIBILITY STUDY
WELLESLEY, MASSACHUSETTS

2,000 0 2,000

Scale In Feet

Weston & Sampson

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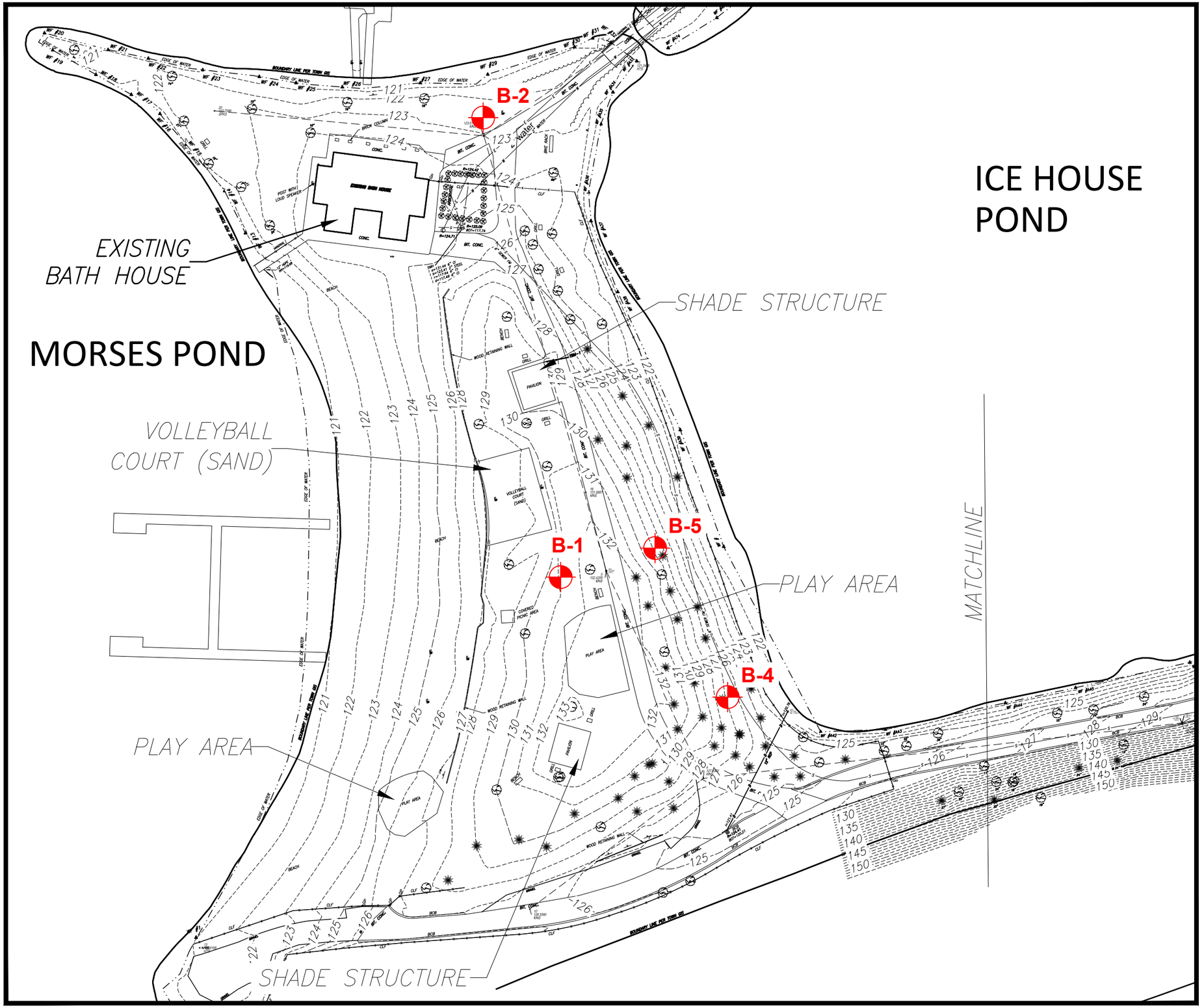

Weston & Sampson℠

Weston & Sampson Engineers, Inc.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
978.532.1900 800.SAMPSON
www.westonandsampson.com

NOTES

1. THIS PLAN IS BASED ON AN EXISTING CONDITIONS SURVEY OF MORSES POND BEACH PREPARED BY BRENNAN CONSULTING DATED OCTOBER 2021.
2. BORINGS WERE COMPLETED BY TECHNICAL DRILLING SERVICES, INC. OF STERLING, MA ON SEPTEMBER 1, 2021.
3. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON ENGINEER.
4. BORING LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-1 DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – WEST
	PROJECT: MORSES POND BEACH AND BATH HOUSE, WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	WZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2A

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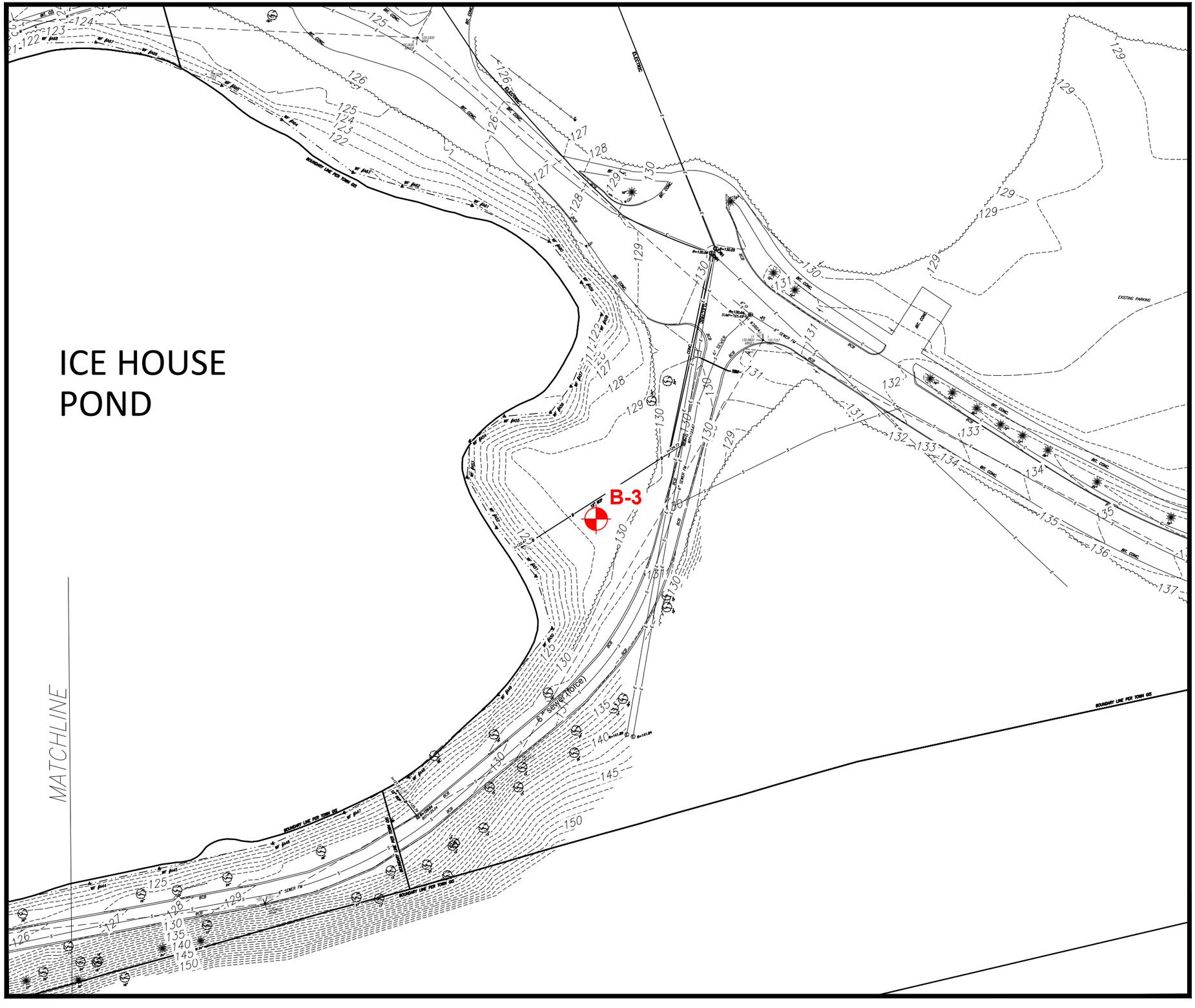

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5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-3 — DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – EAST
	PROJECT
	MORSES POND BEACH AND BATH HOUSE
	WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	MZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2B

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NOTES:

1. THIS FIGURE IS BASED ON A SITE CONCEPT PLAN PREPARED BY WESTON AND SAMPSON ENGINEERS, INC. DATED MARCH 2020.
2. FIGURE IS NOT DRAWN TO SCALE.

NOT TO SCALE

FIGURE 3
CONCEPTUAL SITE PLAN

MORSES POND BEACH AND BATHHOUSE
WELLESLEY, MASSACHUSETTS

DESIGNED BY: MJZ	CHECKED BY: JACM	DATE: NOVEMBER 2021

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Attachment A
Boring Logs

Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-1

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
			● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
	S-1 12/24	9 17 16 17	33		Topsoil- 4 inches thick. Well graded gravel with silt and sand (GW-GM) - Medium dense to dense; light brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines.	
	S-2 6/24	8 10 9 8	19			[2.0 - 21.0] Intermittent auger grinding.
5	S-3 10/24	11 6 6 11	12		Silty sand (SM) - Medium dense; brown; moist; mostly fine to coarse SAND, little non plastic fines, few fine gravel. 2-inch seam of fine sand	[4.0] GC: 9%, SC: 74%, FC: 17%
					Silty sand with gravel (SM) - Dense; brown; moist; mostly fine to coarse SAND, some fine gravel, little non plastic fines.	
10	S-4 6/24	21 23 20 16	43			
					Poorly graded gravel with silt (GP-GM) - Very dense; brown; wet; mostly coarse GRAVEL, few fine to coarse sand, few non plastic fines.	[12.5] Estimated water level at time of drilling based on changes in sample moisture.
15	S-5 6/24	20 24 32 46	>> 56		Sample is primarily gravel-sized rock fragments	
	S-6 12/12				Silty sand (SM) - Brown; wet; mostly fine to medium SAND, some non plastic fines, few fine gravel.	[16.0] Split spoon advanced 12 inches to obtain sample but blow counts not recorded.
20	S-7 9/24	19 17 19 33	36		Silty gravel with sand (GM) - Dense; brown; wet; mostly fine to coarse GRAVEL, some medium to coarse sand, little non plastic fines.	
						Exploration ended at 21.0 ft.

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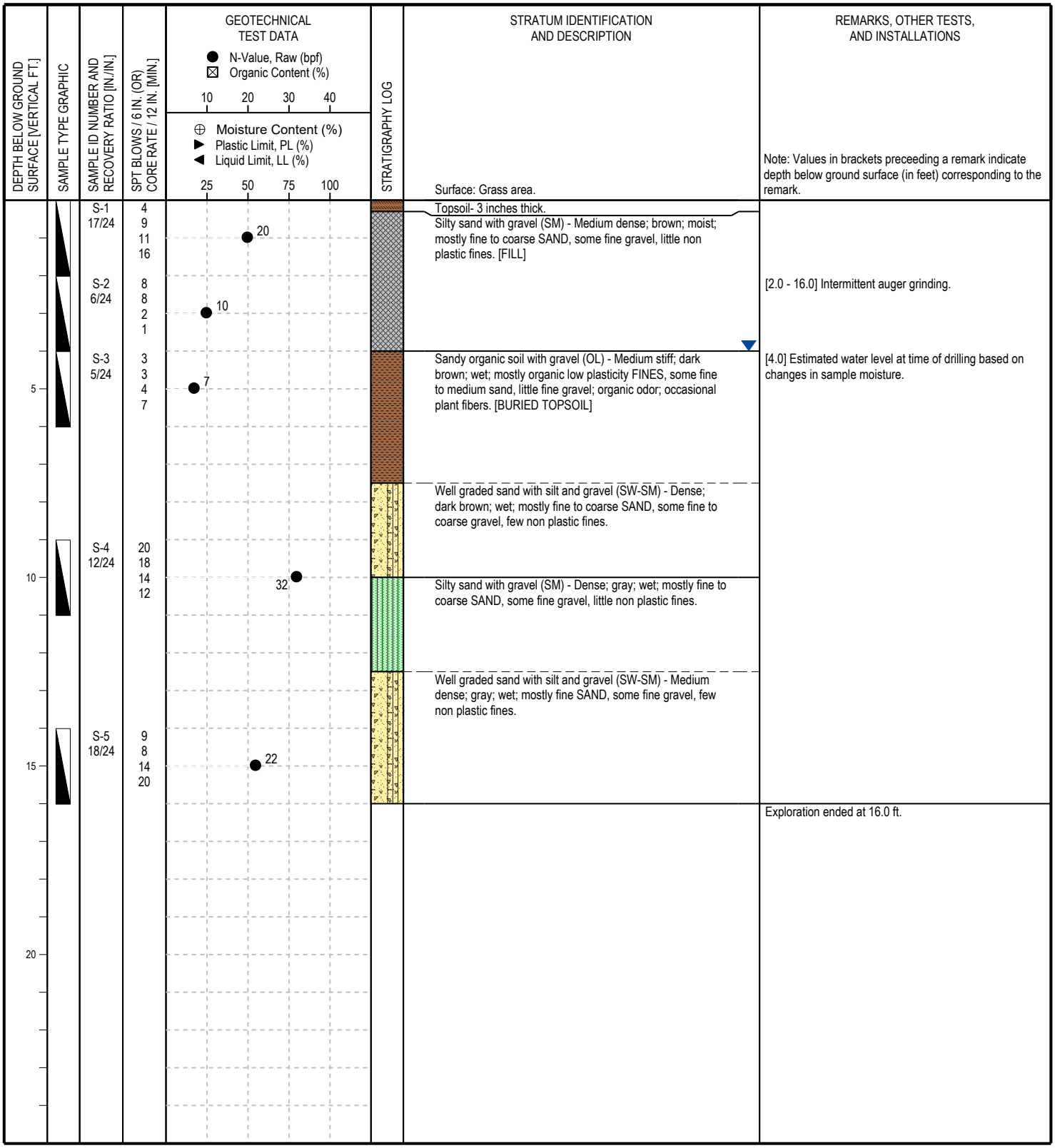
WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-2

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-3

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
				N-Value, Raw (bpf); Organic Content (%); 10 20 30 40; Moisture Content (%); Plastic Limit, PL (%); Liquid Limit, LL (%); 25 50 75 100		Surface: Forest debris.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 8/24	3 9 6 6	15		Topsoil- 5 inches thick.	
						Silty sand with gravel (SM) - Loose to medium dense; brown; moist; mostly fine SAND, some fine to coarse gravel, little non plastic fines.	
		S-2 10/24	5 4 5 5	9			[2.0 - 16.0] Intermittent auger grinding.
5		S-3 9/24	8 10 14 12	24		Well graded sand with silt and gravel (SW-SM) - Medium dense; light brown; moist to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines.	
10		S-4 8/24	14 14 12 9	26		▼	[10.0] Estimated water level at time of drilling based on changes in sample moisture.
15		S-5 15/24	8 8 11 22	19			
							Exploration ended at 16.0 ft.
20							

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

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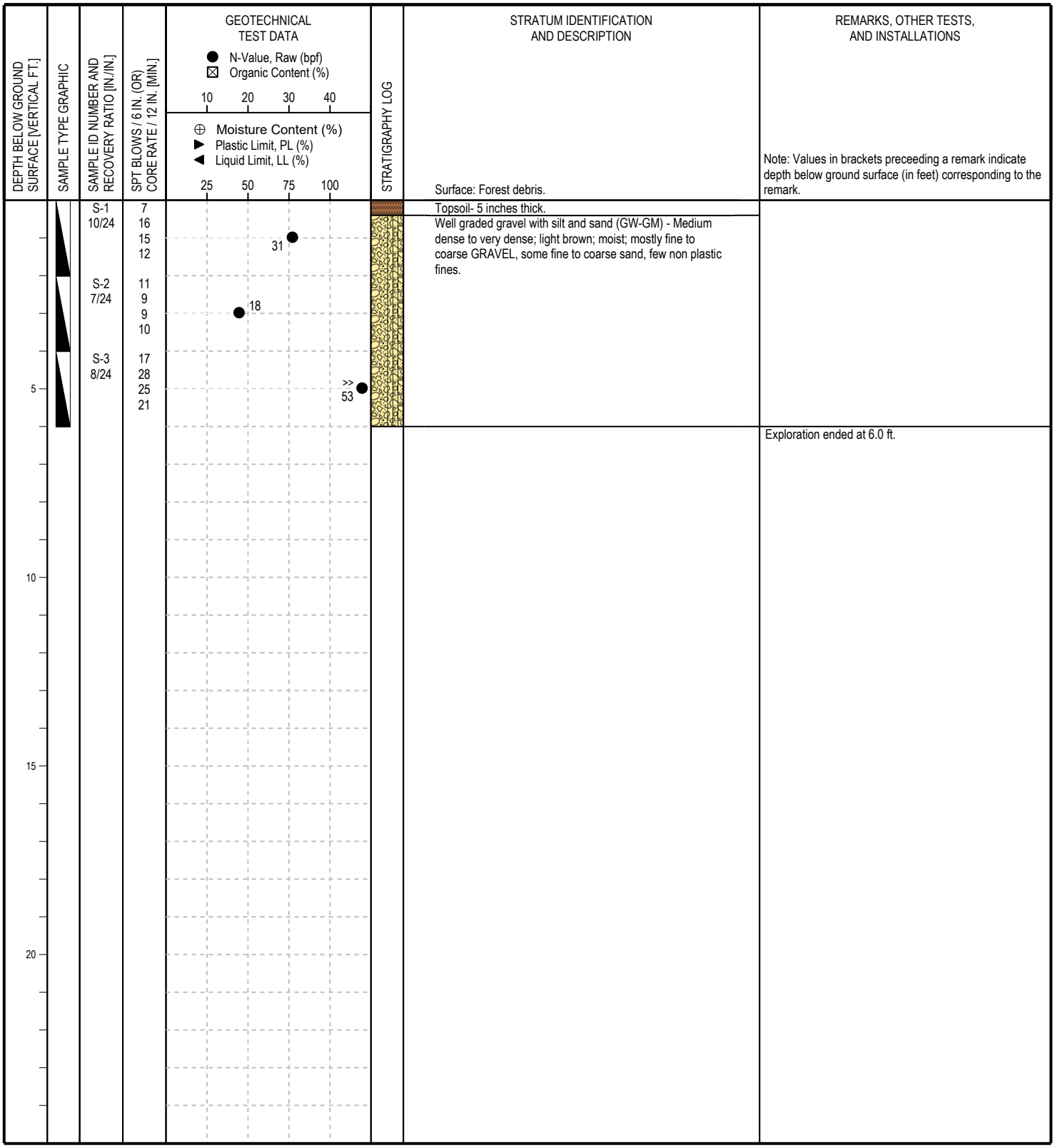
WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-4

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	6.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



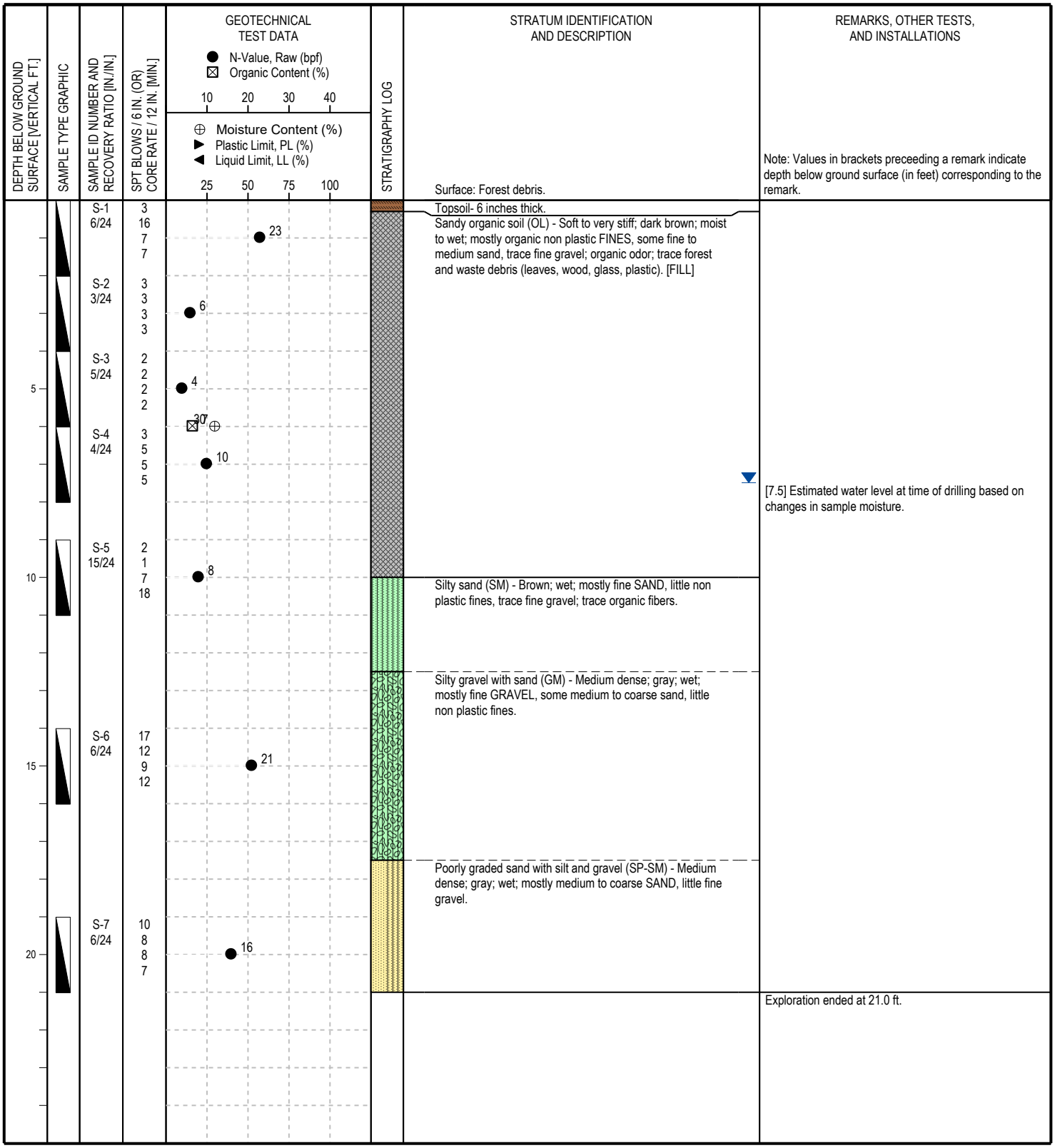
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-5

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 1 GENERAL INFORMATION

GENERAL NOTES AND USE OF LOGS

1.) Explorations were made by ordinary and conventional methods and with care adequate for Weston & Sampson's study and/or design purposes. The exploration logs are part of a specific report prepared by Weston & Sampson for the referenced project and client, and are an integral part of that report. Information and interpretations are subject to the explanations and limitations stated in the report. Weston & Sampson is not responsible for any interpretations, assumptions, projections, or interpolations made by others.

2.) Exploration logs represent general conditions observed at the point of exploration on the date(s) stated. Boundary lines separating soil and rock layers (strata) represent approximate boundaries only and are shown as solid lines where observed and dashed lines where inferred based on drilling action. Actual transitions may be gradual and changes may occur over time.

3.) Soil and rock descriptions are based on visual-manual examination of recovered samples, direct observation in test pits (when permissible), and laboratory testing (when conducted).

4.) Water level observations were made at the times and under the conditions stated. Fluctuations should be be expected to vary with seasons and other factors. Use of fluids during drilling may affect water level observations. The absence of water level observations does not necessarily mean the exploration was dry or that subsurface water will not be encountered during construction.

5.) Standard split spoon samplers may not recover particles with any dimension larger than 1-3/8 inches. Reported gravel conditions or poor sample recovery may not reflect actual in-situ conditions.

6.) Sections of this guide provide a general overview of Weston & Sampson's practices and procedures for *identifying* and *describing* soil and rock. These procedures are predominantly based on ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)*, the International Society of Rock Mechanics (ISRM) standards, and the *Engineering Geology Field Manual* published by the Bureau of Reclamation. Not all aspects of this guide relating to description and identification procedures of soil and rock may be applicable in all circumstances.

SAMPLER GRAPHICS

- Split Spoon (Standard) 2" OD, 1-3/8" ID
- Split Spoon (Oversize) 3" OD, 2-3/8" ID
- Shelby or Piston Tube 3" OD, 2-7/8" ID
- Double-Tube Rock Core Barrel 2" Core Diameter
- Direct Push with Acetate Liner Various Liner Sizes
- A — Auger Sample *(from cuttings or hand auger)*
- G — Grab Sample *(manual, from discrete point)*
- C — Composite Sample *(multiple grab samples)*

WELL GRAPHICS

- Cement concrete seal around casing or riser pipe
- Bentonite seal around casing or riser pipe
- Cement grout seal around casing or riser pipe
- Soil backfill around riser pipe or beneath screen
- Gravel backfill around screen or riser pipe
- Sand backfill around screen or riser pipe (filter sand)
- Solid-wall riser; Sch. 40 PVC, 1" ID unless noted otherwise
- Slotted screen; Sch. 40 PVC, 1" ID with machined slots

CAVING / SEEPAGE TERMS

The following caving and/or seepage terms may appear on a test pit log.

Caving Term	Criteria
Minor	less than 1 cubic ft.
Moderate	1 to 3 cubic ft.
Severe	greater than 3 cubic ft.

Seepage Term	Criteria
Slow	less than 1 gpm
Moderate	1 to 3 gpm
Fast	greater than 3 gpm

KEY TO WATER LEVELS

- Observed in exploration during advancement.
- Measured in exploration at completion, prior to backfilling or well installation.
- Measured in exploration after the stated stabilization period, prior to backfilling, or in well installation if noted.

DEFINITIONS OF COMMON TERMS

Sample Recovery Ratio - The length of material recovered in a drive or push type sampler over the length of sampler penetration, in inches (e.g. 18/24).

Standard Penetration Test (*SPT*) - An in-situ test where a standard split-spoon sampler is driven a distance of 12 or 18 inches (after an initial 6-inch seating interval) using a 140-lb. hammer falling 30 inches for each blow.

SPT Blows - The number of hammer blows required to drive a split-spoon sampler each consecutive 6-inch interval during a *Standard Penetration Test*. If no discernable advancement of a split spoon sampler is made after 50 consecutive hammer blows, 50/X indicates *sampler refusal* and is the number of blows required to drive the sampler X inches.

SPT N-Value (*N*) - The uncorrected blow count representation of a soil's penetration resistance over a 12-inch interval after an initial 6-in. seating interval, reported in blows per foot (bpf). The N-value is correlated to soil engineering properties.

Auger Refusal - No discernable advancement of the auger over a period of 5 minutes with full rig down pressure applied.

Casing Refusal (Driven) - Casing penetration of less than 6 inches after a minimum 50 blows of a drop hammer weighing 300 lbs. or a minimum 100 blows of a drop hammer weighing 140 lbs.

PID Measurement - A measurement (electronic reading) taken in the field using a photoionization detector (PID) to detect the presence of volatile organic compounds in a soil sample. Values are reported as benzene equivalent units in parts per million (ppm) unless noted otherwise.

Rock Quality Designation (RQD) - A qualitative index measure of the degree of jointing and fracture of a rock core taken from a borehole. The RQD is defined as the sum length of solid core pieces 4 inches or longer divided by the run (cored) length, expressed as a percentage. Higher RQD values may indicate fewer joints and fractures in the rock mass.

Fill (Made Ground) - A deposit of soil and/or artificial waste materials that has been placed or altered by human processes.

LABORATORY TESTS AND FIELD MEASUREMENTS

MC	Moisture Content	IC	1D Incremental Consolidation
OC	Organic Content	VS	Laboratory Vane Shear
PL	Plastic Limit	US	Unconfined Compression
LL	Liquid Limit	TC	Triaxial Compression
GC	Gravel Content	PP	Pocket (Hand) Penetrometer
SC	Sand Content	TV	Torvane (Hand Vane)
FC	Fines Content	PID	Photoionization Detector
DS	Direct Shear	FID	Flame Ionization Detector

BORING ADVANCEMENT METHODS

Hollow-Stem Auger Drilling - Utilizes continuous flight auger sections with hollow stems to advance the borehole. Drill rods and a plug are inserted into the auger stem to prevent the entrance of soil cuttings into the augers.

Rotary Wash Drilling - Utilizes downward pressure and rotary action applied to a non-coring bit while washing the cuttings to the surface using a circulating fluid injected down the drill rods. The borehole is supported with either steel casing or the drilling fluid. Where a casing is used, the borehole is advanced sequentially by driving the casing to the desired depth and then cleaning out the casing. The process of driving and cleaning the casing is commonly referred to as the 'drive-and-wash' technique.

Continuous Sampling - Includes a variety of methods and procedures during which the borehole is advanced via continuous recovery of soil samples. *Direct Push* sampling is a common method that uses static downward pressure combined with percussive energy to drive a steel mandrel into the ground at continuous intervals while recovering soil samples in disposable acetate liners.

Rock Coring - Utilizes downward pressure and rotary action applied to a core barrel equipped with a diamond-set or tungsten carbide coring bit. During conventional coring, the entire barrel is retrieved from the hole upon completion of a core run. Wireline coring allows for removal of the inner barrel assembly containing the actual core while the the drill rods and outer barrel remain in the hole. Various types and sizes of core barrels and bits are used.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 2
SOIL DESCRIPTION

SOIL CONSTITUENTS

Naturally occurring soils consist of one or more of the following matrix constituents defined in terms of particle size.

Constituent		U.S. Sieve Size			Observed Size (in.)		
Gravel	(Coarse)	3/4 in.	-	3 in.	3/4	-	3
Gravel	(Fine)	No. 4	-	3/4 in.	1/5	-	3/4
Sand	(Coarse)	No. 10	-	No. 40	1/16	-	1/5
Sand	(Medium)	No. 40	-	No. 10	1/64	-	1/16
Sand	(Fine)	No. 200	-	No. 40	1/300	-	1/64
Fines	(Silt or Clay)	Smaller than		No. 200	Less than		1/300

SOIL IDENTIFICATION

Soil identification refers to the grouping of soils with similar physical characteristics into a category defined by a **group name** and corresponding **group symbol** based on estimation of the matrix soil constituents to the nearest 5% and simple manual tests. Proportions of cobbles, boulders, and other non-matrix soil materials are not considered during this procedure but are included in the overall soil description if observed or thought to be present. Refer to the following descriptions and tables adapted from ASTM D2488.

Coarse-Grained Soil - Coarse-grained soils contain fewer than 50% fines and are identified based on the following table.

Primary Constituent	Fines Percent	Type of Fines and Gradation		Group Symbol	Group Name [1]
GRAVEL *% gravel > % sand*	≤ 5%	well graded		GW	Well graded gravel
		poorly graded		GP	Poorly graded gravel
	10%	clayey fines	well graded	GW-GC	Well graded gravel with clay
			poorly graded	GP-GC	Poorly graded gravel with clay
		silty fines	well graded	GW-GM	Well graded gravel wth silt
			poorly graded	GP-GM	Poorly graded gravel with silt
	15% to 45%	clay fines		GC	Clayey gravel
		silt fines		GM	Silty gravel
SAND *% sand ≥ % gravel*	≤ 5%	well graded		SW	Well graded sand
		poorly graded		SP	Poorly graded sand
	10%	clayey fines	well graded	SW-SC	Well graded sand with clay
			poorly graded	SP-SC	Poorly graded sand with clay
		silty fines	well graded	SW-SM	Well graded sand with silt
			poorly graded	SP-SM	Poorly graded sand with silt
	15% to 45%	clay fines		SC	Clayey sand
		silt fines		SM	Silty sand

[1] If soil is a gravel and contains 15% or more sand, add "with sand" to the group name. If soil is a sand and contains 15% of more gravel, add "with gravel" to the group name.

Inorganic Fine-Grained Soil - Fine-grained soils contain 50% or more fines and are identified based on the following table.

Plasticity Criteria	Dry Strength	Coarse Fraction S = Sand, G = Gravel		Group Symbol	Group Name [1]
Medium	Medium to high	< 15% S + G		CL	Lean clay
		≥ 30%	% S ≥ % G	CL	Sandy lean clay
		S + G	% S < % G	CL	Gravelly lean clay
Non-plastic	None to low	< 15% S + G		ML	Silt
		≥ 30%	% S ≥ % G	ML	Sandy silt
		S + G	% S < % G	ML	Gravelly silt
High	High to very high	< 15% S + G		CH	Fat clay
		≥ 30%	% S ≥ % G	CH	Sandy fat clay
		S + G	% S < % G	CH	Gravelly fat clay
Low to Medium	Low to medium	< 15% S + G		MH	Elastic silt
		≥ 30%	% S ≥ % G	MH	Sandy elastic silt
		S + G	% S < % G	MH	Gravelly elastic silt

[1] If soil contains 15% to 25% sand or gravel, add "with sand" or "with gravel" to the group name.

Organic Fine-Grained Soil - Fine-grained soils that contain enough organic particles to influence the soil properties are identified as Organic Soil and assigned the group symbol **OL** or **OH**.

Highly Organic Soil (Peat) - Soils composed primarily of plant remains in various stages of decomposition are identified as Peat and given the group symbol **PT**. Peat usually has an organic odor, a dark brown to black color, and a texture ranging from fibrous (original plant structure intact or mostly intact) to amorphous (plant structure decomposed to fine particles).

SOIL DESCRIPTION

Soils are *described* in the following general sequence. Deviations may occur in some instances.

Identification Components

(1) Group Name and Group Symbol

Description Components

(2) Consistency (Fine-Grained) or Apparent Density (Coarse-Grained)
(3) Color (*note, the term "to" may be used to indicate a gradational change*)
(4) Soil Moisture
(5) Matrix Soil Constituents (Gravel, Sand, Fines)
  └► Proportion (*by weight*), particle size, plasticity of fines, angularity, etc.
(6) Non-Matrix Soil Materials and Proportions (*by volume*)
(7) Other Descriptive Information (Unusual Odor, Structure, Texture, etc.)
(8) [Geologic Formation Name or Soil Survey Unit]

SPT N-VALUE CORRELATIONS

Consistency	SPT N-Value	Apparent Density	SPT N-Value
Very soft	0 - 2	Very loose	0 - 5
Soft	2 - 4	Loose	5 - 10
Medium stiff	4 - 8	Medium dense	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very stiff	15 - 30	Very dense	> 50
Hard	> 30		

SOIL MOISTURE

Dry..... Apparent absence of moisture; dry to the touch.
Moist..... Damp but no visible water.
Wet..... Visible free water; saturated.

PROPORTIONS / PERCENTAGES

Proportions of gravel, sand, and fines (excluding cobbles, boulders, and other constituents) are stated in the following terms indicating a range of percentages by weight (to nearest 5%) of the minus 3-in. soil fraction and add up to 100%.

Mostly ..... 50% - 100%
Some ..... 30% - 45%
Little ..... 15% - 25%
Few ..... 5% - 10%
Trace..... Less than 5%

Proportions of cobbles, boulders, and other non-matrix soil materials including artificial debris, roots, plant fibers, etc. are stated in the following terms indicating a range of percentages by volume (to the nearest 5%) of the total soil.

Numerous ..... 40% - 50%
Common ..... 25% - 35%
Occasional ..... 10% - 20%
Trace..... Less than 5%

PLASTICITY (FINES ONLY)

Non-plastic.....Dry specimen ball falls apart easily. Cannot be rolled into thread at any moisture content.
Low.....Dry specimen ball easily crushed with fingers. Can be rolled into 1/8-in. thread with some difficulty.
Medium.....Difficult to crush dry specimen ball with fingers. Easily rolled into 1/8-in. thread.
High.....Cannot crush dry specimen ball with fingers. Easily rolled and re-rolled into 1/8-in. thread.

COBBLES AND BOULDERS

Cobbles - Particles of rock that will pass a 12-in. square opening and be retained on a 3-in. sieve.

Boulders - Particles of rock that will not pass a 12-in. square opening.

Note: Where the percentage (by volume) of cobbles and/or boulders cannot be accurately or reliably estimated, the terms "with cobbles", "with boulders", or "with cobbles and boulders" may be used to indicate observed or inferred presence.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 3
ROCK DESCRIPTION

ROCK DEFINITION

Where reported on an exploration log, *rock* is defined as any naturally formed aggregate of mineral matter occurring in larges masses or fragments. This definition of rock should not be taken as a replacement for any definitions relating to rock and/or rock excavation defined in construction documents. Intensely weathered or decomposed rock that is friable and can be reduced to gravel size particles or smaller by normal hand pressure is identified and described as soil. Poorly indurated formational materials which display both rock-like and soil-like properties are identified and described as rock followed by the soil description. In such cases, the term "poorly indurated" or "weakly cemented" is added to the rock name (e.g. weakly cemented sandstone).

ROCK IDENTIFICATION

Rock is identified by a combination of *rock type* (igneous, metamorphic, or sedimentary) followed by the the *rock name* (e.g. granite, schist, sandstone).

ROCK DESCRIPTION

Rock descriptions are presented in the following general sequence. The detail of description is dictated by the complexity and objectives of the project.

Identification Components

(1) Rock Type and Name

Description Components

(2) Rock Grain Size (*for clastic sedimentary rock*)
(3) Crystal Size (*for igneous and metamorphic rock*)
(4) Bedding Spacing (*for sedimentary rock*)
(5) Color
(6) Hardness and Weathering Descriptors
(7) Fracture Density
(8) [Geologic Formation Name]

ROCK QUALITY DESIGNATION

$$\text{RQD (\%)} = \frac{\Sigma \text{ Length of intact core pieces} \geq 4 \text{ inches}}{\text{Total length of core run (inches)}} \times 100$$

The RQD should correlate with the fracture density in most cases. Higher RDQ values generally indicate fewer joints and fractures.

GRAIN / CRYSTAL SIZE

Grain Size for Clastic Sedimentary Rock

The names of clastic sedimentary rocks are generally based on their predominant clast or grain size (e.g. fine sandstone, medium sandstone, coarse gravel conglomerate, cobble conglomerate, siltstone, claystone).

Crystal Size for Igneous and Metamorphic Rock

Grain Size Description	Average Crystal Size (in.)
Very coarse grained (pegmatitic)	Greater than or equal to 3/8
Coarse-grained	Between 3/16 and 3/8
Medium-grained	Between 1/32 and 3/16
Fine-grained	Between 1/250 and 1/32
Aphanitic	Less than or equal to 1/250

BEDDING SPACING

Bedding Description	Thickness / Spacing
Massive	Less than 10 ft.
Very thickly bedded	3 ft. to 10 ft.
Thickly bedded	1 ft. to 3 ft.
Moderately bedded	4 in. to 1 ft.
Thinly bedded	1 in. to 4 in.
Very thinly bedded	1/4 in. to 1 in.
Laminated	Less than 1/4 in.

Note: Bedding is generally only applicable to sedimentary or bedded volcanic rocks.

HARDNESS

Hardness	Criteria
Extremely hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows.
Very hard	Cannot be scratched with a pocketknife or sharp pick with difficulty. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with with a pocketknife or sharp pick with difficulty. Breaks with heavy hammer blows.
Moderately hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows.
Moderately soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick. Breaks with light to moderate manual pressure.
Very soft	Can be readily indented, grooved, or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

WEATHERING (INTACT ROCK)

Weathering Description	Discoloration and/or Oxidation	General Characteristics
Fresh	Body of rock and fracture surfaces are not discolored or oxidized.	Rock texture unchanged. Hammer rings when crystalline rocks are struck.
Slightly weathered	Discoloration or oxidation limited to surface of, or short distance from, fractures. Most surfaces exhibit minor to complete discoloration.	Rock texture preserved. Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately weathered	Discoloration or oxidation extends usually throughout. Fe-Mg minerals appear rusty. All fracture surfaces are discolored or oxidized.	Rock texture generally preserved. Hammer does not ring when rock is struck. Body of rock slightly weakened.
Intensely weathered	Discoloration or oxidation throughout. Feldspar and Fe-Mg minerals altered to clay to some extent. All fracture surfaces are discolored or oxidized and friable.	Rock texture altered by chemical disintegration. Can usually be broken with moderate to heavy manual pressure or by light hammer blow . Body of rock is significantly weakened.
Decomposed	Discoloration or oxidation throughout but resistant minerals such as quartz may be unaltered. All feldspar and Fe-Mg minerals are completely altered to clay.	Resembles a soil; partial or complete remnant rock structure may be preserved. Can be granulated by hand. Resistant minerals may present as stringers or dikes.

FRACTURE DENSITY

Description	Observed Fracture Density
Unfractured	No fractures
Very slightly fractured	Core lengths greater than 3 ft.
Slightly fractured	Core lengths mostly from 1 ft. to 3 ft.
Moderately fractured	Core lengths mostly from 4 in. to 1 ft.
Intensely fractured	Core lengths mostly from 1 in. to 4 in.
Very intensely fractured	Mostly chips and fragments

Note: Fracture density is based on the fracture spacing in recovered core, measured along the core axis (excluding mechanical breaks).

Attachment B
Geotechnical Laboratory Test Results

THIELSCH ENGINEERING

195 Frances Avenue
Cranston RI, 02910
Phone: (401)-467-6454
Fax: (401)-467-2398
thielsch.com
Let's Build a Solid Foundation

Client Information:
Weston & Sampson
Foxborough, MA
PM: Matthew Zanchi
Assigned By: Matthew Zanchi
Collected By: Client

Project Information:
Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA 02482
W&S Project Number: ENG21-0701
Summary Page: 1 of 1
Report Date: 10.18.2021

LABORATORY TESTING DATA SHEET, Report No.: 7421-K-B009

Boring No.	Sample No.	Depth (ft)	Laboratory No.	Identification Tests								Proctor / CBR / Permeability Tests								Laboratory Log and Soil Description
				As Received Moisture Content %	LL %	PL %	Gravel %	Sand %	Fines %	Org. %	G_s	Dry unit wt. pcf	Test Moisture Content %	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) (Corr.)	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec	
				D2216	D4318		D6913/D422			D2974	D854			D1557						
B-1	S-3	4-6	21-S-B280				9.4	74.0	16.6											Light Brown silty sand
B-5	S-4	6-8	21-S-B281	29.9						6.6										Organic Content Only

Date Received: 10.08.2021

Reviewed By: Pamela LaBlanc

Date Reviewed: 10.18.2021

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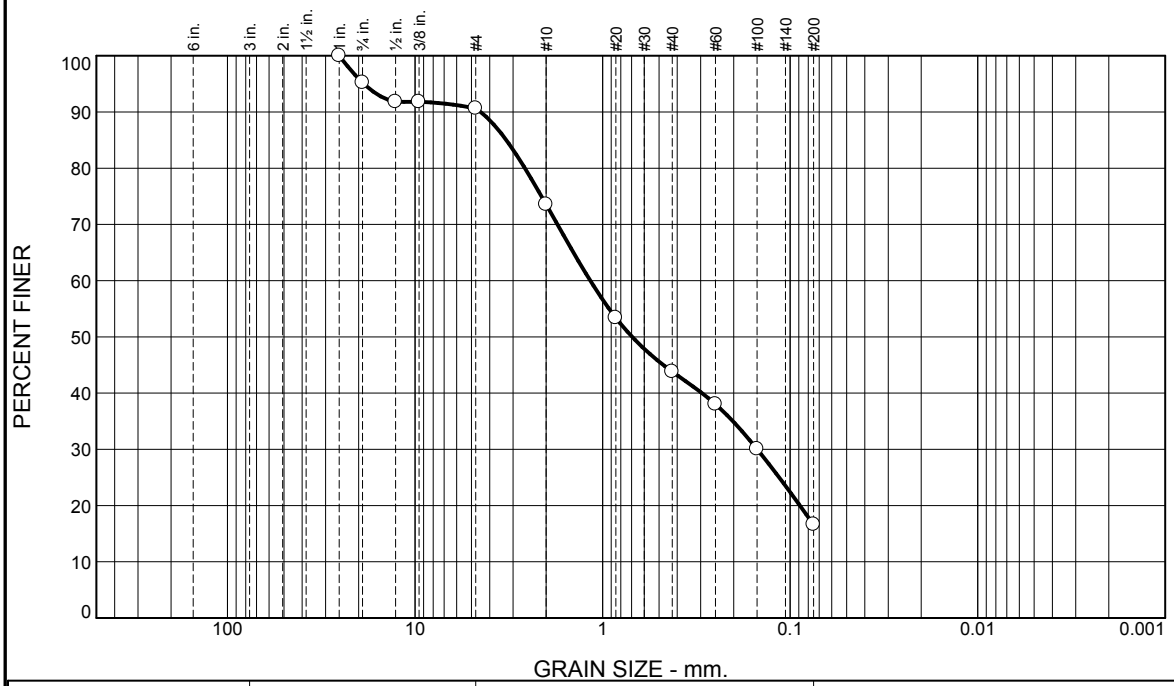
Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.8	4.6	17.0	29.8	27.2	16.6	

Test Results (D6913 & ASTM D 1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
3/4"	95.2		
1/2"	91.8		
3/8"	91.8		
#4	90.6		
#10	73.6		
#20	53.4		
#40	43.8		
#60	38.0		
#100	30.0		
#200	16.6		

* (no specification provided)

Material Description

Light Brown silty sand

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= SM **AASHTO (M 145)=** A-1-b

Coefficients

D_{90}= 4.4663 D_{85}= 3.2627 D_{60}= 1.1624
D_{50}= 0.6960 D_{30}= 0.1497 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 10.08.2021 **Date Tested:** 10.13.2021

Tested By: RL / DN

Checked By: Ronelle LeBlanc, E.I.T.

Title: Laboratory Coordinator

Source of Sample: B-1 **Depth:** 4-6
Sample Number: S-3 **Date Sampled:**

Thielsch Engineering Inc.

Cranston, RI

Client: Weston & Sampson

Project: Morses Pond Beach and Bath House
Morses Pond Access Rd, Wellesley, MA 02482

Project No: ENG21-0701 **Figure** 21-S-B280

Attachment C
Important Information about this
Geotechnical-Engineering Report

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

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Appendix E:

Sanborn Fire Insurance Maps

Morses Pond
99 Turner Road
Wellesley, MA 02482

Inquiry Number: 8064784.3
July 31, 2025

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

07/31/25

Site Name:

Morses Pond
99 Turner Road
Wellesley, MA 02482
EDR Inquiry # 8064784.3

Client Name:

Weston and Sampson Engineers
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
Contact: Melissa Davis

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Certified Sanborn Results:

Certification # 7D6F-46AD-A5EF

PO # NA

Project ENG25-0709

Maps Provided:

1962
1949
1927

Sanborn® Library search results

Certification #: 7D6F-46AD-A5EF

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Sanborn Sheet Key

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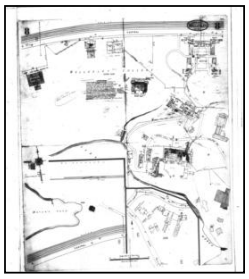
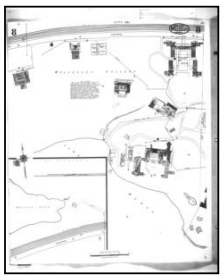
1962 Source Sheets



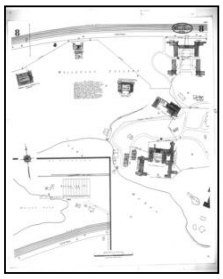
Volume 1, Sheet 8
1962

1949 Source Sheets

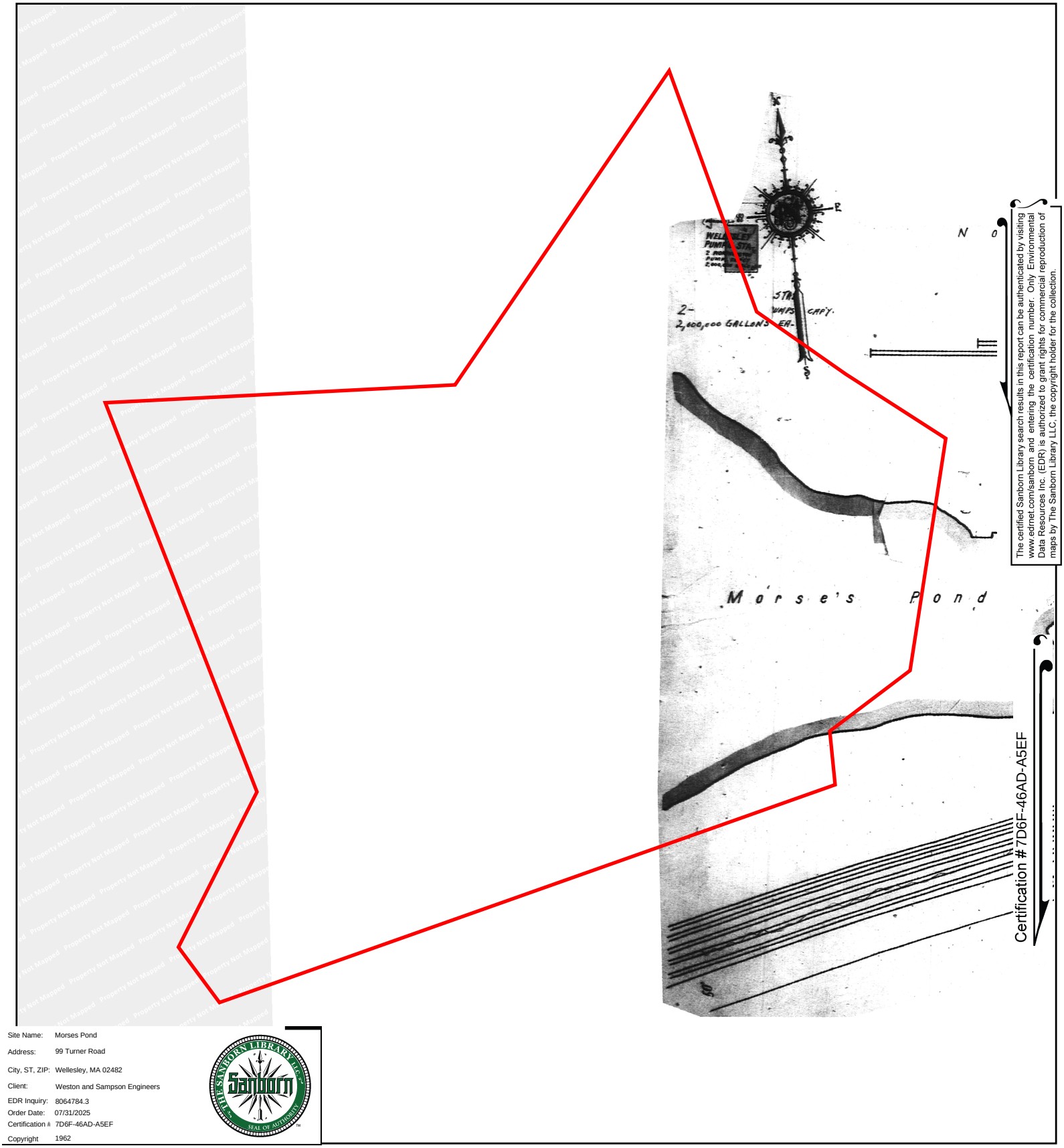


Volume 1, Sheet 8
1949

1927 Source Sheets



Volume 1, Sheet 8
1927



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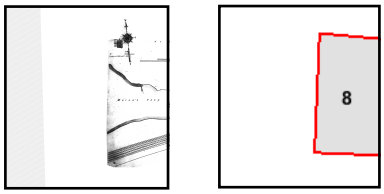
Certification #7D6F-46AD-A5EF

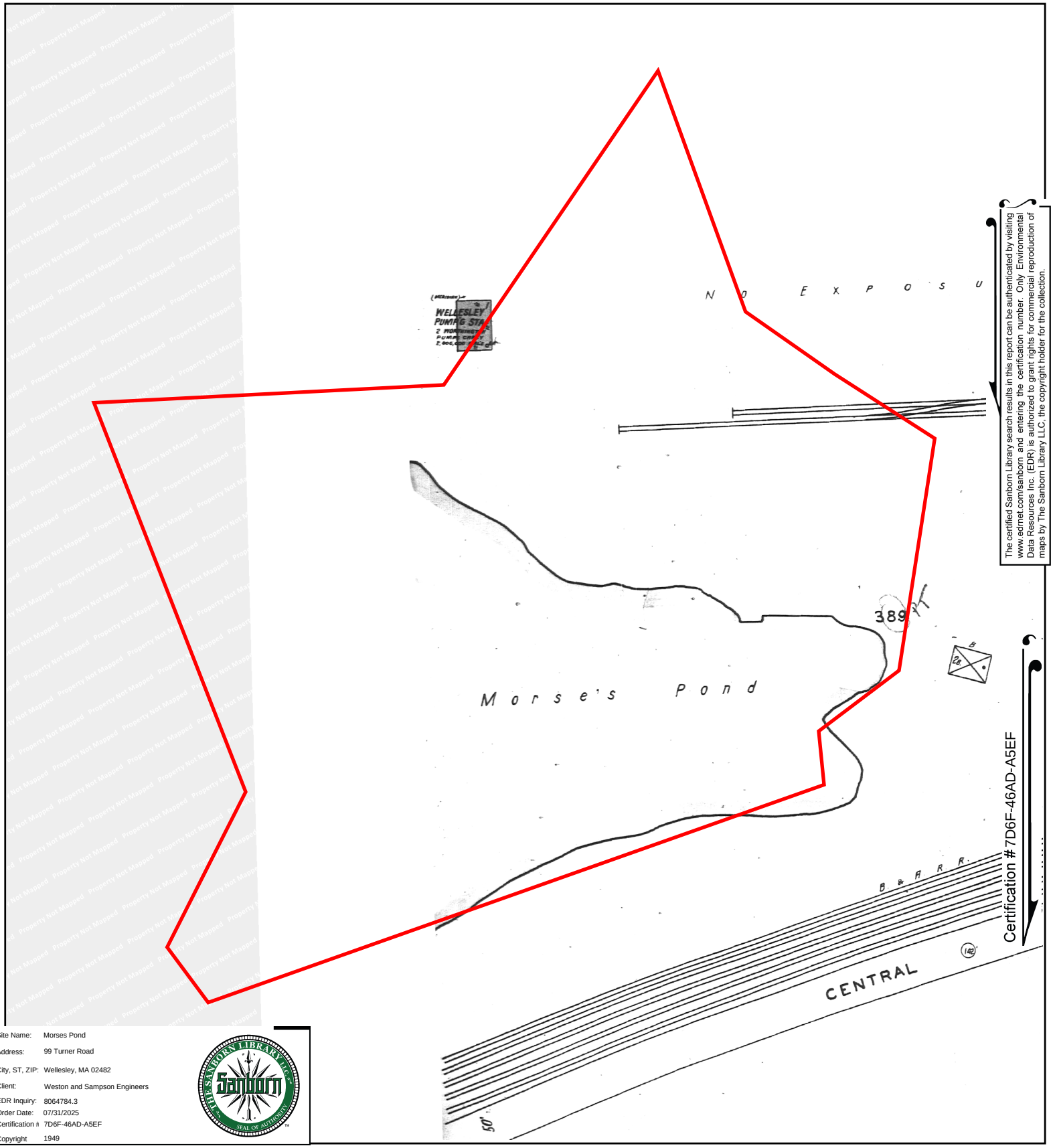
Site Name: Morses Pond
Address: 99 Turner Road
City, ST, ZIP: Wellesley, MA 02482
Client: Weston and Sampson Engineers
EDR Inquiry: 8064784.3
Order Date: 07/31/2025
Certification #: 7D6F-46AD-A5EF
Copyright: 1962

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 8

0 Feet 150 300 600



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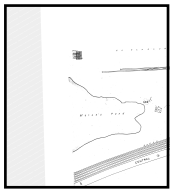
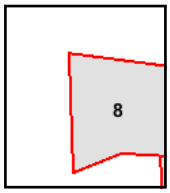
Site Name: Morses Pond
Address: 99 Turner Road
City, ST, ZIP: Wellesley, MA 02482
Client: Weston and Sampson Engineers
EDR Inquiry: 8064784.3
Order Date: 07/31/2025
Certification #: 7D6F-46AD-A5EF
Copyright: 1949

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

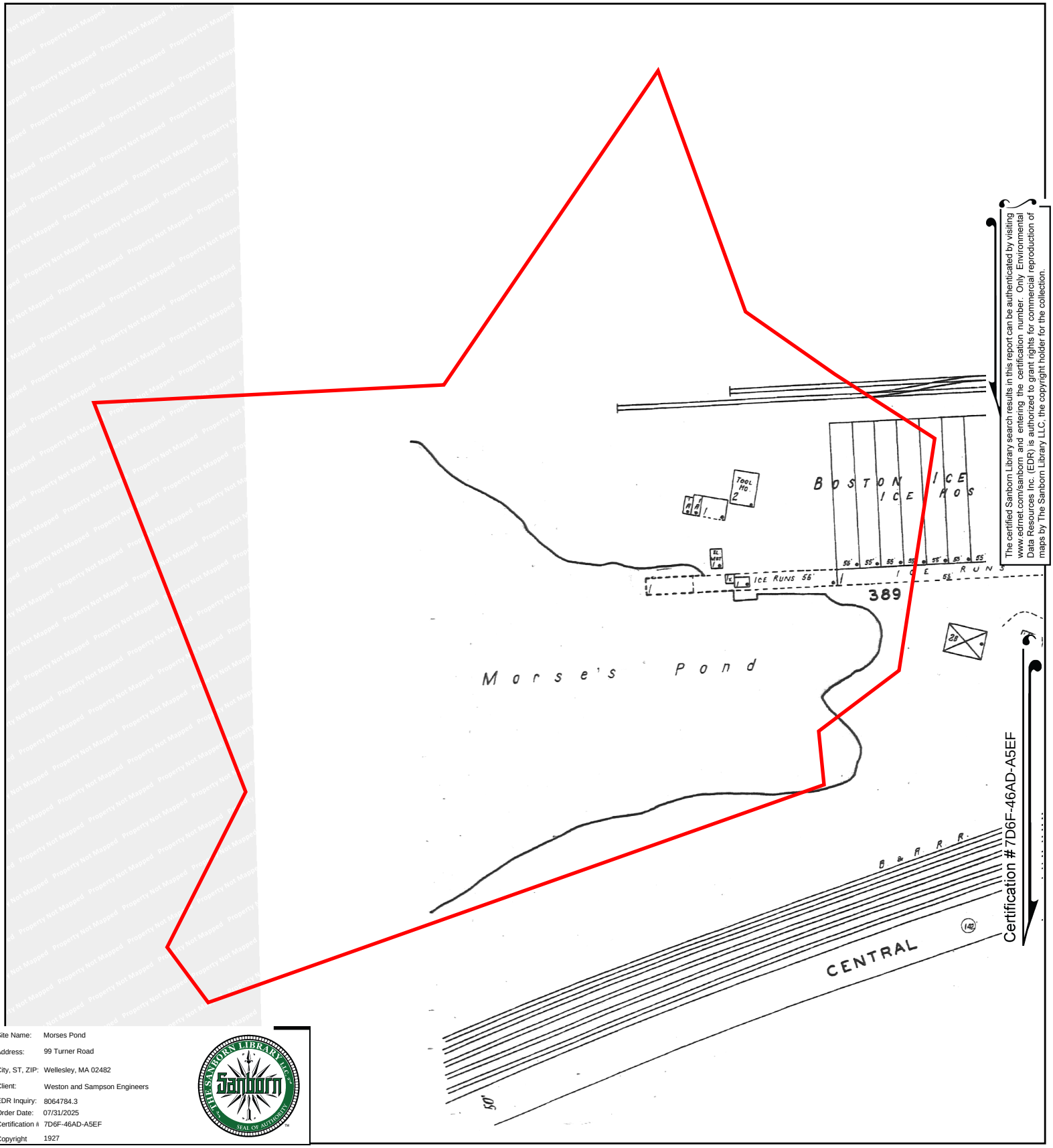




Volume 1, Sheet 8

0 Feet 150 300 600

N



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

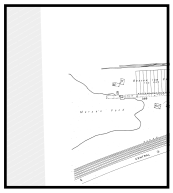
Certification #7D6F-46AD-A5EF

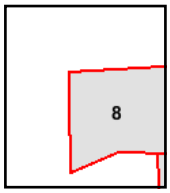
Site Name:	Morses Pond
Address:	99 Turner Road
City, ST, ZIP:	Wellesley, MA 02482
Client:	Weston and Sampson Engineers
EDR Inquiry:	8064784.3
Order Date:	07/31/2025
Certification #	7D6F-46AD-A5EF
Copyright	1927

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600

Volume 1, Sheet 8





N

Appendix F:

Topographic Maps

Morses Pond
99 Turner Road
Wellesley, MA 02482

Inquiry Number: 8064784.4
July 31, 2025

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

07/31/25

Site Name:

Morses Pond
99 Turner Road
Wellesley, MA 02482
EDR Inquiry # 8064784.4

Client Name:

Weston and Sampson Engineers
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
Contact: Melissa Davis

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Weston and Sampson Engineers were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: ENG25-0709

Coordinates:

Latitude:	42.296475 42° 17' 47" North
Longitude:	-71.316875 -71° 19' 1" West
UTM Zone:	Zone 19 North
UTM X Meters:	309010.17
UTM Y Meters:	4685293.79
Elevation:	165.57' above sea level

Maps Provided:

2021	1950
2018	1943
2015	1918
2012	1915
1987	1894
1977	
1970	
1958	

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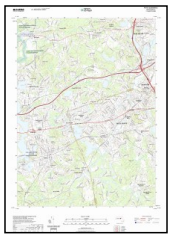
Topo Sheet Key

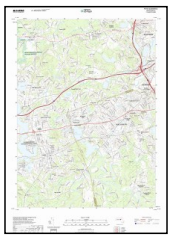
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2021 Source Sheets



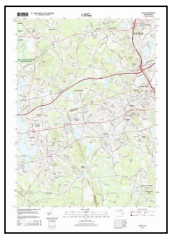
Natick
2021
7.5-minute, 24000

2018 Source Sheets



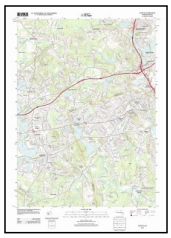
Natick
2018
7.5-minute, 24000

2015 Source Sheets



Natick
2015
7.5-minute, 24000

2012 Source Sheets



Natick
2012
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1987 Source Sheets

Framingham
1987
7.5-minute, 25000
Aerial Photo Revised 1981

1977 Source Sheets

Natick
1977
7.5-minute, 25000
Aerial Photo Revised 1977

1970 Source Sheets

Natick
1970
7.5-minute, 24000
Aerial Photo Revised 1969

1958 Source Sheets

Natick
1958
7.5-minute, 24000
Aerial Photo Revised 1957

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1950 Source Sheets

Natick
1950
7.5-minute, 24000

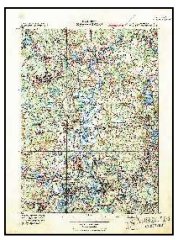
1943 Source Sheets

Natick
1943
7.5-minute, 31680

1918 Source Sheets

Framingham
1918
15-minute, 62500

1915 Source Sheets



FRAMINGHAM
1915
15-minute, 62500

Topo Sheet Key

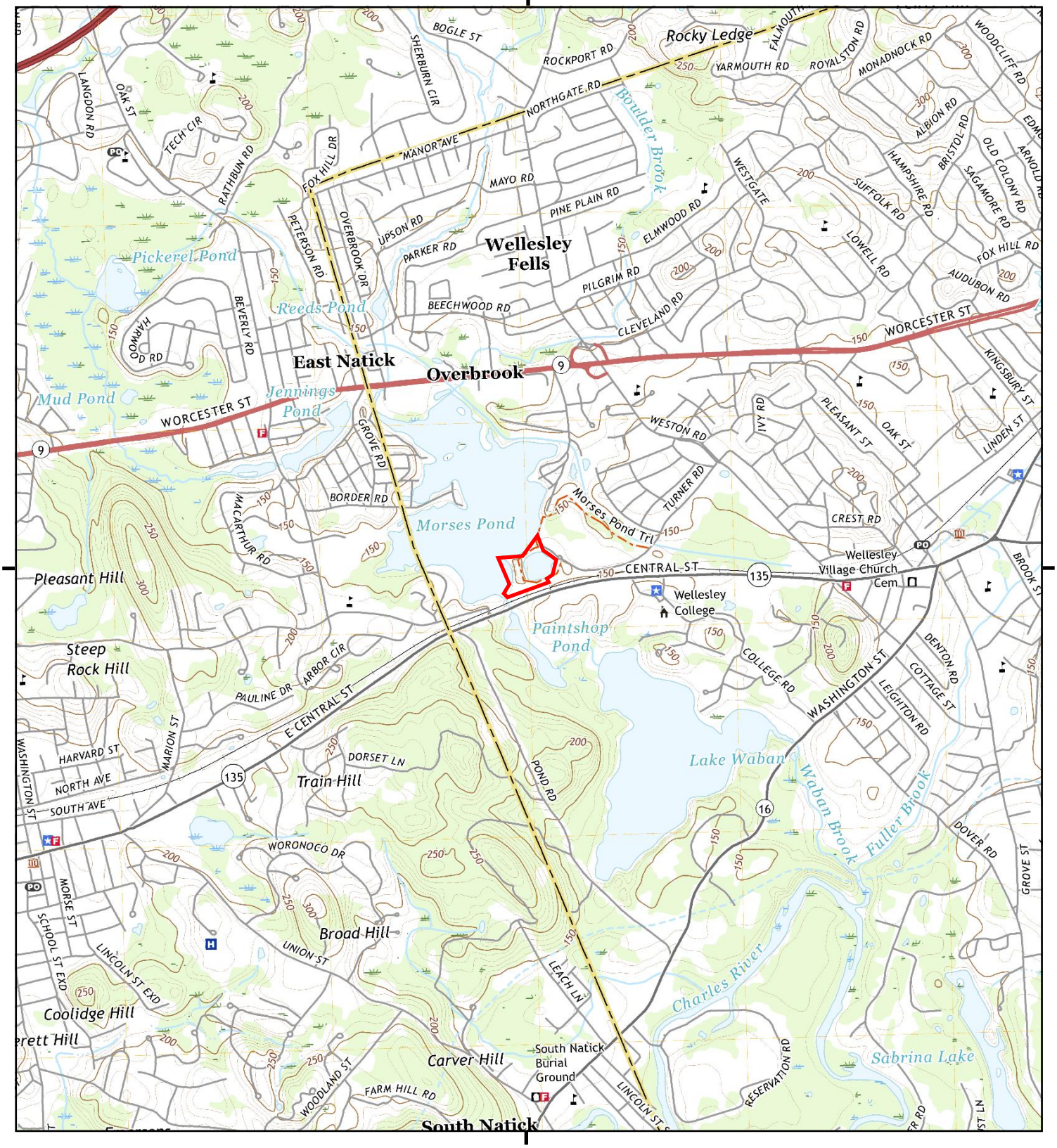
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1894 Source Sheets

Framingham
1894
15-minute, 62500

Historical Topo Map

2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

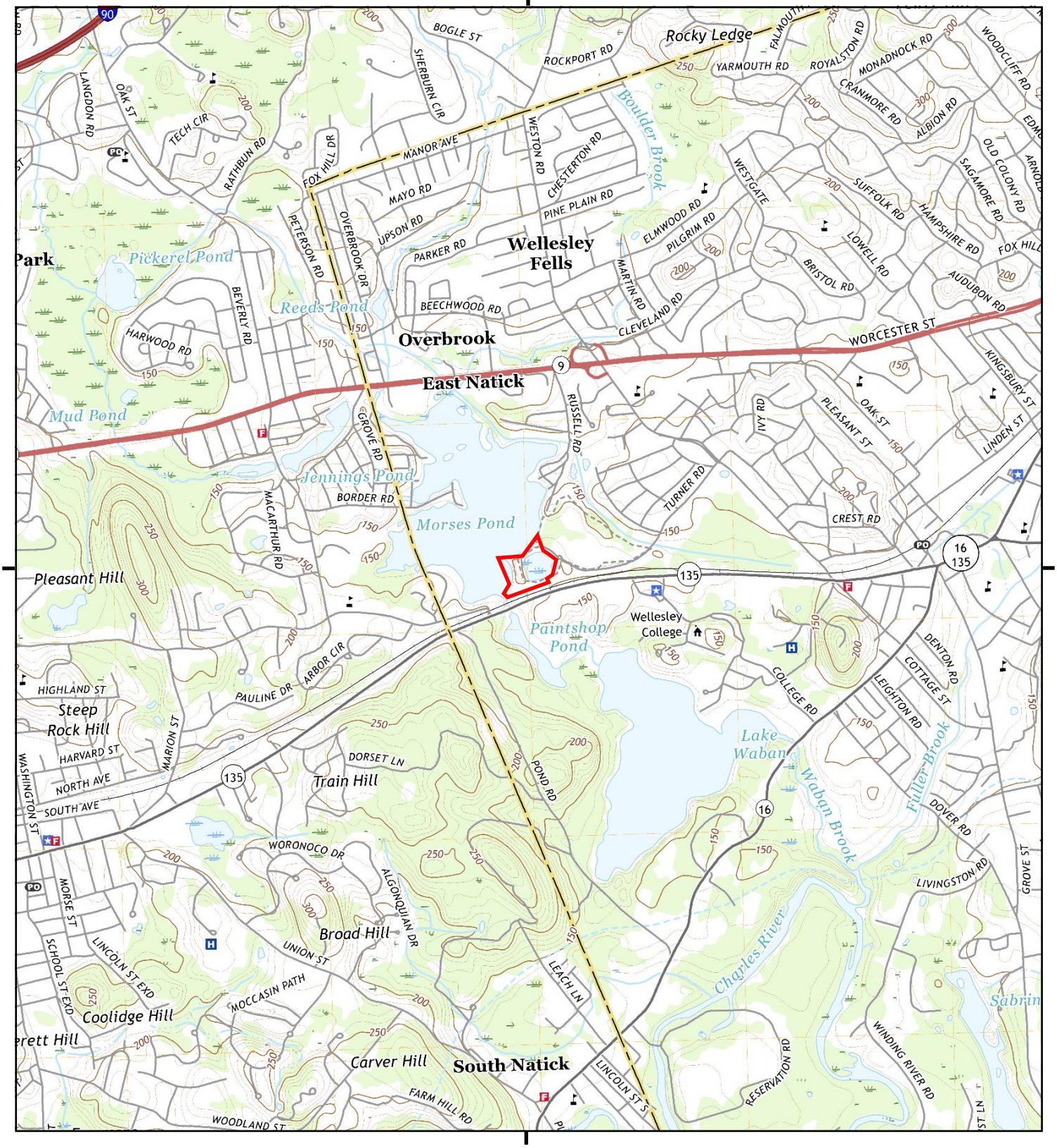
TP, Natick, 2021, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

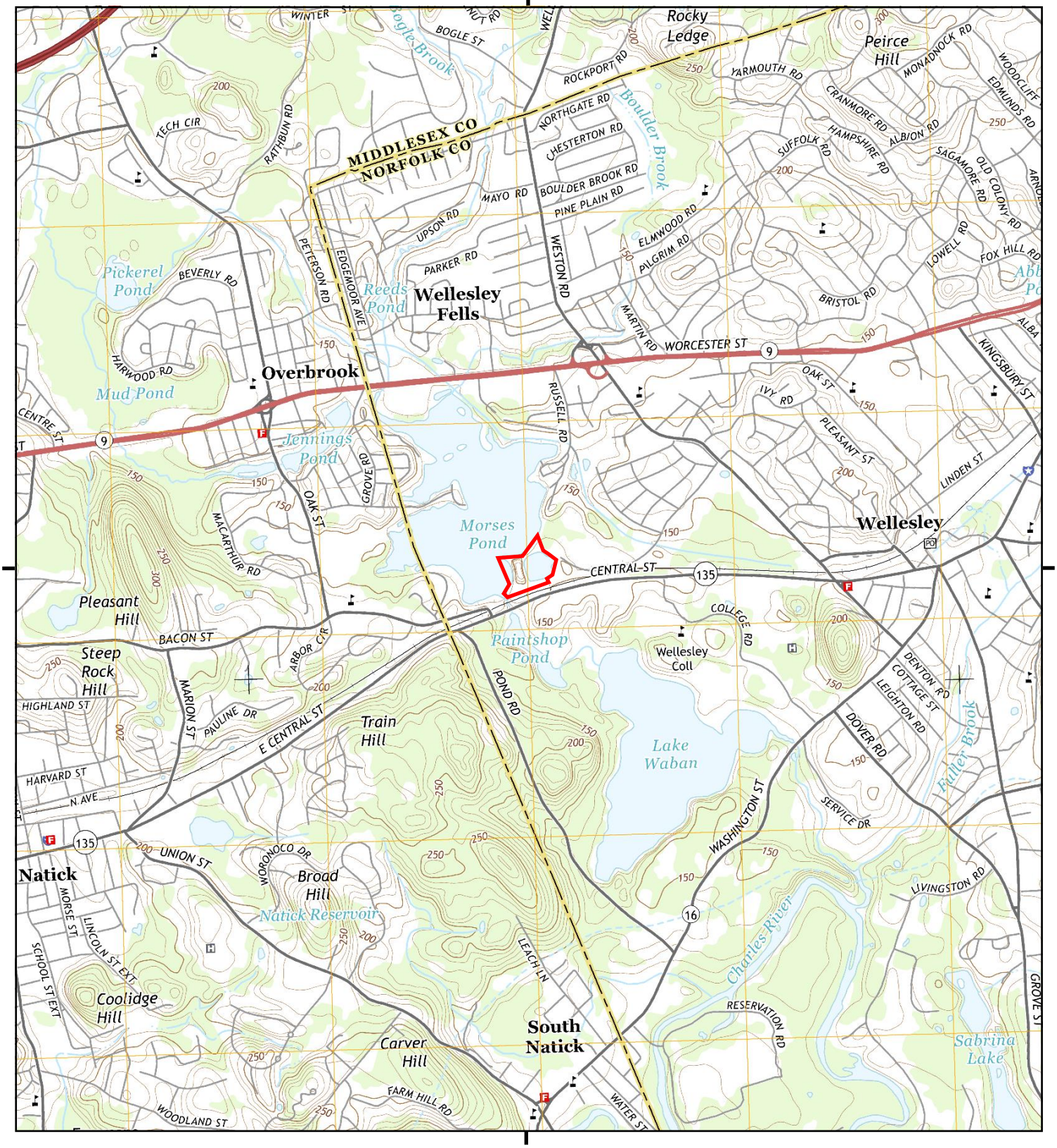
TP, Natick, 2018, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

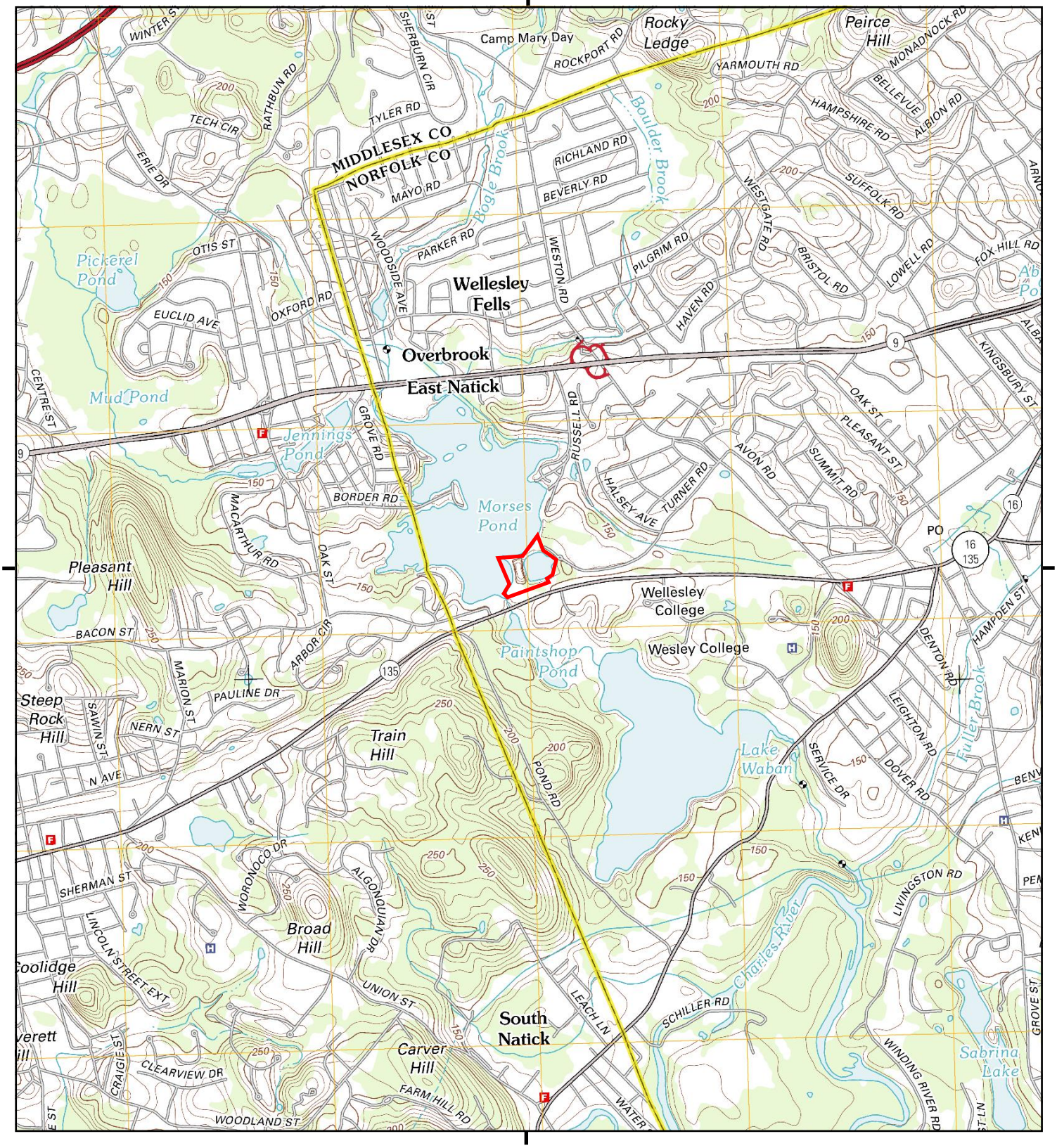
TP, Natick, 2015, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

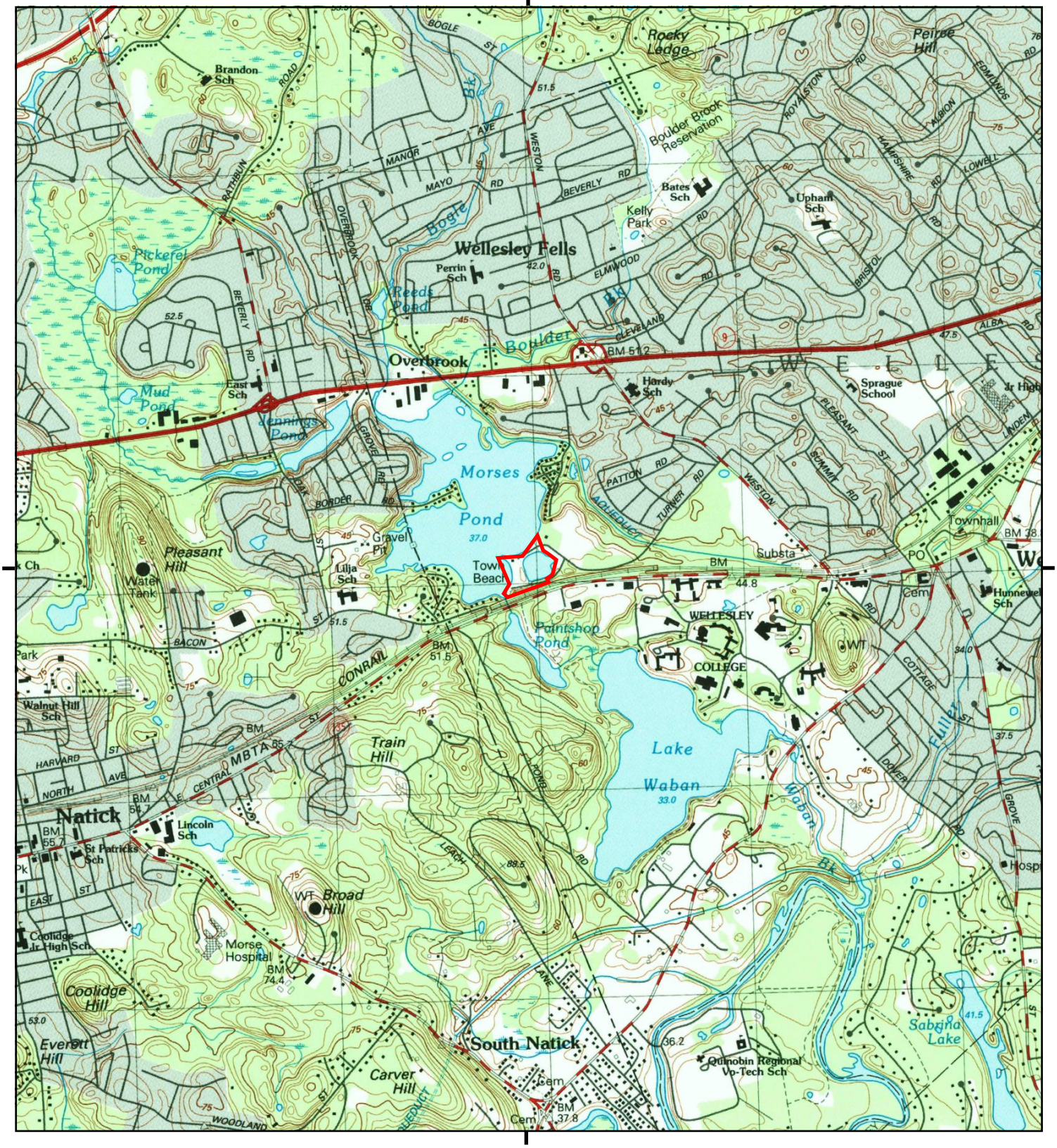
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Natick, 2012, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

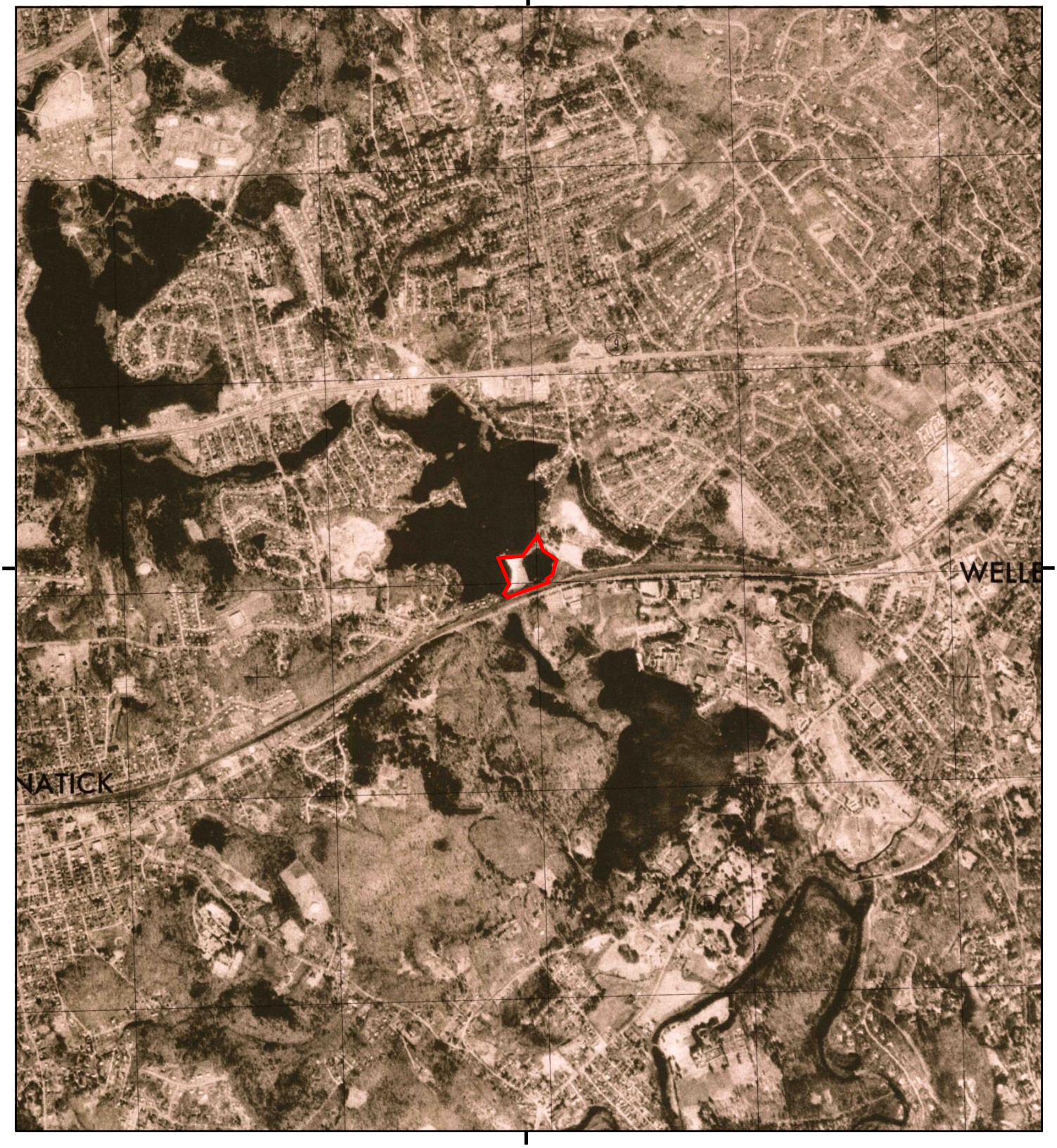
TP, Framingham, 1987, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N

Historical Topo Map

1977



This report includes information from the following map sheet(s).

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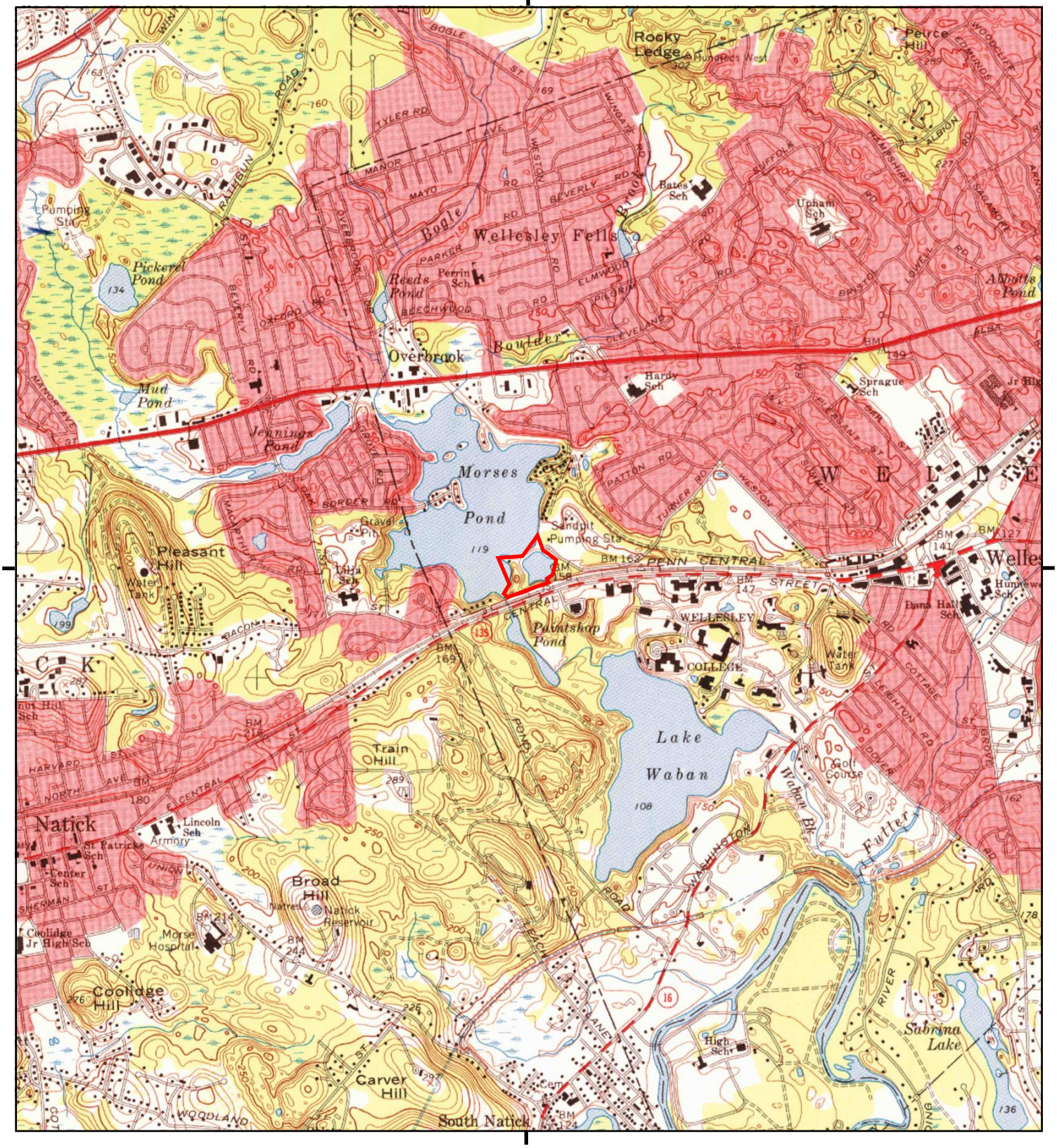
NW N NE
W E
SW S SE

TP, Natick, 1977, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



This report includes information from the following map sheet(s).

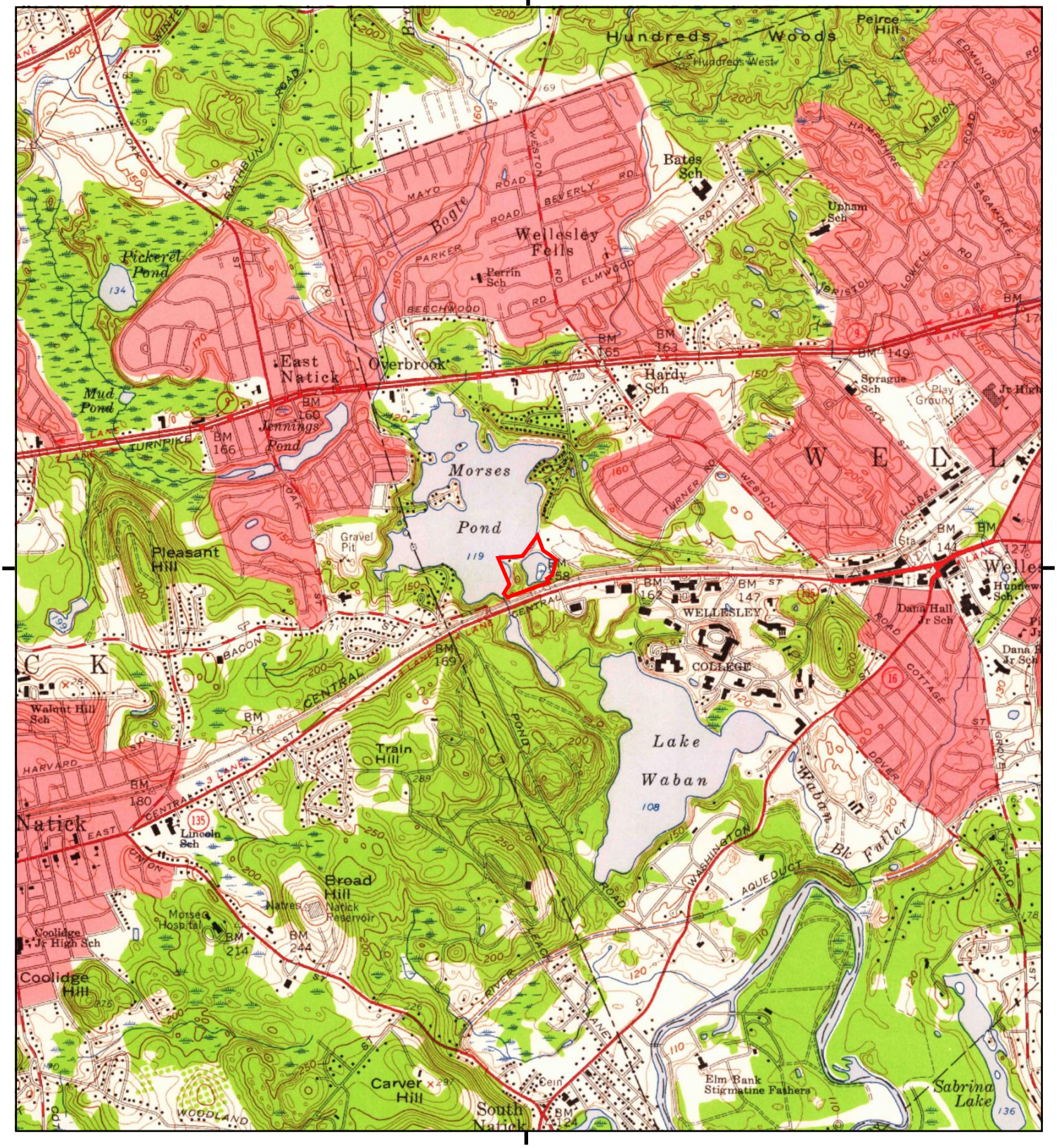
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Natick, 1970, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



This report includes information from the following map sheet(s).

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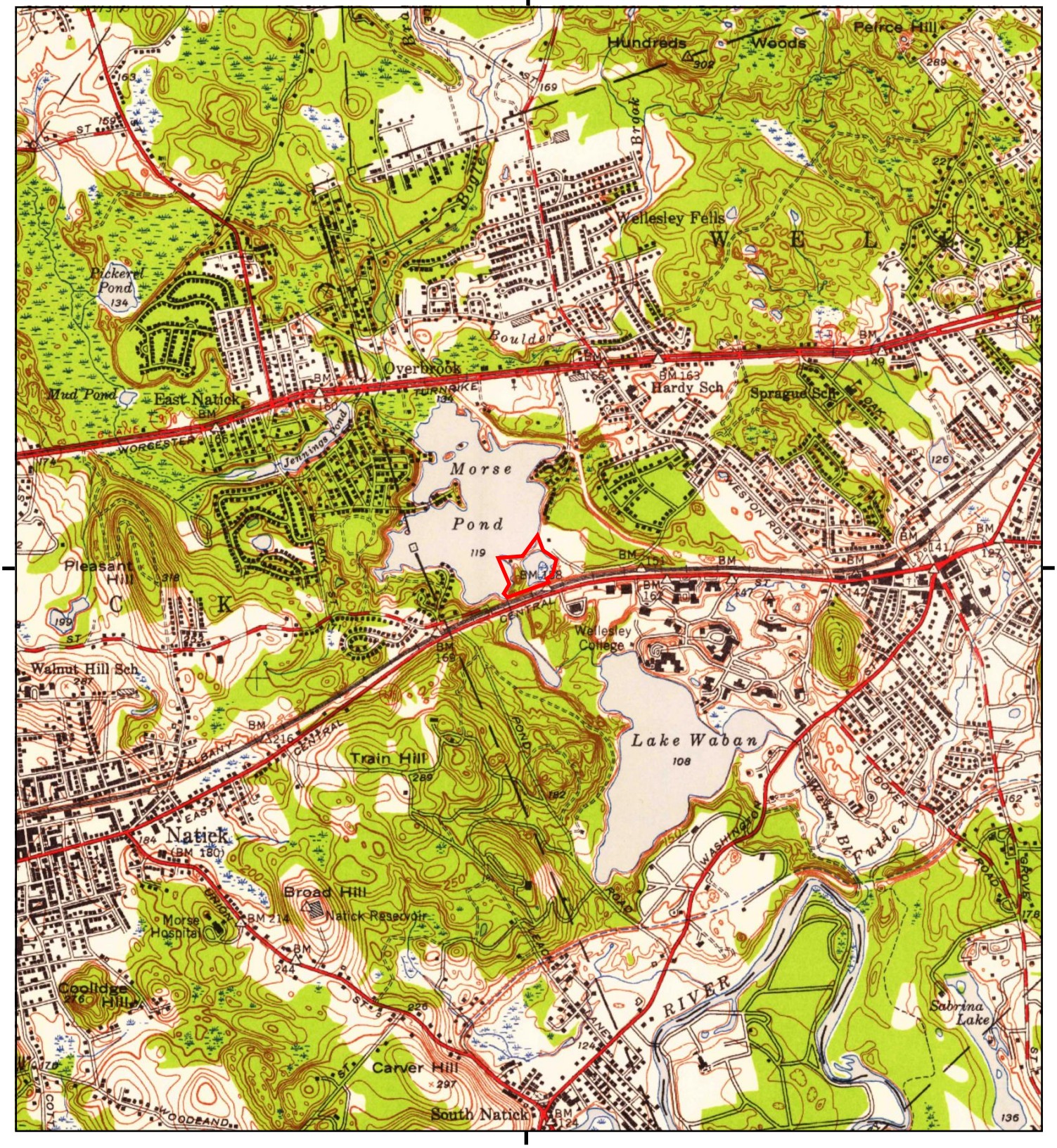
NW N NE
W E
SW S SE

TP, Natick, 1958, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

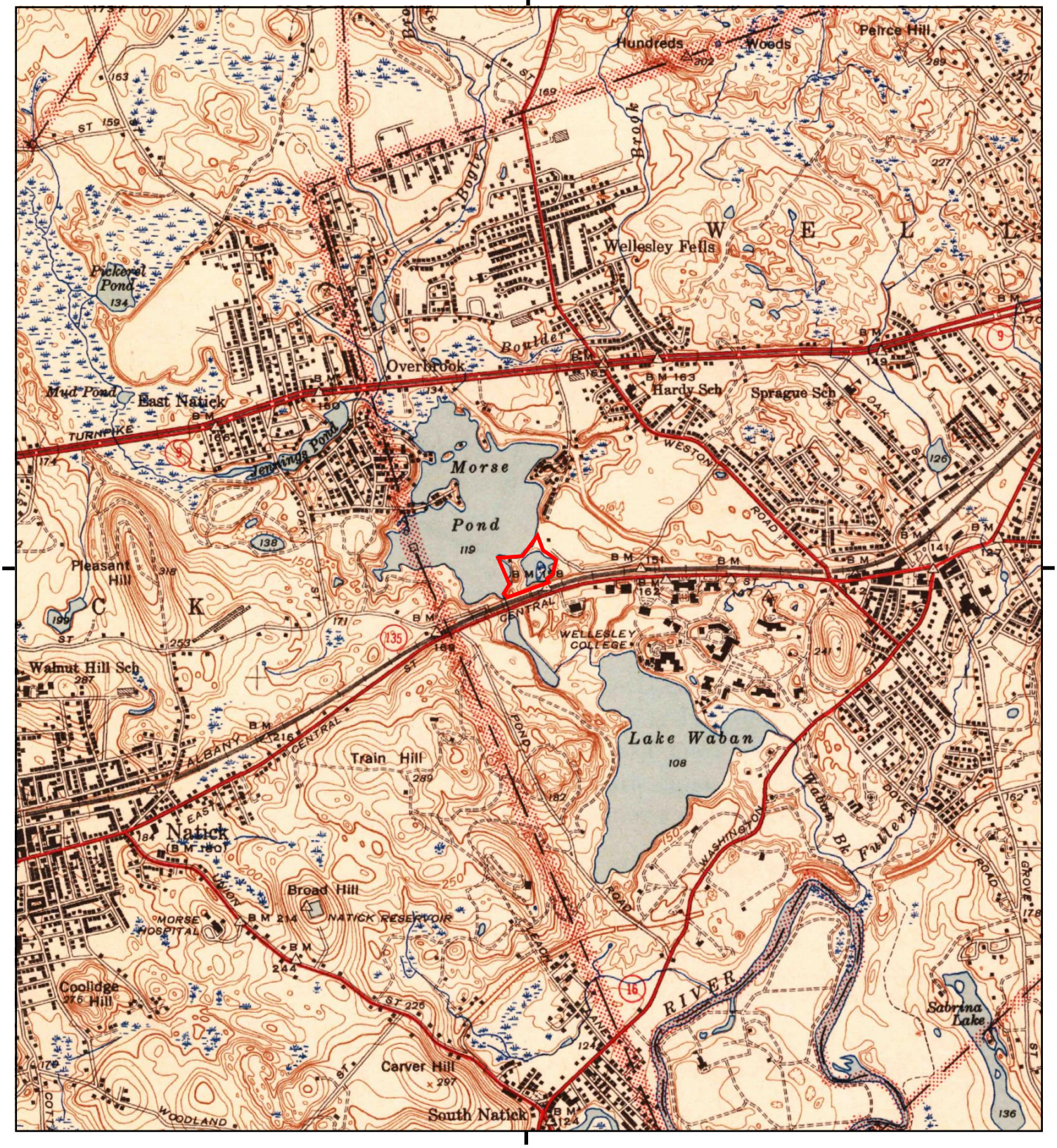
TP, Natick, 1950, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N

Historical Topo Map

1943



This report includes information from the following map sheet(s).

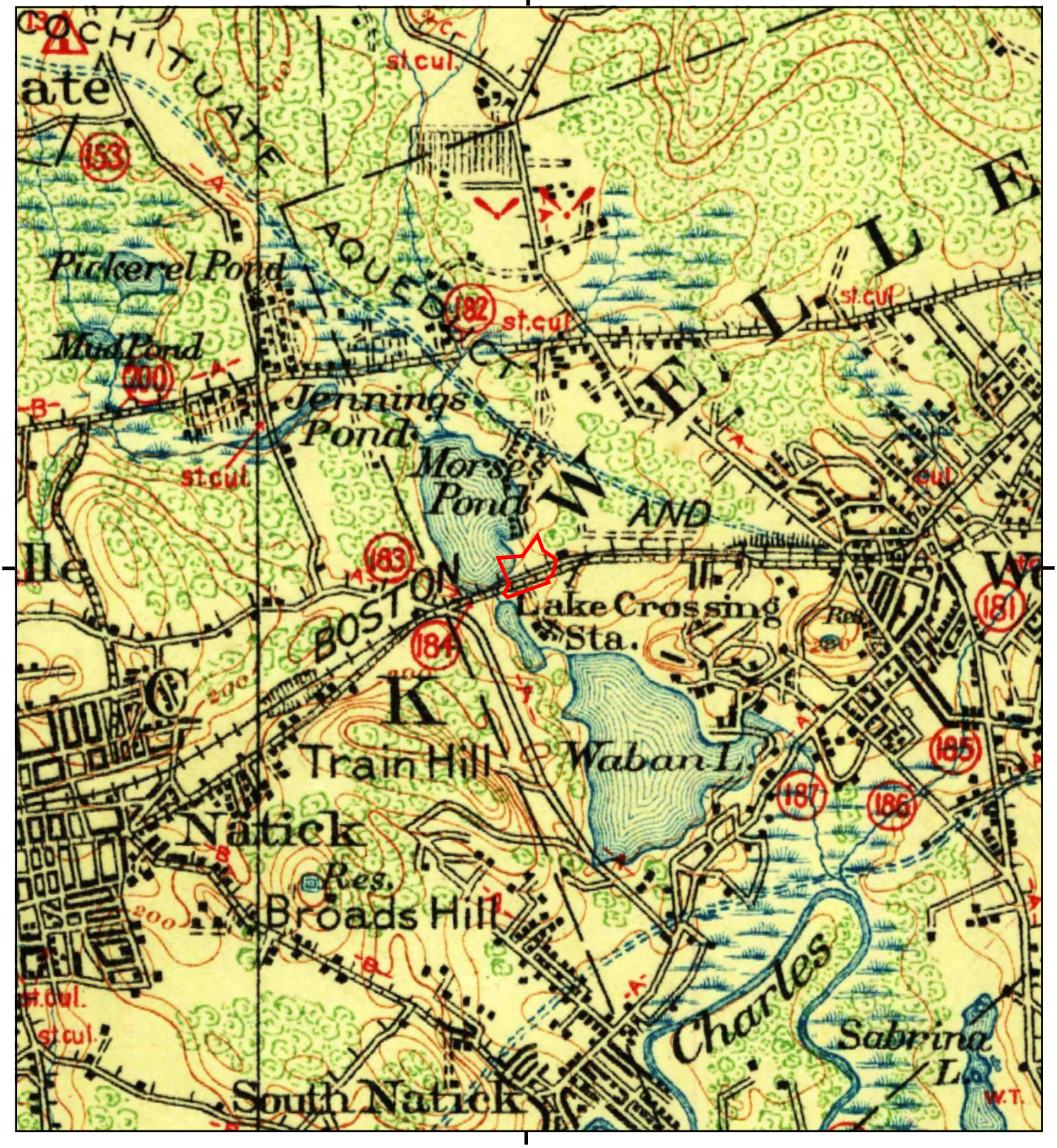
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Natick, 1943, 7.5-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



This report includes information from the following map sheet(s).

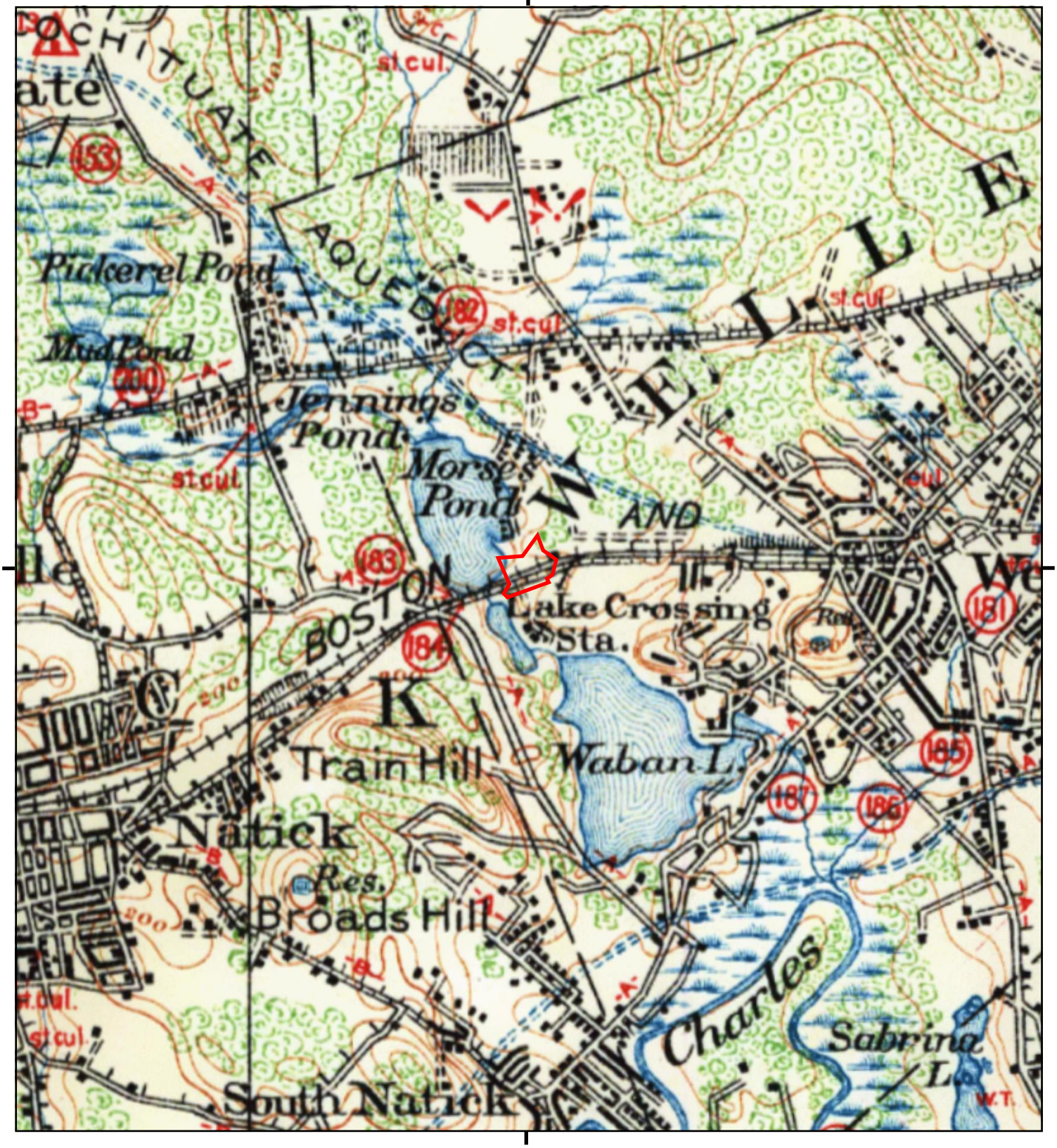
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Framingham, 1918, 15-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



This report includes information from the following map sheet(s).

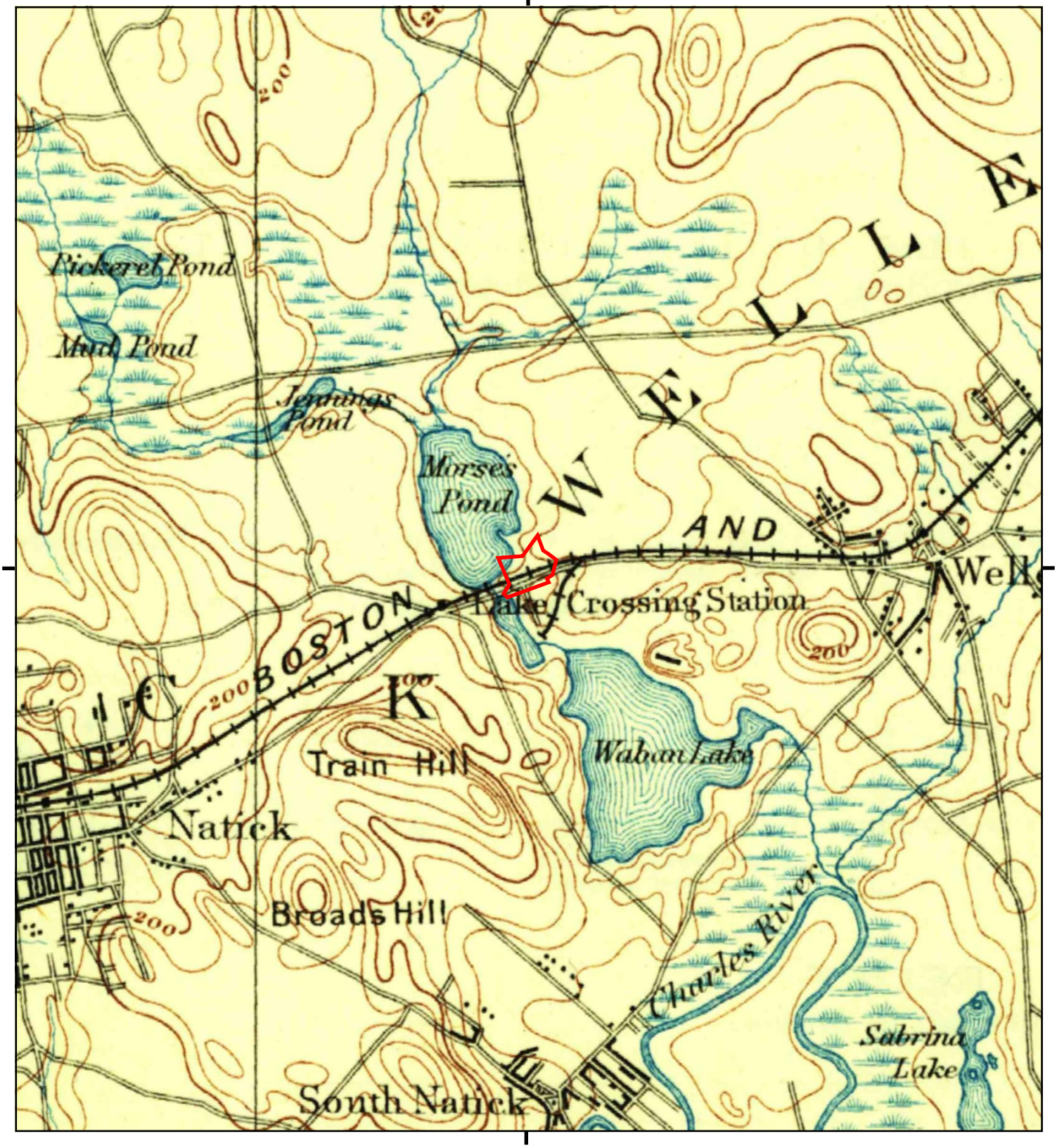
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, FRAMINGHAM, 1915, 15-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Framingham, 1894, 15-minute

SITE NAME: Morses Pond
ADDRESS: 99 Turner Road
Wellesley, MA 02482
CLIENT: Weston and Sampson Engineers

N

Appendix G:

Aerial Photographs

Morses Pond

99 Turner Road

Wellesley, MA 02482

Inquiry Number: 8064784.8

July 31, 2025

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

07/31/25

Site Name:

Morses Pond
99 Turner Road
Wellesley, MA 02482
EDR Inquiry # 8064784.8

Client Name:

Weston and Sampson Engineers
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
Contact: Melissa Davis

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Search Results:

Year	Scale	Details	Source
2023	1"=500'	Flight Year: 2023	USDA/NAIP
2018	1"=500'	Flight Year: 2018	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1995	1"=500'	Acquisition Date: March 29, 1995	USGS/DOQQ
1985	1"=500'	Flight Date: April 17, 1985	USDA
1980	1"=500'	Flight Date: October 10, 1980	USDA
1978	1"=500'	Flight Date: May 12, 1978	USGS
1970	1"=500'	Flight Date: October 06, 1970	USDA
1969	1"=500'	Flight Date: April 13, 1969	USGS
1960	1"=500'	Flight Date: May 01, 1960	USGS
1957	1"=500'	Flight Date: April 22, 1957	USGS
1955	1"=500'	Flight Date: December 01, 1955	USGS
1938	1"=500'	Flight Date: November 15, 1938	USGS

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INQUIRY #: 8064784.8
YEAR: 2023
= 500'
N
EDR

INQUIRY #: 8064784.8
YEAR: 2018
= 500'
N
EDR

INQUIRY #: 8064784.8
YEAR: 2014
= 500'
N
EDR

INQUIRY #: 8064784.8

YEAR: 2010

= 500'

N

EDR

INQUIRY #: 8064784.8

YEAR: 2006

= 500'

N

EDR

INQUIRY #: 8064784.8
YEAR: 1995
= 500'
N
EDR

INQUIRY #: 8064784.8
YEAR: 1985
= 500'
N
EDR

INQUIRY #: 8064784.8

YEAR: 1980

= 500'

N

EDR

INQUIRY #: 8064784.8

YEAR: 1978

= 500'

N

EDR

INQUIRY #: 8064784.8

YEAR: 1970

= 500'

N

EDR

INQUIRY #: 8064784.8

YEAR: 1969

= 500'

N

EDR

INQUIRY #: 8064784.8

YEAR: 1960

= 500'

N

EDR

INQUIRY #: 8064784.8
YEAR: 1957
= 500'
N
EDR

INQUIRY #: 8064784.8

YEAR: 1955

= 500'

N

EDR

INQUIRY #: 8064784.8

YEAR: 1938

= 500'

N

EDR

Appendix H:

City Directories

Morses Pond
99 Turner Road
Wellesley, MA 02482

Inquiry Number: 8064784.5
August 01, 2025

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2022	☑	☑	EDR Digital Archive
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☑	Cole Information
1995	☑	☑	Cole Information
1992	☑	☑	Cole Information
1989	☑	☑	Cole Criss-Cross Directory
1984	☑	☑	Cole Criss-Cross Directory
1975	☑	☑	Cole Criss-Cross Directory
1970	☑	☑	Cole Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

99 Turner Road
Wellesley, MA 02482

Year	*CD Image*	*Source*
TURNER RD		
2022	pg A2	EDR Digital Archive
2014	pg A4	Cole Information
2010	pg A6	Cole Information
2005	pg A8	Cole Information
2000	pg A10	Cole Information
1995	pg A12	Cole Information
1992	pg A14	Cole Information
1989	pg A16	Cole Criss-Cross Directory
1984	pg A18	Cole Criss-Cross Directory
1975	pg A20	Cole Criss-Cross Directory
1970	pg A22	Cole Criss-Cross Directory

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*

MORSE POND RD

1995	pg. A11	Cole Information
1992	pg. A13	Cole Information
1989	pg. A15	Cole Criss-Cross Directory
1984	pg. A17	Cole Criss-Cross Directory
1975	pg. A19	Cole Criss-Cross Directory
1970	pg. A21	Cole Criss-Cross Directory

MORSES POND RD

2022	pg. A1	EDR Digital Archive
2014	pg. A3	Cole Information
2010	pg. A5	Cole Information
2005	pg. A7	Cole Information
2000	pg. A9	Cole Information

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MORSES POND RD 2022

1	CHRISTINE BLACKETT
4	PAUL GREW
	VIRGINIA GREW
5	ALAN ROGERS
	LISA ROGERS
	NORA ROGERS
10	CHRISTINE BRADVICA
14	DAVID FELDMAN
	SANDRA EATON
16	EDWIN JAROS
20	OLGA REINELT
21	ALLISON HO
	KIEN HO
	PATTY HO
	RACHEL HO
	Y KIEN
24	RICHARD SATTERFIELD
	SATTERFIELD FABRICS INC
26	JIAN DU
	S DU JIAN
27	ANDREW LIVINGSTON
	CAROLINE LIVINGSTON
	CHRISTINE LIVINGSTON
	GREGORY LIVINGSTON
	PRISCILLA LIVINGSTON
	SUSAN LIVINGSTON
30	ERSIN OZDEMIR
31	EDMUND DONLAN
37	PAIGE O'ROURKE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TURNER RD 2022

7	CAROL HOGAN
11	J LEBLANC
	JENNIFER LEBLANC
	JUDITH LEBLANC
	K LEBLANC
	KENNETH LEBLANC
15	BETH CONNORS
	EUGENE CONNORS
	MAURA CONNORS
19	GRADY CHARLOTTE
23	CYNTHIA SOOHOO
	VICTOR SOOHOO
27	PADMA JAGANNATHAN
	PRATAP CHAKRAVARTHY
31	BALCA ERYILMAZ
	BURCUS ERYILMAZ
37	JENNIFER GROSSMAN
	STEVEN GROSSMAN
41	CHRISTINE BEACH
	JOHN BEACH
	STEPHEN BEACH
	THOMAS BEACH
45	ANDREW BONEE
	CAROLINE BONEE
	KATHERINE BONEE
	TERRI BONEE

Target Street	Cross Street	Source
-	✓	Cole Information

MORSES POND RD 2014

1	BLACKETT, CHRISTINE N
4	GREW, VIRGINIA M
5	ROGERS, JAMES A
10	SIGGINS, MICHAEL J
14	FELDMAN, DAVID B
16	JAROS, EDWIN J
20	OCCUPANT UNKNOWN,
21	HO, KIEN N
24	SATTERFIELD FABRICS INC
	SATTERFIELD, RICHARD C
26	HONPUI, CHAN
27	LIVINGSTON, GREGORY P
30	FOX, KENT K
	GILLEY, DAVID E
31	DONLAN, EDMOND
37	ARRUDA, ROBERT L

Target Street	Cross Street	Source
✓	-	Cole Information

TURNER RD 2014

7	OCCUPANT UNKNOWN,
11	OCCUPANT UNKNOWN,
15	CONNORS, EUGENE P
19	MURPHY, LELAND A
23	SOOHOO, VICTOR
27	OCCUPANT UNKNOWN,
31	REED, PETER G
37	GROSSMAN, STEVEN T
41	BEACH, STEPHEN H
45	BONEE, TERRI H

Target Street	Cross Street	Source
-	✓	Cole Information

MORSES POND RD 2010

1	CABUSO, ROSANNA C
4	GREW, DANIEL
5	ROGERS, JAMES A
14	FELDMAN, DAVID B
16	JAROS, EDWIN J
20	BELOGOUR, PAVEL B
21	HO, KIEN N
24	SATTERFIELD, RICHARD C
27	LIVINGSTON, GREGORY P
30	FOX, KENT K
37	ARRUDA, ROBERT L

Target Street	Cross Street	Source
✓	-	Cole Information

TURNER RD 2010

7	RHOME, JOHN O
11	FELDMAN, ELLIOT M
15	CONNORS, EUGENE P
19	MURPHY, LELAND A
27	CONNOLLY, BARBARA J
31	REED, PETER A
37	GROSSMAN, STEVEN E
41	BEACH, STEPHEN H
45	BONEE, ANDREW D

Target Street	Cross Street	Source
-	✓	Cole Information

MORSES POND RD 2005

1	ROVERO, TOM J
4	GREW, VIRGINIA M
5	ROGERS, JAMES A
10	SIGGINS, MICHAEL J
14	FELDMAN, DAVID B
16	GREEN, SHEILA G
20	BELOGOUR, PAVEL B
21	HO, KIEN Y
24	SATTERFIELD, RICHARD C
26	JI, KYUNG C
27	LIVINGSTON, GREGORY P
	NEW PHILHARMONIC ORCHESTRA
30	FOX, KENT K
	GILLEY, DAVID E
37	ARRUDA STUDIO
	ARRUDA, ROBERT B

Target Street	Cross Street	Source
✓	-	Cole Information

TURNER RD 2005

7	RHOME, JOHN O
11	FELDMAN, ELLIOT M
15	CONNORS, EUGENE P
19	MURPHY, LELAND A
27	CONNOLLY, BARBARA J
31	BELIVEAU, JOSEPH
37	GROSSMAN, STEVEN E
41	STECYK, ADRIAN Z
45	BONEE, ANDREW D

Target Street	Cross Street	Source
-	✓	Cole Information

MORSES POND RD 2000

1	ROVERO, TOM
4	GREW, V
5	ROGERS, ALAN
10	OSMOND, EWEN M
14	FELDMAN, DAVID
16	YOUNG, WILLIAM
20	COTTON, E V
21	YOUNG, MARTIN W
24	SATTERFIELD, RICHARD
26	COLE, PAMELA
27	LIVINGSTON, GREGORY
30	FOX, H K
	GILLEY, DAVID E
31	FADER, JOHN E
37	ARRUDA, ROBERT

Target Street	Cross Street	Source
✓	-	Cole Information

TURNER RD 2000

11	FELDMAN, ELLIOT
15	CONNORS, EUGENE P
19	MURPHY, LELAND
23	GRALTON, P J
27	CONNOLLY, BARBARA J
31	FREEMAN, MARK M
37	GROSSMAN, STEVEN
41	STECYK, ADRIAN
45	BONEE, ANDREW

Target Street	Cross Street	Source
-	✓	Cole Information

MORSE POND RD 1995

1	ROVERO, TOM
4	GREW, V
10	OSMOND, EWEN M
14	COLEMAN, RONALD H
16	MEDEIROS, MICHAEL
	YOUNG, WM & DIANE
21	YOUNG, MARTIN W
26	OGAR, DAN & DENNISE
27	LIVINGSTON, GREGORY
30	FOX, SALLY & H KENT
	GILLEY, DAVID E
31	FADER, J E
37	ARRUDA, ROBERT & LESLIE
	ARRUDA, ROBT

Target Street	Cross Street	Source
✓	-	Cole Information

TURNER RD 1995

11	COLINA DEVIVERO, JUAN J
	COLINA, JUAN & MELISSA
	VON STADE, MELISSA
15	CONNORS, EUGENE P
19	MURPHY, LELAND
23	GRALTON, P JOS
27	CONNOLLY, B J
31	BARR, DAVID & ROBERTA
37	GROSSMAN, STEVEN & JENNIFER
41	STECYK, ADRIAN
45	BONEE, ANDREW & TERRI

Target Street	Cross Street	Source
-	✓	Cole Information

MORSE POND RD 1992

1	ROVERO, TOM
4	GREW, V
10	OSMOND, EWEN M
14	COLEMAN, RONALD H
16	MEDEIROS, MICHAEL
	YOUNG, WM & DIANE
21	YOUNG, MARTIN W
27	LIVINGSTON, GREGORY
30	FOX, SALLY & H KENT
	GILLEY, DAVID E
31	FADER, J E
	NOLET, KRISTINE
37	ARRUDA, ROBERT & LESLIE
	ARRUDA, ROBT

Target Street	Cross Street	Source
✓	-	Cole Information

TURNER RD 1992

11	COLINA DEVIVERO, JUAN J
15	CONNORS, EUGENE P
19	MURPHY, LELAND
23	GRALTON, P JOS
27	CONNOLLY, B J
31	CABOT, CHAS C, III
37	MARTIN, JAS A
	TONER, ROBT E
41	STECYK, ADRIAN
45	BONEE, ANDREW & TERRI

MORSE POND RD 1989

14 Russell Clark 235-7180
Robert E Fleming . . .74 235-7180
15 Thomas W Brennan . .76 235-7717
17 Merrill Rosenblatt . . .69 237-0086
18 . . . . . NP
21 Thomas P Drummy . . .76 235-4048
50 David C Hoskyns 86 237-3645
Horace B Hoskyns . . .64 235-7925
12 RESIDENCE

MORSES POND RD 02181

Begins Shore Road Stops At Natick Road

1- 99 CT4043 $B..H 2

1 Alton H Temple 64 235-1736
4 V Grew 83 237-2498
10 Ewen M Osmond 81 235-4410
14 Ronald H Coleman . . .87 235-8140
16 William Young 84 237-6357
20 Carroll M Cotton 64 235-2168
21 Martin W Young 69 235-5259
26 . . . . . NP
27 Gregory Livingston . . .86 237-9178
30 David E Gilley 74 237-0365
31 J E Fader 84 235-8549
37 Robert Arruda . . . . . - 239-1750
12 RESIDENCE

MORTON CIR 02181

500- 599 CT4042 $A..H 3

NO # Mrs Jos D Dooling . .83 235-6169
1 RESIDENCE

MORTON ST 02181

Begins Washington St Stops Twitchell St

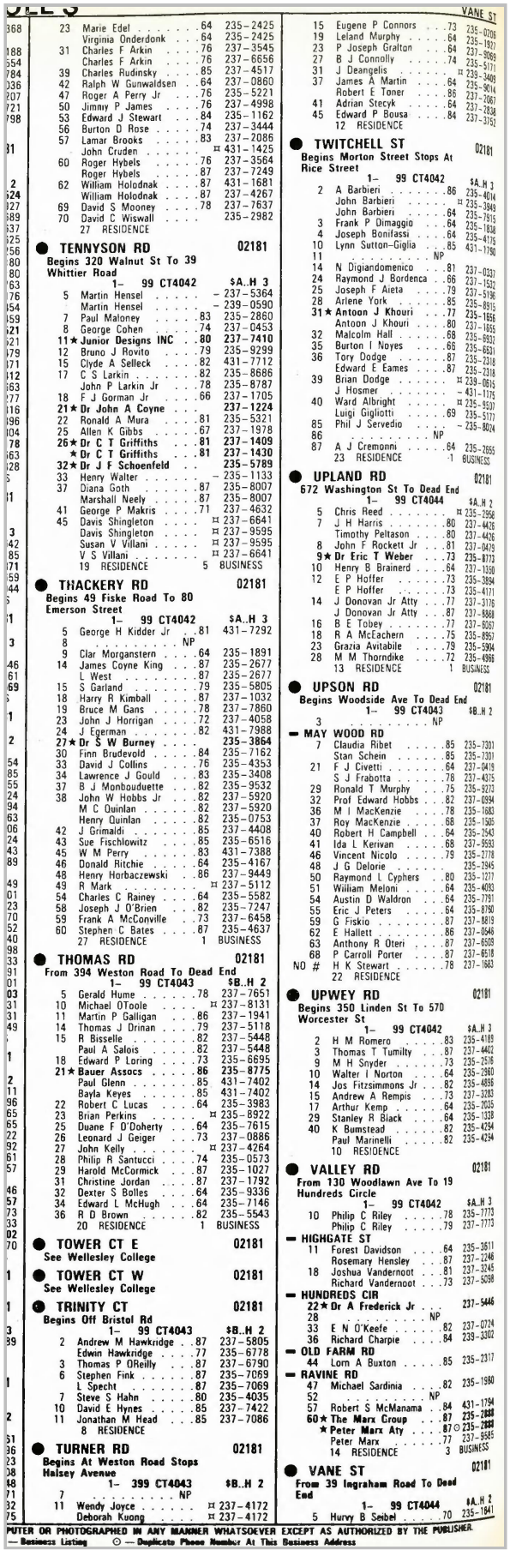
1- 99 CT4042 $A..H 3

6 Charles H Welch 64 235-2432
7 John J Walsh 76 237-3989

ATWOOD ST

Target Street	Cross Street	Source
✔	-	Cole Criss-Cross Directory

TURNER RD 1989



23 Marie Edel .64 235-2425
Virginia Onderdonk .64 235-2425
31 Charles F Arkin .76 237-3545
Charles F Arkin .76 237-6656
39 Charles Rudinsky .85 237-4517
42 Ralph W Gunwaldsen .64 237-0860
47 Roger A Perry Jr .76 235-5221
50 Jimmy P James .76 237-4998
53 Edward J Stewart .84 235-1162
56 Burton D Rose .74 237-3444
57 Lamar Brooks .83 237-2086
John Cruden ¤ 431-1425
60 Roger Hybels .76 237-3564
Roger Hybels .87 237-7249
62 William Holodnak .87 431-1681
William Holodnak .87 237-4267
69 David S Mooney .78 237-7637
70 David C Wiswall 235-2982
27 RESIDENCE

TENNYSON RD 02181
Begins 320 Walnut St To 39 Whittier Road
1- 99 CT4042 $A..H 3
5 Martin Hensel - 237-5364
Martin Hensel - 239-0590
7 Paul Maloney .83 235-2860
8 George Cohen .74 237-0453
11★ Junior Designs INC .80 237-7410
12 Bruno J Rovito .79 235-9299
15 Clyde A Selleck .82 431-7712
17 C S Larkin .82 235-8686
John P Larkin Jr .78 235-8787
18 F J Gorman Jr .66 237-1705
21★ Dr John A Coyne 237-1224
22 Ronald A Mura .81 235-5321
25 Allen K Gibbs .67 237-1978
26★ Dr C T Griffiths .81 237-1409
★ Dr C T Griffiths .81 237-1430
32★ Dr J F Schoenfeld 235-5789
33 Henry Walter - 235-1133
37 Diana Goth .87 235-8007
Marshall Neely .87 235-8007
41 George P Makris .71 237-4632
45 Davis Shingleton ¤ 237-6641
Davis Shingleton ¤ 237-9595
Susan V Villani ¤ 237-9595
V S Villani ¤ 237-6641
19 RESIDENCE 5 BUSINESS

THACKERY RD 02181
Begins 49 Fiske Road To 80 Emerson Street
1- 99 CT4042 $A..H 3
5 George H Kidder Jr .81 431-7292
8 NP
9 Clar Morganstern .64 235-1891
14 James Coyne King .87 235-2677
L West .87 235-2677
15 S Garland .79 235-5805
18 Harry R Kimball .87 237-1032
19 Bruce M Gans .78 237-7860
23 John J Horrigan .72 237-4058
24 J Egerman .82 431-7988
27★ Dr S W Burney 235-3864
30 Finn Brudevold .84 235-7162
33 David J Collins .76 235-4353
34 Lawrence J Gould .83 235-3408
37 B J Monbouduette .82 235-9532
38 John W Hobbs Jr .82 237-5920
M C Quinlan .82 237-5920
Henry Quinlan .82 235-0753
42 J Grimaldi .85 237-4408
43 Sue Fischlowitz .85 235-6516
45 W M Perry .83 431-7388
46 Donald Ritchie .64 235-4167
48 Henry Horbaczewski .86 237-9449
49 R Mark ¤ 237-5112
54 Charles C Rainey .64 235-5582
58 Joseph J O'Brien .82 235-7247
59 Frank A McConville .73 237-6458
60 Stephen C Bates .87 235-4637
27 RESIDENCE 1 BUSINESS

THOMAS RD 02181
From 394 Weston Road To Dead End
1- 99 CT4043 $B..H 2
5 Gerald Hume .78 237-7651
10 Michael OToole ¤ 237-8131
11 Martin P Galligan .86 237-1941
14 Thomas J Drinan .79 237-5118
15 R Bisselle .82 237-5448
Paul A Salois .82 237-5448
18 Edward P Loring .73 235-6695
21★ Bauer Assocs .86 235-8775
Paul Glenn .85 431-7402
Bayla Keyes .85 431-7402
22 Robert C Lucas .64 235-3983
23 Brian Perkins ¤ 235-8922
25 Duane F O'Doherty .64 235-7615
26 Leonard J Geiger .73 237-0886
27 John Kelly ¤ 237-4264
28 Philip R Santucci .74 235-0573
29 Harold McCormick .87 235-1027
31 Christine Jordan .87 237-1792
32 Dexter S Bolles .64 235-9336
34 Edward L McHugh .64 235-7146
36 R D Brown .82 235-5543
20 RESIDENCE 1 BUSINESS

TOWER CT E 02181
See Wellesley College

TOWER CT W 02181
See Wellesley College

TRINITY CT 02181
Begins Off Bristol Rd
1- 99 CT4043 $B..H 2
2 Andrew M Hawkridge .87 237-5805
Edwin Hawkridge .77 235-6778
3 Thomas P OReilly .87 237-6790
6 Stephen Fink .87 235-7069
L Specht .87 235-7069
7 Steve S Hahn .80 235-4035
10 David E Hynes .85 237-7422
11 Jonathan M Head .85 237-7086
8 RESIDENCE

TURNER RD 02181
Begins At Weston Road Stops Halsey Avenue
1- 399 CT4043 $B..H 2
7 NP
11 Wendy Joyce ¤ 237-4172
Deborah Kuong ¤ 237-4172
15 Eugene P Connors .73 235-0706
19 Leland Murphy .64 235-1927
23 P Joseph Gralton .64 237-3545
27 B J Connolly .74 235-5171
31 J Deangelis ¤ 239-3409
37 James A Martin .64 235-9014
Robert E Toner .86 237-2067
41 Adrian Stecyk .64 237-2838
45 Edward P Bousa .84 237-3752
12 RESIDENCE

TWITCHELL ST 02181
Begins Morton Street Stops At Rice Street
1- 99 CT4042 $A..H 3
2 A Barbieri .86 235-4014
John Barbieri ¤ 235-3949
John Barbieri .64 235-7915
3 Frank P Dimaggio .64 235-1838
4 Joseph Bonifassi .64 235-4175
10 Lynn Sutton-Giglia .85 431-1790
11 NP
14 N Digiandomenico .81 237-0337
24 Raymond J Bordenca .66 237-1532
25 Joseph F Aieta .79 237-5196
28 Arlene York .85 235-8915
31★ Antoon J Khouri .77 235-1656
Antoon J Khouri .80 237-1655
32 Malcolm Hall .68 235-9932
35 Burton I Noyes .66 235-6631
36 Tory Dodge .87 235-2318
Edward E Eames .87 235-2318
39 Brian Dodge ¤ 239-0615
J Hosmer - 431-1175
40 Ward Albright ¤ 235-9507
Luigi Gigliotti .69 235-5177
85 Phil J Servedio - 235-8024
86 NP
87 A J Cremonni .64 235-2655
23 RESIDENCE 1 BUSINESS

UPLAND RD 02181
672 Washington St To Dead End
1- 99 CT4044 $A..H 2
5 Chris Reed ¤ 235-2958
7 J H Harris .80 237-4426
Timothy Peltason .80 237-4426
8 John F Rockett Jr .81 237-0479
9★ Dr Eric T Weber .73 235-8773
10 Henry B Brainerd .64 237-1350
12 E P Hoffer .73 235-3894
E P Hoffer .73 235-4171
14 J Donovan Jr Atty .77 237-3176
J Donovan Jr Atty .87 237-8868
16 B E Tobey .77 237-6057
18 R A McEachern .75 235-8957
23 Grazia Avitabile .79 235-5904
28 M M Thorndike .72 235-4966
13 RESIDENCE 1 BUSINESS

UPSON RD 02181
Begins Woodside Ave To Dead End
1- 99 CT4043 $B..H 2
3 NP

MAY WOOD RD
7 Claudia Ribet .85 235-7301
Stan Schein .85 235-7301
21 F J Civetti .64 237-0419
S J Frabotta .78 237-4375
29 Ronald T Murphy .75 235-9273
32 Prof Edward Hobbs .82 237-0994
36 M I MacKenzie .78 235-1683
37 Roy MacKenzie .68 235-1505
40 Robert H Campbell .64 235-2943
41 Ida L Kerivan .68 237-9593
46 Vincent Nicolo .79 235-2778
48 J G Delorie 235-2945
50 Raymond L Cyphers .80 235-1227
51 William Meloni .64 235-4093
54 Austin D Waldron .64 235-7751
55 Eric J Peters .64 235-8760
59 G Fiskio .87 237-8819
62 E Hallett .86 237-0546
63 Anthony R Oteri .87 237-6509
68 P Carroll Porter .87 237-6518
NO # H K Stewart .78 237-1663
22 RESIDENCE

UPWEY RD 02181
Begins 350 Linden St To 570 Worcester St
1- 99 CT4042 $A..H 3
2 H M Romero .83 235-4189
3 Thomas T Tumilty .87 237-4402
9 M H Snyder .73 235-2516
10 Walter I Norton .64 235-2960
14 Jos Fitzsimmons Jr .82 235-4896
15 Andrew A Rempis .73 237-3283
17 Arthur Kemp .64 235-2035
29 Stanley R Black .64 235-1338
40 K Bumstead .82 235-4294
Paul Marinelli .82 235-4294
10 RESIDENCE

VALLEY RD 02181
From 130 Woodlawn Ave To 19 Hundreds Circle
1- 99 CT4042 $A..H 3
10 Philip C Riley .78 235-7773
Philip C Riley .79 237-7773

HIGHGATE ST
11 Forest Davidson .64 235-3611
Rosemary Hensley .87 237-2246
18 Joshua Vandernoot .81 237-3245
Richard Vandernoot .73 237-5098

HUNDREDS CIR
22★ Dr A Frederick Jr 237-5446
28 NP
33 E N O'Keefe .82 237-0724
36 Richard Charpie .84 239-3302

OLD FARM RD
44 Lorn A Buxton .85 235-2317

RAVINE RD
47 Michael Sardinia .82 235-1980
52 NP
57 Robert S McManama .84 431-1794
60★ The Marx Group .87 235-2888
★ Peter Marx Aty .87 ⊙ 235-2888
Peter Marx .77 237-9585
14 RESIDENCE 3 BUSINESS

VANE ST 02181
From 39 Ingraham Road To Dead End
1- 99 CT4044 $A..H 2
5 Hurvy B Seibel .70 235-1841

PUTER OR PHOTOGRAPHED IN ANY MANNER WHATSOEVER EXCEPT AS AUTHORIZED BY THE PUBLISHER.
— Business Listing ⊙ — Duplicate Phone Number At This Business Address

MORSE POND RD 1984

37 Bernard P Rome 69 527-3191
42 Elliot E Rosenberg 66 244-3723
45 Leonard Saxe 75 965-5761
51 Mrs H W Scholl 66 244-6918
55 Monroe S Glick 66 332-8945
Monroe S Glick 969-5889
56 Elliott T Adams 76 332-3568
61 John Cary Allen 78 244-1075
69 Gary Gibbons 78 527-1738
17 Residence

MORSES POND RD WELLSLY

Begins Shore Road
Stops At Natick Road

..... 02181
13- 99 TZ4043 $A..
034590

1 Alton H Temple 235-1736
4 V Grew .....¤ 237-2498
10 Ewen M Osmond 81 235-4410
16 R M Kinniery 235-0830
20 Carroll M Cotton 235-2168
21 Martin W Young 235-5259
26 Carlo Deluca 78 237-7442
27 Gregory Livingston 81 237-6308
30 H Kent Fox 77 235-8271
David E Gilley 74 237-0365
31 Edward E Mr Hinds 81 235-8549
37 Douglas W Duncan 82 237-1556
12 Residence

MORSE ST WATRTWN

From 123 Galen Street To 150 Watertown St

..... 02172
1- 97 TZ3704 $C..
88- 199 TZ3701 $C..
034600

3 L Vaughn .....¤ 926-8814
5 R Cranitch Jr 81 926-0879
6 Malcolm Stuart 75 924-7560
7 S P Trombetta 79 924-3705
9 Mary Brezoska 64 924-0754
13 James Richard 77 926-0123
14 M E Cloherty 75 924-2665
Paula Packenham .....¤ 923-0193
16 D M Cloherty .....¤ 924-3690

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

TURNER RD 1984

TURF MEADOW RD — **BEDFORD**
From 186 Concord Road To Dead End
. 01730
049820
1 Steven Buzzotta . . . . . ¤ 275-2890
1 Residence

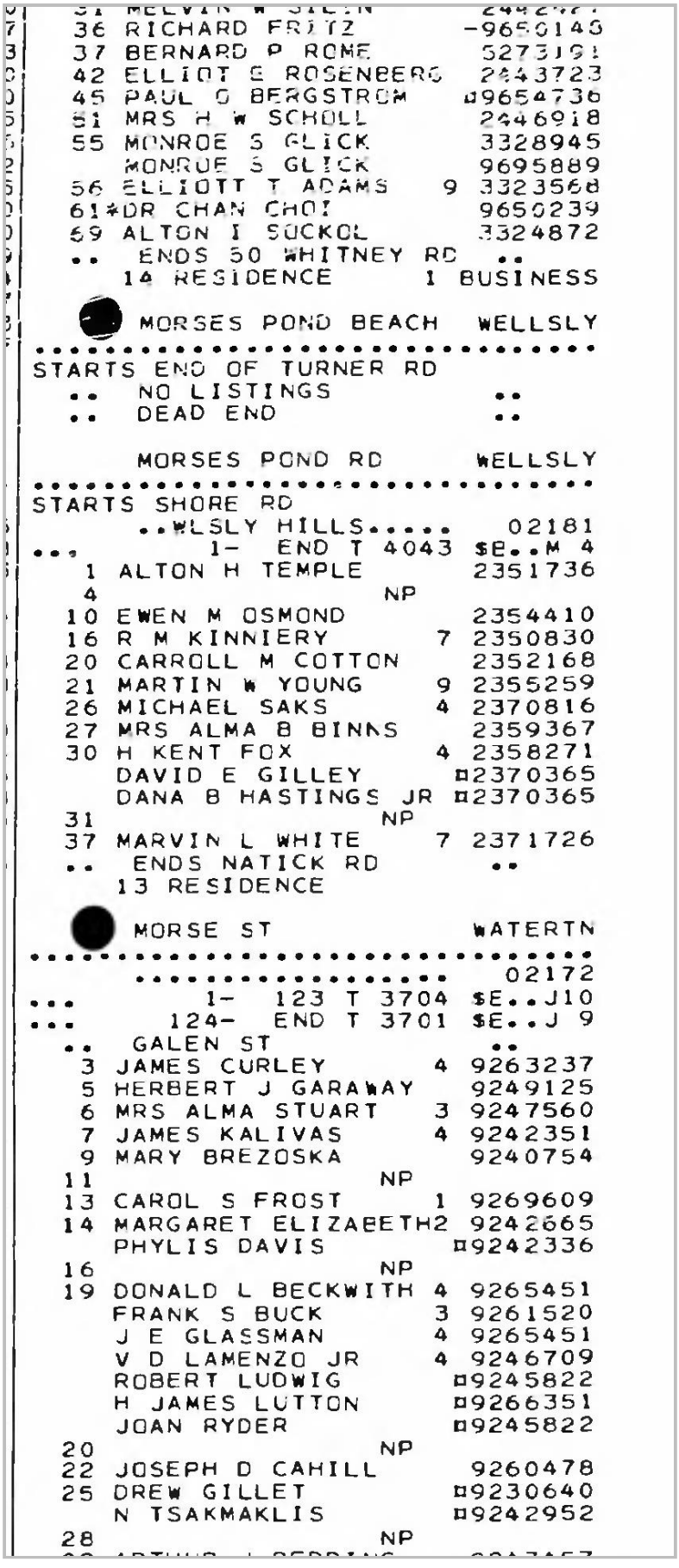
TURNER RD — **WELLSLY**
Begins At Weston Road Stops Halsey Avenue
. 02181
1- 399 TZ4043 $A..
049830
7 J G Summers . . . . . ¤ 237-9508
11 Thomas Lubker . . . . . ¤ 237-6119
15 Eugene P Connors 235-0206
19 Leland Murphy 235-1927
23 P Joseph Gralton 237-9069
27 B J Connolly 74 235-5171
31 Robert P Macbey 235-4050
37 James A Martin 235-9014
41 Adrian Stecyk 237-2838
45 M J O'Donnell 80 237-4483
M J ODonnell 80 431-1689
11 Residence

TURNER ST — **NWTNVLE**
From 59 Central Ave To 162 Walnut Street
. 02160
1- 99 TZ3733 $B..
049840
12 D A Snyder 76 965-5386
15 Barbara H Buell . . . . . ¤ 965-6134
Don Buell 77 964-7125
20 Joseph Giovangelo 72 969-4915
Thaddeus Siemasko . . . . . ¤ 527-8191
21 J M Wadrick 82 965-1850
24 S P Goldstein 76 964-5885
7 Residence

TURNER ST — **WALTHAM**
From 529 South St Roberts Crossing Runs Westerly To B & M Railroad
. 02154
1- 99 TZ3684 $B..
049850
12 W F Connerney 64 894-4447
20 William Govone 73 899-8284
26 Peter F Donovan 67 899-2666

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

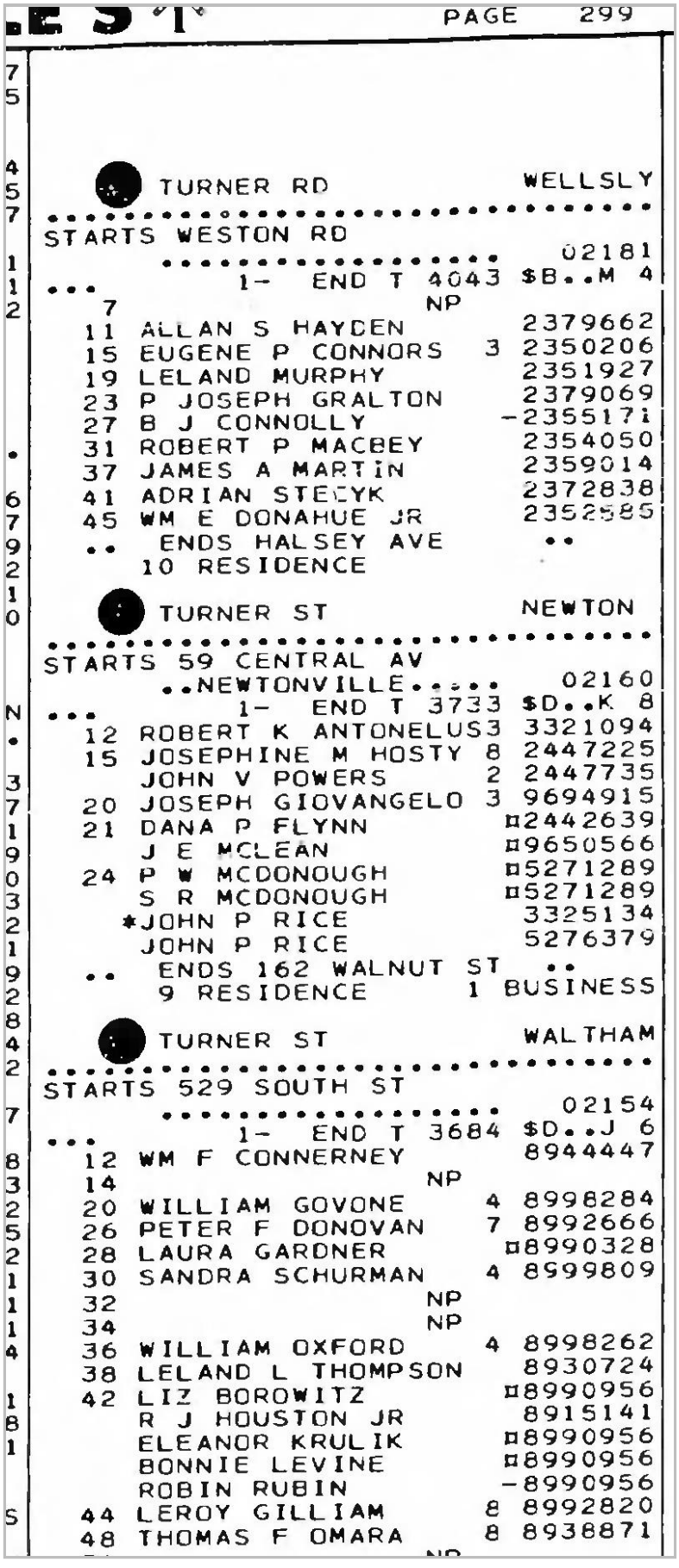
MORSE POND RD 1975



```
   31 MELVIN W SILIN          2442427
   36 RICHARD FRITZ          -9650143
   37 BERNARD P ROME          5273191
   42 ELLIOT E ROSENBERG      2443723
   45 PAUL O BERGSTROM       ¤9654736
   51 MRS H W SCHOLL          2446918
   55 MONROE S GLICK          3328945
      MONROE S GLICK          9695889
   56 ELLIOTT T ADAMS      9  3323568
   61*DR CHAN CHOI            9650239
   69 ALTON I SOCKOL          3324872
   ..  ENDS 50 WHITNEY RD   ..
      14 RESIDENCE         1 BUSINESS

      MORSES POND BEACH   WELLSLY
.................................
STARTS END OF TURNER RD
   ..  NO LISTINGS            ..
   ..  DEAD END               ..

      MORSES POND RD       WELLSLY
.................................
STARTS SHORE RD
      ..WLSLY HILLS.....     02181
...        1-  END T 4043 $E..M 4
    1 ALTON H TEMPLE         2351736
    4                  NP
   10 EWEN M OSMOND          2354410
   16 R M KINNIERY        7  2350830
   20 CARROLL M COTTON       2352168
   21 MARTIN W YOUNG      9  2355259
   26 MICHAEL SAKS        4  2370816
   27 MRS ALMA B BINNS       2359367
   30 H KENT FOX          4  2358271
      DAVID E GILLEY        ¤2370365
      DANA B HASTINGS JR    ¤2370365
   31                  NP
   37 MARVIN L WHITE      7  2371726
   ..  ENDS NATICK RD         ..
      13 RESIDENCE

      MORSE ST              WATERTN
.................................
      ...................     02172
...        1-  123 T 3704 $E..J10
...      124-  END T 3701 $E..J 9
   ..  GALEN ST               ..
    3 JAMES CURLEY        4  9263237
    5 HERBERT J GARAWAY      9249125
    6 MRS ALMA STUART     3  9247560
    7 JAMES KALIVAS       4  9242351
    9 MARY BREZOSKA          9240754
   11                  NP
   13 CAROL S FROST       1  9269609
   14 MARGARET ELIZABETH2    9242665
      PHYLIS DAVIS          ¤9242336
   16                  NP
   19 DONALD L BECKWITH   4  9265451
      FRANK S BUCK        3  9261520
      J E GLASSMAN        4  9265451
      V D LAMENZO JR      4  9246709
      ROBERT LUDWIG         ¤9245822
      H JAMES LUTTON        ¤9266351
      JOAN RYDER            ¤9245822
   20                  NP
   22 JOSEPH D CAHILL        9260478
   25 DREW GILLET           ¤9230640
      N TSAKMAKLIS          ¤9242952
   28                  NP
```

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

TURNER RD 1975



PAGE 299

TURNER RD WELLSLY
STARTS WESTON RD
02181
1- END T 4043 $B..M 4
7 NP
11 ALLAN S HAYDEN 2379662
15 EUGENE P CONNORS 3 2350206
19 LELAND MURPHY 2351927
23 P JOSEPH GRALTON 2379069
27 B J CONNOLLY -2355171
31 ROBERT P MACBEY 2354050
37 JAMES A MARTIN 2359014
41 ADRIAN STECYK 2372838
45 WM E DONAHUE JR 2352585
.. ENDS HALSEY AVE ..
10 RESIDENCE

TURNER ST NEWTON
STARTS 59 CENTRAL AV
..NEWTONVILLE..... 02160
1- END T 3733 $D..K 8
12 ROBERT K ANTONELUS3 3321094
15 JOSEPHINE M HOSTY 8 2447225
JOHN V POWERS 2 2447735
20 JOSEPH GIOVANGELO 3 9694915
21 DANA P FLYNN ¤2442639
J E MCLEAN ¤9650566
24 P W MCDONOUGH ¤5271289
S R MCDONOUGH ¤5271289
*JOHN P RICE 3325134
JOHN P RICE 5276379
.. ENDS 162 WALNUT ST ..
9 RESIDENCE 1 BUSINESS

TURNER ST WALTHAM
STARTS 529 SOUTH ST
02154
1- END T 3684 $D..J 6
12 WM F CONNERNEY 8944447
14 NP
20 WILLIAM GOVONE 4 8998284
26 PETER F DONOVAN 7 8992666
28 LAURA GARDNER ¤8990328
30 SANDRA SCHURMAN 4 8999809
32 NP
34 NP
36 WILLIAM OXFORD 4 8998262
38 LELAND L THOMPSON 8930724
42 LIZ BOROWITZ ¤8990956
R J HOUSTON JR 8915141
ELEANOR KRULIK ¤8990956
BONNIE LEVINE ¤8990956
ROBIN RUBIN -8990956
44 LEROY GILLIAM 8 8992820
48 THOMAS F OMARA 8 8938871
NP

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

MORSE POND RD 1970

NO LISTINGS

.. DEAD END ..

MORSES POND RD WELLSLY

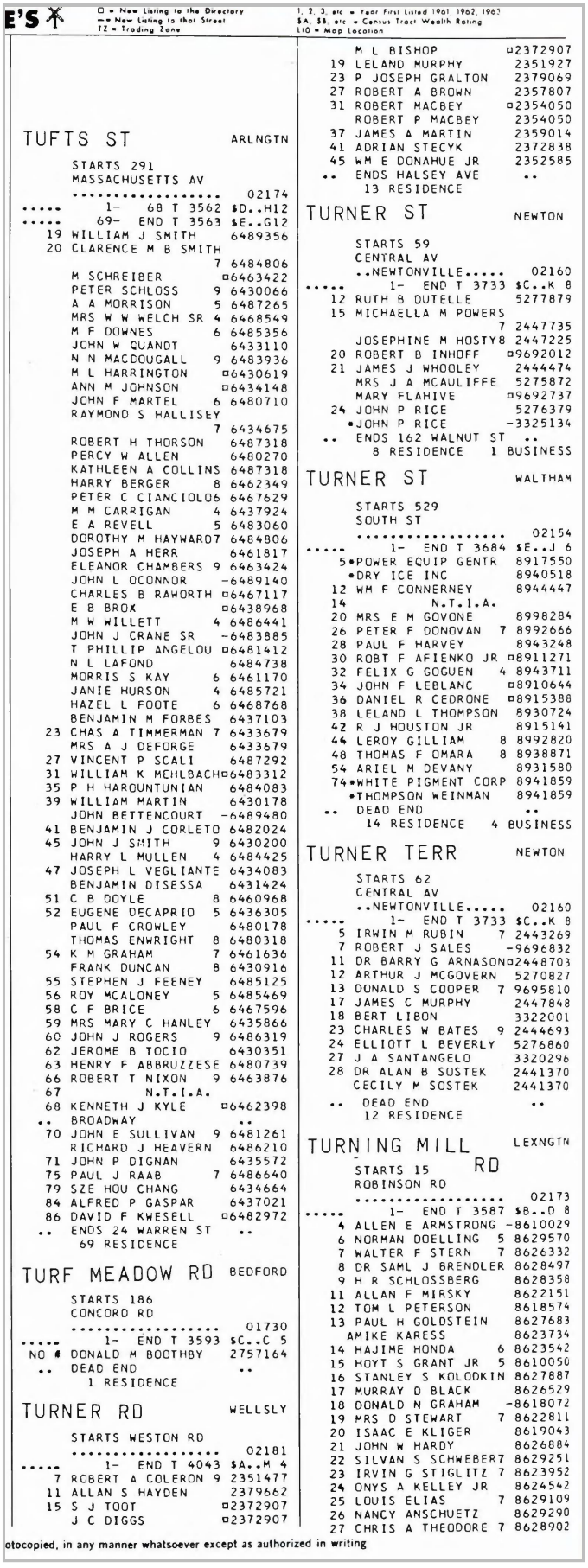
STARTS SHORE RD
..WLSLY HILLS..... 02181
..... 1- END T 4043 $A..M 4
1 ALTON H TEMPLE 2351736
4 N.T.I.A.
10 EWEN M OSMOND 2354410
16 RITA KINNIERY 7 2350830
20 CARROLL M COTTON 2352168
21 MARTIN W YOUNG 9 2355259
26 N.T.I.A.
27 MRS ALMA B BINNS 2359367
30 PHILLIP R SIMMS 2354265
CARL ERICKSON 2370365
31 FRANK J OAKES 9 2370318
37 MARVIN L WHITE 7 2371726
.. ENDS NATICK RD ..
12 RESIDENCE

MORSE ST WATERTN

..... 02172
..... 1- 123 T 3704 $D..J10
.. GALEN ST ..
..... 124- END T 3701 $D..J 9
3 JEREMIAH J DONOVAN 9260265
5 HERBERT J GARAWAY 9249125
6 MRS ROY STUART 9247560
7 N.T.I.A.
9 MARY BREZOSKA 9240754
11 A RICHARD MONAHAN9 9241360
13 THOMAS R MONAHAN 9 9231968
16 DELIA M CLOHERTY 9242665
19 RICHARD E JOLLY 6 9246448
20 WILLIAM J FRY 9242393
22 JOSEPH D CAHILL 9260478

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

TURNER RD 1970



E'S

□ = New Listing to the Directory
—= New Listing to that Street
TZ = Trading Zone

1, 2, 3, etc = Year First Listed 1961, 1962, 1963
$A, $B, etc = Census Tract Wealth Rating
L10 = Map Location

TUFTS ST ARLNGTN

STARTS 291
MASSACHUSETTS AV
..... 02174
..... 1- 68 T 3562 $D..H12
..... 69- END T 3563 $E..G12
19 WILLIAM J SMITH 6489356
20 CLARENCE M B SMITH
7 6484806
M SCHREIBER □6463422
PETER SCHLOSS 9 6430066
A A MORRISON 5 6487265
MRS W W WELCH SR 4 6468549
M F DOWNES 6 6485356
JOHN W QUANDT 6433110
N N MACDOUGALL 9 6483936
M L HARRINGTON □6430619
ANN M JOHNSON □6434148
JOHN F MARTEL 6 6480710
RAYMOND S HALLISEY
7 6434675
ROBERT H THORSON 6487318
PERCY W ALLEN 6480270
KATHLEEN A COLLINS 6487318
HARRY BERGER 8 6462349
PETER C CIANCIOLO6 6467629
M M CARRIGAN 4 6437924
E A REVELL 5 6483060
DOROTHY M HAYWARO7 6484806
JOSEPH A HERR 6461817
ELEANOR CHAMBERS 9 6463424
JOHN L OCONNOR -6489140
CHARLES B RAWORTH □6467117
E B BROX □6438968
M W WILLETT 4 6486441
JOHN J CRANE SR -6483885
T PHILLIP ANGELOU □6481412
N L LAFOND 6484738
MORRIS S KAY 6 6461170
JANIE HURSON 4 6485721
HAZEL L FOOTE 6 6468768
BENJAMIN M FORBES 6437103
23 CHAS A TIMMERMAN 7 6433679
MRS A J DEFORGE 6433679
27 VINCENT P SCALI 6487292
31 WILLIAM K MEHLBACH□6483312
35 P H HARQUNTUNIAN 6484083
39 WILLIAM MARTIN 6430178
JOHN BETTENCOURT -6489480
41 BENJAMIN J CORLETO 6482024
45 JOHN J SMITH 9 6430200
HARRY L MULLEN 4 6484425
47 JOSEPH L VEGLIANTE 6434083
BENJAMIN DISESSA 6431424
51 C B DOYLE 8 6460968
52 EUGENE DECAPRIO 5 6436305
PAUL F CROWLEY 6480178
THOMAS ENWRIGHT 8 6480318
54 K M GRAHAM 7 6461636
FRANK DUNCAN 8 6430916
55 STEPHEN J FEENEY 6485125
56 ROY MCALONEY 5 6485469
58 C F BRICE 6 6467596
59 MRS MARY C HANLEY 6435866
60 JOHN J ROGERS 9 6486319
62 JEROME B TOCIO 6430351
63 HENRY F ABBRUZZESE 6480739
66 ROBERT T NIXON 9 6463876
67 N.T.I.A.
68 KENNETH J KYLE □6462398
.. BROADWAY ..
70 JOHN E SULLIVAN 9 6481261
RICHARD J HEAVERN 6486210
71 JOHN P DIGNAN 6435572
75 PAUL J RAAB 7 6486640
79 SZE HOU CHANG 6434664
84 ALFRED P GASPAR 6437021
86 DAVID F KWESELL □6482972
.. ENDS 24 WARREN ST ..
69 RESIDENCE

TURF MEADOW RD BEDFORD

STARTS 186
CONCORD RD
..... 01730
..... 1- END T 3593 $C..C 5
NO # DONALD M BOOTHBY 2757164
.. DEAD END ..
1 RESIDENCE

TURNER RD WELLSLY

STARTS WESTON RD
..... 02181
..... 1- END T 4043 $A..M 4
7 ROBERT A COLERON 9 2351477
11 ALLAN S HAYDEN 2379662
15 S J TOOT □2372907
J C DIGGS □2372907
M L BISHOP □2372907
19 LELAND MURPHY 2351927
23 P JOSEPH GRALTON 2379069
27 ROBERT A BROWN 2357807
31 ROBERT MACBEY □2354050
ROBERT P MACBEY 2354050
37 JAMES A MARTIN 2359014
41 ADRIAN STECYK 2372838
45 WM E DONAHUE JR 2352585
.. ENDS HALSEY AVE ..
13 RESIDENCE

TURNER ST NEWTON

STARTS 59
CENTRAL AV
..NEWTONVILLE..... 02160
..... 1- END T 3733 $C..K 8
12 RUTH B DUTELLE 5277879
15 MICHAELLA M POWERS
7 2447735
JOSEPHINE M HOSTY8 2447225
20 ROBERT B INHOFF □9692012
21 JAMES J WHOOLEY 2444474
MRS J A MCAULIFFE 5275872
MARY FLAHIVE □9692737
24 JOHN P RICE 5276379
•JOHN P RICE -3325134
.. ENDS 162 WALNUT ST ..
8 RESIDENCE 1 BUSINESS

TURNER ST WALTHAM

STARTS 529
SOUTH ST
..... 02154
..... 1- END T 3684 $E..J 6
5•POWER EQUIP GENTR 8917550
•DRY ICE INC 8940518
12 WM F CONNERNEY 8944447
14 N.T.I.A.
20 MRS E M GOVONE 8998284
26 PETER F DONOVAN 7 8992666
28 PAUL F HARVEY 8943248
30 ROBT F AFIENKO JR □8911271
32 FELIX G GOGUEN 4 8943711
34 JOHN F LEBLANC □8910644
36 DANIEL R CEDRONE □8915388
38 LELAND L THOMPSON 8930724
42 R J HOUSTON JR 8915141
44 LEROY GILLIAM 8 8992820
48 THOMAS F OMARA 8 8938871
54 ARIEL M DEVANY 8931580
74•WHITE PIGMENT CORP 8941859
•THOMPSON WEINMAN 8941859
.. DEAD END ..
14 RESIDENCE 4 BUSINESS

TURNER TERR NEWTON

STARTS 62
CENTRAL AV
..NEWTONVILLE..... 02160
..... 1- END T 3733 $C..K 8
5 IRWIN M RUBIN 7 2443269
7 ROBERT J SALES -9696832
11 DR BARRY G ARNASON□2448703
12 ARTHUR J MCGOVERN 5270827
13 DONALD S COOPER 7 9695810
17 JAMES C MURPHY 2447848
18 BERT LIBON 3322001
23 CHARLES W BATES 9 2444693
24 ELLIOTT L BEVERLY 5276860
27 J A SANTANGELO 3320296
28 DR ALAN B SOSTEK 2441370
CECILY M SOSTEK 2441370
.. DEAD END ..
12 RESIDENCE

TURNING MILL RD LEXNGTN

STARTS 15
ROBINSON RD
..... 02173
..... 1- END T 3587 $B..D 8
4 ALLEN E ARMSTRONG -8610029
6 NORMAN DOELLING 5 8629570
7 WALTER F STERN 7 8626332
8 DR SAML J BRENDLER 8628497
9 H R SCHLOSSBERG 8628358
11 ALLAN F MIRSKY 8622151
12 TOM L PETERSON 8618574
13 PAUL H GOLDSTEIN 8627683
AMIKE KARESS 8623734
14 HAJIME HONDA 6 8623542
15 HOYT S GRANT JR 5 8610050
16 STANLEY S KOLODKIN 8627887
17 MURRAY D BLACK 8626529
18 DONALD N GRAHAM -8618072
19 MRS D STEWART 7 8622811
20 ISAAC E KLIGER 8619043
21 JOHN W HARDY 8626884
22 SILVAN S SCHWEBER7 8629251
23 IRVIN G STIGLITZ 7 8623952
24 ONYS A KELLEY JR 8624542
25 LOUIS ELIAS 7 8629109
26 NANCY ANSCHUETZ 8629290
27 CHRIS A THEODORE 7 8628902

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Appendix I:

Environmental Data Resources, Inc. Radius Report

Morses Pond
99 Turner Road
Wellesley, MA 02482

Inquiry Number: 8064784.2s
July 31, 2025

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	295
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-13
Physical Setting Source Map Findings	A-15
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

99 TURNER ROAD
WELLESLEY, MA 02482

COORDINATES

Latitude (North):	42.2964750 - 42° 17' 47.31''
Longitude (West):	71.3168750 - 71° 19' 0.75''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	309004.9
UTM Y (Meters):	4685080.0
Elevation:	162 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	20024146 NATICK, MA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20230707
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
99 TURNER ROAD
WELLESLEY, MA 02482

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MORSES POND CULVERT	99 TURNER RD	RCRA NonGen / NLR, ICIS, FINDS, ECHO		TP
A2	MORSES POND CULVERT	OFF OF STATE HIGHWAY	SEMS-ARCHIVE, PRP, NY MANIFEST	Higher	1 ft.
B3	MORSES POND OUTLET C	RTE 135	MA SHWS, MA RELEASE, MA ENF	Lower	70, 0.013, SW
B4	MBTA RAIL BRIDGE REP	1 BACON ST	MA HW GEN	Lower	204, 0.039, SW
B5	MBTA RAIL BRIDGE REP	1 BACON ST	RCRA-SQG	Lower	204, 0.039, SW
6	MORSES POND	TURNER RD END OF	MA SHWS, MA RELEASE	Lower	261, 0.049, NE
7	NO LOCATION AID	300 CENTRAL ST	MA SHWS, MA RELEASE	Lower	809, 0.153, East
8	WELLESLEY COLLEGE MA	RTE 135 WASHINGTON S	MA SHWS, MA RELEASE	Higher	1057, 0.200, SW
9	NO LOCATION AID	18 KENDALL RD	MA SHWS, MA LAST, MA RELEASE	Lower	1517, 0.287, NNE
10	PAINTSHOP POND	CENTRAL ST RTE 135	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	2272, 0.430, ESE
11	FORMER ST JAMES THE	900 WORCESTER STREET	MA SHWS, MA RELEASE, MA ASBESTOS, MA TIER 2	Lower	2499, 0.473, North
12	293 WESTON ROAD, WEL	293 WESTON ROAD	MA LAST, MA RELEASE, MA ASBESTOS, MA HW GEN	Lower	2622, 0.497, NNE
C13	376-378-380 CENTRE S	874-878 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2642, 0.500, North
C14	WESTON RD	870 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2655, 0.503, NNE
C15	SUNOCO STATION FMR	870 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2655, 0.503, NNE
C16	SUNOCO STATION	870 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2655, 0.503, NNE
C17	NO LOCATION AID	870 WORCESTER RD	MA SHWS, MA RELEASE	Lower	2687, 0.509, NNE
18	FORMER LEE VOLVO	962 WORCESTER ST	MA SHWS, MA LUST, MA INST CONTROL, MA RELEASE	Lower	2801, 0.530, NNW
19	LILJA SCHOOL	OAK AND BACON STS	MA SHWS, MA RELEASE	Higher	2828, 0.536, WSW
20	FMR RUSSELLS TEXACO	873 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2855, 0.541, NNE
21	NATICK DPW	25 OAK ST	MA SHWS, MA RELEASE	Lower	2923, 0.554, West
D22	NO LOCATION AID	984 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3140, 0.595, NW
23	NO LOCATION AID	965 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3143, 0.595, NNW
D24	984 990 AND 990R WOR	984 990 990R WORCEST	MA SHWS, MA LUST, MA RELEASE	Lower	3152, 0.597, NW
D25	NO LOCATION AID	986 WORCESTER ST	MA SHWS, MA RELEASE, MA HW GEN	Lower	3164, 0.599, NW
D26	OVERBROOK DRIVE	987 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3304, 0.626, NW
D27	SHELL SERVICE STATIO	987 WORCESTER ST	MA SHWS, MA LUST, MA RELEASE	Lower	3304, 0.626, NW
E28	ROUTE 9 WEST	1005 WORCESTER ROAD	MA SHWS, MA LUST, MA RELEASE	Lower	3390, 0.642, NW
E29	999 WORCESTER STREET	999 WORCESTER STREET	MA SHWS, MA RELEASE	Lower	3449, 0.653, NW
E30	MOBIL STATION 01-PG2	1005 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3465, 0.656, NW
E31	PROPERTY	1 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3496, 0.662, NW
F32	NO LOCATION AID	72 BACON ST	MA SHWS, MA RELEASE	Higher	3523, 0.667, WSW
F33	NO LOCATION AID	72 BACON ST	MA SHWS, MA RELEASE	Higher	3523, 0.667, WSW
G34	NORTH 40 PROPERTY	156 WESTON ROAD	MA SHWS, MA RELEASE	Lower	3678, 0.697, East
G35	NORTH 40	156 WESTON ROAD	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	3678, 0.697, East
G36	WELLESLEY COLLEGE CO	156 WESTON ROAD	MA SHWS, MA RELEASE	Lower	3678, 0.697, East
37	WELLESLEY COLLEGE	CENTRAL ST (RTE 135)	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	3803, 0.720, ESE
38	NO LOCATION AID	104 WORCESTER ROAD	MA SHWS, MA RELEASE	Lower	3916, 0.742, NW
39	WHITTIER RD	111 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4225, 0.800, NW

MAPPED SITES SUMMARY

Target Property Address:
99 TURNER ROAD
WELLESLEY, MA 02482

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
H40	KEOHANE SPORTS CENTE	106 CENTRAL STREET	MA SHWS, MA RELEASE	Lower	4415, 0.836, East
H41	WELLESLEY COLLEGE AL	106 CENTRAL ST	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	4415, 0.836, East
H42	WELLESLEY COLLEGE	106 CENTRAL ST	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	4415, 0.836, East
H43	WELLESLEY COLLEGE GA	106 CENTRAL ST	MA SHWS, MA RELEASE	Lower	4415, 0.836, East
H44	WELLESLEY COLLEGE FO	106 CENTRAL ST	EDR MGP	Lower	4415, 0.836, East
I45	PAD MOUNT TRANSFORME	172 WORCESTER STREET	MA SHWS, MA RELEASE	Higher	4421, 0.837, WNW
I46	NO LOCATION AID	172 WORCESTER RD	MA SHWS, MA RELEASE, MA HW GEN	Lower	4563, 0.864, WNW
47	BEHIND BEL CANTO RES	92 CENTRAL ST	MA SHWS, MA LUST, MA RELEASE, MA ASBESTOS	Lower	4714, 0.893, East
J48	FMR SHELL	193 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4797, 0.909, WNW
J49	SHELL SERVICE STATIO	193 WORCESTER ST	MA SHWS, MA RELEASE	Lower	4797, 0.909, WNW
J50	NO LOCATION AID	206 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4831, 0.915, WNW
J51	HESS GAS STATION	207 WORCESTER ST	MA SHWS, MA RELEASE	Lower	4889, 0.926, WNW
J52	MERIT SERVICE STATIO	207 WORCESTER ST	MA SHWS, MA LUST, MA RELEASE	Lower	4889, 0.926, WNW
J53	NO LOCATION AID	207 WORCESTER RD	MA SHWS, MA LUST, MA RELEASE	Lower	4889, 0.926, WNW
J54	RTE 9W @ HESS STA #2	207 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4889, 0.926, WNW
55	RESIDENTIAL PROPERTY	4-8 SERVICE DRIVE	MA SHWS, MA RELEASE	Lower	4896, 0.927, ESE
56	GULF STATION FMR	75 CENTRAL ST	MA SHWS, MA RELEASE	Lower	4941, 0.936, East
K57	NO LOCATION AID	206 218 WORCESTER ST	MA SHWS, MA RELEASE	Lower	4956, 0.939, WNW
J58	SPEEDWAY #2507	207 WORCESTER RD	MA SHWS, MA UST, MA RELEASE	Lower	5012, 0.949, WNW
J59	HESS STATION NO. 215	207 WORCESTER STREET	MA SHWS, MA RELEASE, MA ENF	Lower	5012, 0.949, WNW
K60	NO LOCATION AID	226 WORCESTER RD	MA SHWS, MA RELEASE	Lower	5017, 0.950, WNW
K61	TEXACO STATION	226 WORCESTER RD	MA SHWS, MA RELEASE	Lower	5017, 0.950, WNW
L62	NO LOCATION AID	151 EAST CENTRAL ST	MA SHWS, MA RELEASE	Higher	5174, 0.980, SW
L63	JMH WEST AUTOMOTIVE	151 EAST CENTRAL STR	MA SHWS, MA LUST, MA RELEASE	Higher	5174, 0.980, SW
L64	FRAZZEE AUTOMOTIVE	151 EAST CENTRAL ST	MA SHWS, MA LUST, MA RELEASE	Higher	5174, 0.980, SW
65	PILGRIM RD AT LINWOO	PILGRIM RD	MA SHWS, MA RELEASE	Higher	5192, 0.983, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MORSES POND CULVERT 99 TURNER RD WELLESLEY, MA 02482	RCRA NonGen / NLR EPA ID:: MAR000502724 ICIS FRS ID:: 110012241029 FINDS Registry ID:: 110012241029 ECHO Registry ID: 110012241029	MAR000502724

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators

RCRA-VSQG RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS Land Use Control Information System
US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

MA SWF/LF Solid Waste Facility Database/Transfer Stations

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
MA AST Aboveground Storage Tank Database
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

MA BROWNFIELDS Completed Brownfields Covenants Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
US CDL National Clandestine Laboratory Register

Local Land Records

MA LIENS Liens Information Listing

LIENS 2 ---------- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
MA SPILLS ---------- Historical Spill List
MA SPILLS 90 ---------- SPILLS 90 data from FirstSearch
MA SPILLS 80 ---------- SPILLS 80 data from FirstSearch

Other Ascertainable Records

FUDS ---------- Formerly Used Defense Sites
DOD ---------- Department of Defense Sites
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---------- Financial Assurance Information
EPA WATCH LIST ---------- EPA WATCH LIST
2020 COR ACTION ---------- 2020 Corrective Action Program List
TSCA ---------- Toxic Substances Control Act
TRIS ---------- Toxic Chemical Release Inventory System
SSTS ---------- Section 7 Tracking Systems
ROD ---------- Records Of Decision
RMP ---------- Risk Management Plans
RAATS ---------- RCRA Administrative Action Tracking System
PADS ---------- PCB Activity Database System
FTTS ---------- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---------- Material Licensing Tracking System
COAL ASH DOE ---------- Steam-Electric Plant Operation Data
COAL ASH EPA ---------- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---------- PCB Transformer Registration Database
RADINFO ---------- Radiation Information Database
HIST FTTS ---------- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---------- Incident and Accident Data
CONSENT ---------- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---------- Indian Reservations
FUSRAP ---------- Formerly Utilized Sites Remedial Action Program
UMTRA ---------- Uranium Mill Tailings Sites
LEAD SMELTERS ---------- Lead Smelter Sites
US AIRS ---------- Aerometric Information Retrieval System Facility Subsystem
US MINES ---------- Mines Master Index File
MINES MRDS ---------- Mineral Resources Data System
ABANDONED MINES ---------- Abandoned Mines
UXO ---------- Unexploded Ordnance Sites
DOCKET HWC ---------- Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ---------- EPA Fuels Program Registered Listing
PFAS NPL ---------- Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES ---------- Federal Sites PFAS Information
PFAS TRIS ---------- List of PFAS Added to the TRI
PFAS TSCA ---------- PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST ---------- PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR ---------- PFAS Contamination Site Location Listing
PFAS WQP ---------- Ambient Environmental Sampling for PFAS
PFAS PROJECT ---------- NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS NPDES ---------- Clean Water Act Discharge Monitoring Information
PFAS ECHO ---------- Facilities in Industries that May Be Handling PFAS Listing

PFAS ECHO FIRE TRAIN Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC Aqueous Foam Related Incidents Listing
BIOSOLIDS ICIS-NPDES Biosolids Facility Data
UST FINDER RELEASE UST Finder Releases Database
UST FINDER UST Finder Database
E MANIFEST Hazardous Waste Electronic Manifest System
MA PFAS PFAS Contaminated Sites Listing
MA AIRS Permitted Facilities Listing
MA DRYCLEANERS Regulated Drycleaning Facilities
MA Financial Assurance Financial Assurance Information Listing
MA GWDP Ground Water Discharge Permits
MA MERCURY Mercury Product Recyling Drop-Off Locations Listing
MA NPDES NPDES Permit Listing
MA TSD TSD Facility
MA UIC Underground Injection Control Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

MA RGA HWS Recovered Government Archive State Hazardous Waste Facilities List
MA RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly

known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 06/26/2025 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MORSES POND CULVERT Site ID: 0103085 EPA Id: MAN000103085	***OFF OF STATE HIGHWAY***	***0 - 1/8 (0.000 mi.)***	***A2***	***15***

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/02/2025 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MBTA RAIL BRIDGE REP EPA ID:: MAR000594572	1 BACON ST	SW 0 - 1/8 (0.039 mi.)	B5	29

Lists of state- and tribal hazardous waste facilities

MA SHWS: Contains information on releases of oil and hazardous materials that have been reported to DEP.

A review of the MA SHWS list, as provided by EDR, and dated 06/30/2025 has revealed that there are 59 MA SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WELLESLEY COLLEGE MA Current Status: RAO Release Tracking Number: 3-0013455	***RTE 135 WASHINGTON S***	***SW 1/8 - 1/4 (0.200 mi.)***	***8***	***34***
LILJA SCHOOL Current Status: REMOPS Release Tracking Number: 3-0004232	***OAK AND BACON STS***	***WSW 1/2 - 1 (0.536 mi.)***	***19***	***109***
NO LOCATION AID	***72 BACON ST***	***WSW 1/2 - 1 (0.667 mi.)***	***F32***	***179***

Current Status: RAO
Release Tracking Number: 3-0015880

NO LOCATION AID	***72 BACON ST***	***WSW 1/2 - 1 (0.667 mi.)***	***F33***	***182***
Current Status: RAO Release Tracking Number: 3-0015577				
PAD MOUNT TRANSFORME	***172 WORCESTER STREET***	***WNW 1/2 - 1 (0.837 mi.)***	***I45***	***214***
Current Status: PSNC Release Tracking Number: 3-0037161				
NO LOCATION AID	***151 EAST CENTRAL ST***	***SW 1/2 - 1 (0.980 mi.)***	***L62***	***281***
Current Status: RAO Release Tracking Number: 3-0011755				
JMH WEST AUTOMOTIVE	***151 EAST CENTRAL STR***	***SW 1/2 - 1 (0.980 mi.)***	***L63***	***283***
Current Status: PSNC Release Tracking Number: 3-0033930				
FRAZZEE AUTOMOTIVE	***151 EAST CENTRAL ST***	***SW 1/2 - 1 (0.980 mi.)***	***L64***	***290***
Current Status: WSCPRM Release Tracking Number: 3-0003445				
PILGRIM RD AT LINWOO	***PILGRIM RD***	***NNE 1/2 - 1 (0.983 mi.)***	***65***	***292***
Current Status: RAO Release Tracking Number: 3-0024388				

Lower Elevation	Address	Direction / Distance	Map ID	Page
MORSES POND OUTLET C	***RTE 135***	***SW 0 - 1/8 (0.013 mi.)***	***B3***	***19***
Current Status: TMPS Release Tracking Number: 3-0011653				
MORSES POND	***TURNER RD END OF***	***NE 0 - 1/8 (0.049 mi.)***	***6***	***32***
Current Status: RAO Release Tracking Number: 3-0020393				
NO LOCATION AID	***300 CENTRAL ST***	***E 1/8 - 1/4 (0.153 mi.)***	***7***	***33***
Current Status: RAO Release Tracking Number: 3-0021420				
NO LOCATION AID	***18 KENDALL RD***	***NNE 1/4 - 1/2 (0.287 mi.)***	***9***	***36***
Current Status: RAO Release Tracking Number: 3-0023928				
PAINTSHOP POND	***CENTRAL ST RTE 135***	***ESE 1/4 - 1/2 (0.430 mi.)***	***10***	***39***
Current Status: TIERI Release Tracking Number: 3-0000462				
FORMER ST JAMES THE	***900 WORCESTER STREET***	***N 1/4 - 1/2 (0.473 mi.)***	***11***	***49***
Current Status: PSNC Release Tracking Number: 3-0032556				
376-378-380 CENTRE S	***874-878 WORCESTER ST***	***N 1/2 - 1 (0.500 mi.)***	***C13***	***80***
Current Status: DPS Release Tracking Number: 3-0024811				
WESTON RD	***870 WORCESTER ST***	***NNE 1/2 - 1 (0.503 mi.)***	***C14***	***82***
Current Status: RTNCLOSED Release Tracking Number: 3-0020072				
SUNOCO STATION FMR	***870 WORCESTER ST***	***NNE 1/2 - 1 (0.503 mi.)***	***C15***	***83***
Current Status: RTNCLOSED Release Tracking Number: 3-0028251				
SUNOCO STATION	***870 WORCESTER ST***	***NNE 1/2 - 1 (0.503 mi.)***	***C16***	***86***

Current Status: RAO Release Tracking Number: 3-0010169				
NO LOCATION AID Current Status: RTNCLOSED Release Tracking Number: 3-0021473	***870 WORCESTER RD***	***NNE 1/2 - 1 (0.509 mi.)***	***C17***	***98***
FORMER LEE VOLVO Current Status: TMPS Release Tracking Number: 3-0031472	***962 WORCESTER ST***	***NNW 1/2 - 1 (0.530 mi.)***	***18***	***99***
FMR RUSSELLS TEXACO Current Status: RAO Release Tracking Number: 3-0004571	***873 WORCESTER ST***	***NNE 1/2 - 1 (0.541 mi.)***	***20***	***119***
NATICK DPW Current Status: RAO Release Tracking Number: 3-0017210	***25 OAK ST***	***W 1/2 - 1 (0.554 mi.)***	***21***	***126***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0028632	***984 WORCESTER ST***	***NW 1/2 - 1 (0.595 mi.)***	***D22***	***128***
NO LOCATION AID Current Status: RTNCLOSED Release Tracking Number: 3-0018213	***965 WORCESTER ST***	***NNW 1/2 - 1 (0.595 mi.)***	***23***	***130***
984 990 AND 990R WOR Current Status: RAO Release Tracking Number: 3-0028167	***984 990 990R WORCEST***	***NW 1/2 - 1 (0.597 mi.)***	***D24***	***131***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0020491	***986 WORCESTER ST***	***NW 1/2 - 1 (0.599 mi.)***	***D25***	***137***
OVERBROOK DRIVE Current Status: RAO Release Tracking Number: 3-0015224	***987 WORCESTER ST***	***NW 1/2 - 1 (0.626 mi.)***	***D26***	***139***
SHELL SERVICE STATIO Current Status: RAO Release Tracking Number: 3-0002336	***987 WORCESTER ST***	***NW 1/2 - 1 (0.626 mi.)***	***D27***	***140***
ROUTE 9 WEST Current Status: REMOPS Release Tracking Number: 3-0032821	***1005 WORCESTER ROAD***	***NW 1/2 - 1 (0.642 mi.)***	***E28***	***155***
999 WORCESTER STREET Current Status: DPS Release Tracking Number: 3-0035056	***999 WORCESTER STREET***	***NW 1/2 - 1 (0.653 mi.)***	***E29***	***173***
MOBIL STATION 01-PG2 Current Status: RAO Release Tracking Number: 3-0001058	***1005 WORCESTER ST***	***NW 1/2 - 1 (0.656 mi.)***	***E30***	***174***
PROPERTY Current Status: RAO Release Tracking Number: 3-0002658	***1 WORCESTER ST***	***NW 1/2 - 1 (0.662 mi.)***	***E31***	***178***
NORTH 40 PROPERTY Current Status: PSNC Release Tracking Number: 3-0032582	***156 WESTON ROAD***	***E 1/2 - 1 (0.697 mi.)***	***G34***	***183***
NORTH 40 Current Status: PSC	***156 WESTON ROAD***	***E 1/2 - 1 (0.697 mi.)***	***G35***	***185***

Release Tracking Number: 3-0032580				
WELLESLEY COLLEGE CO	***156 WESTON ROAD***	***E 1/2 - 1 (0.697 mi.)***	***G36***	***188***
Current Status: RAO Release Tracking Number: 3-0031682				
WELLESLEY COLLEGE	***CENTRAL ST (RTE 135)***	***ESE 1/2 - 1 (0.720 mi.)***	***37***	***190***
Current Status: PSC Release Tracking Number: 3-0002581				
NO LOCATION AID	***104 WORCESTER ROAD***	***NW 1/2 - 1 (0.742 mi.)***	***38***	***195***
Current Status: RAO Release Tracking Number: 3-0031861				
WHITTIER RD	***111 WORCESTER RD***	***NW 1/2 - 1 (0.800 mi.)***	***39***	***197***
Current Status: RTNCLOSED Release Tracking Number: 3-0019321				
KEOHANE SPORTS CENTE	***106 CENTRAL STREET***	***E 1/2 - 1 (0.836 mi.)***	***H40***	***199***
Current Status: URAM Release Tracking Number: 3-0038523				
WELLESLEY COLLEGE AL	***106 CENTRAL ST***	***E 1/2 - 1 (0.836 mi.)***	***H41***	***201***
Current Status: RAO Release Tracking Number: 3-0013767				
WELLESLEY COLLEGE	***106 CENTRAL ST***	***E 1/2 - 1 (0.836 mi.)***	***H42***	***205***
Current Status: PSC Release Tracking Number: 3-0016983				
WELLESLEY COLLEGE GA	***106 CENTRAL ST***	***E 1/2 - 1 (0.836 mi.)***	***H43***	***211***
Current Status: RTNCLOSED Release Tracking Number: 3-0022331				
NO LOCATION AID	***172 WORCESTER RD***	***WNW 1/2 - 1 (0.864 mi.)***	***I46***	***216***
Current Status: RAO Release Tracking Number: 3-0021351				
BEHIND BEL CANTO RES	***92 CENTRAL ST***	***E 1/2 - 1 (0.893 mi.)***	***47***	***218***
Current Status: RAO Release Tracking Number: 3-0010219				
FMR SHELL	***193 WORCESTER RD***	***WNW 1/2 - 1 (0.909 mi.)***	***J48***	***225***
Current Status: RAO Release Tracking Number: 3-0012757				
SHELL SERVICE STATIO	***193 WORCESTER ST***	***WNW 1/2 - 1 (0.909 mi.)***	***J49***	***229***
Current Status: RAO Release Tracking Number: 3-0002307				
NO LOCATION AID	***206 WORCESTER RD***	***WNW 1/2 - 1 (0.915 mi.)***	***J50***	***231***
Current Status: RTNCLOSED Release Tracking Number: 3-0012880				
HESS GAS STATION	***207 WORCESTER ST***	***WNW 1/2 - 1 (0.926 mi.)***	***J51***	***233***
Current Status: RAO Release Tracking Number: 3-0024706				
MERIT SERVICE STATIO	***207 WORCESTER ST***	***WNW 1/2 - 1 (0.926 mi.)***	***J52***	***235***
Current Status: TMPS Release Tracking Number: 3-0004523				
NO LOCATION AID	***207 WORCESTER RD***	***WNW 1/2 - 1 (0.926 mi.)***	***J53***	***249***
Current Status: RAO Release Tracking Number: 3-0015414				
RTE 9W @ HESS STA #2	***207 WORCESTER RD***	***WNW 1/2 - 1 (0.926 mi.)***	***J54***	***255***

Current Status: RAO
Release Tracking Number: 3-0026404

RESIDENTIAL PROPERTY	***4-8 SERVICE DRIVE***	***ESE 1/2 - 1 (0.927 mi.)***	***55***	***259***
Current Status: RAO Release Tracking Number: 3-0031161				
GULF STATION FMR	***75 CENTRAL ST***	***E 1/2 - 1 (0.936 mi.)***	***56***	***260***
Current Status: RAO Release Tracking Number: 3-0001794				
NO LOCATION AID	***206 218 WORCESTER ST***	***WNW 1/2 - 1 (0.939 mi.)***	***K57***	***261***
Current Status: RTNCLOSED Release Tracking Number: 3-0014159				
SPEEDWAY #2507	***207 WORCESTER RD***	***WNW 1/2 - 1 (0.949 mi.)***	***J58***	***263***
Current Status: TMPS Release Tracking Number: 3-0032656				
HESS STATION NO. 215	***207 WORCESTER STREET***	***WNW 1/2 - 1 (0.949 mi.)***	***J59***	***273***
Current Status: RTNCLOSED Release Tracking Number: 3-0031773				
NO LOCATION AID	***226 WORCESTER RD***	***WNW 1/2 - 1 (0.950 mi.)***	***K60***	***277***
Current Status: RAO Release Tracking Number: 3-0023995				
TEXACO STATION	***226 WORCESTER RD***	***WNW 1/2 - 1 (0.950 mi.)***	***K61***	***279***
Current Status: RTNCLOSED Release Tracking Number: 3-0013240				

Lists of state and tribal leaking storage tanks

MA LAST: The Leaking Aboveground Storage Tanks database

A review of the MA LAST list, as provided by EDR, and dated 06/30/2025 has revealed that there are 2 MA LAST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NO LOCATION AID	***18 KENDALL RD***	***NNE 1/4 - 1/2 (0.287 mi.)***	***9***	***36***
Release Tracking Number / Current Status: 3-0023928 / RAO				
293 WESTON ROAD, WEL	***293 WESTON ROAD***	***NNE 1/4 - 1/2 (0.497 mi.)***	***12***	***74***
Release Tracking Number / Current Status: 3-0050297 / UNCLSS				

State and tribal institutional control / engineering control registries

MA INST CONTROL: Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

A review of the MA INST CONTROL list, as provided by EDR, and dated 06/30/2025 has revealed that there is 1 MA INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PAINTSHOP POND	***CENTRAL ST RTE 135***	***ESE 1/4 - 1/2 (0.430 mi.)***	***10***	***39***

EXECUTIVE SUMMARY

Release Tracking Number: 3-0000462

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

MA HW GEN: Permanent generator identification numbers for all Massachusetts generators of hazardous waste and waste oil that have registered with or notified MassDEP of their hazardous waste activities.

A review of the MA HW GEN list, as provided by EDR, and dated 03/07/2025 has revealed that there is 1 MA HW GEN site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MBTA RAIL BRIDGE REP State Generator Status: SQG-MA EPA Id: MAR000594572	1 BACON ST	SW 0 - 1/8 (0.039 mi.)	B4	29

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 12/31/2019 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MORSES POND CULVERT EPA ID: MAN000103085	***OFF OF STATE HIGHWAY***	***0 - 1/8 (0.000 mi.)***	***A2***	***15***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

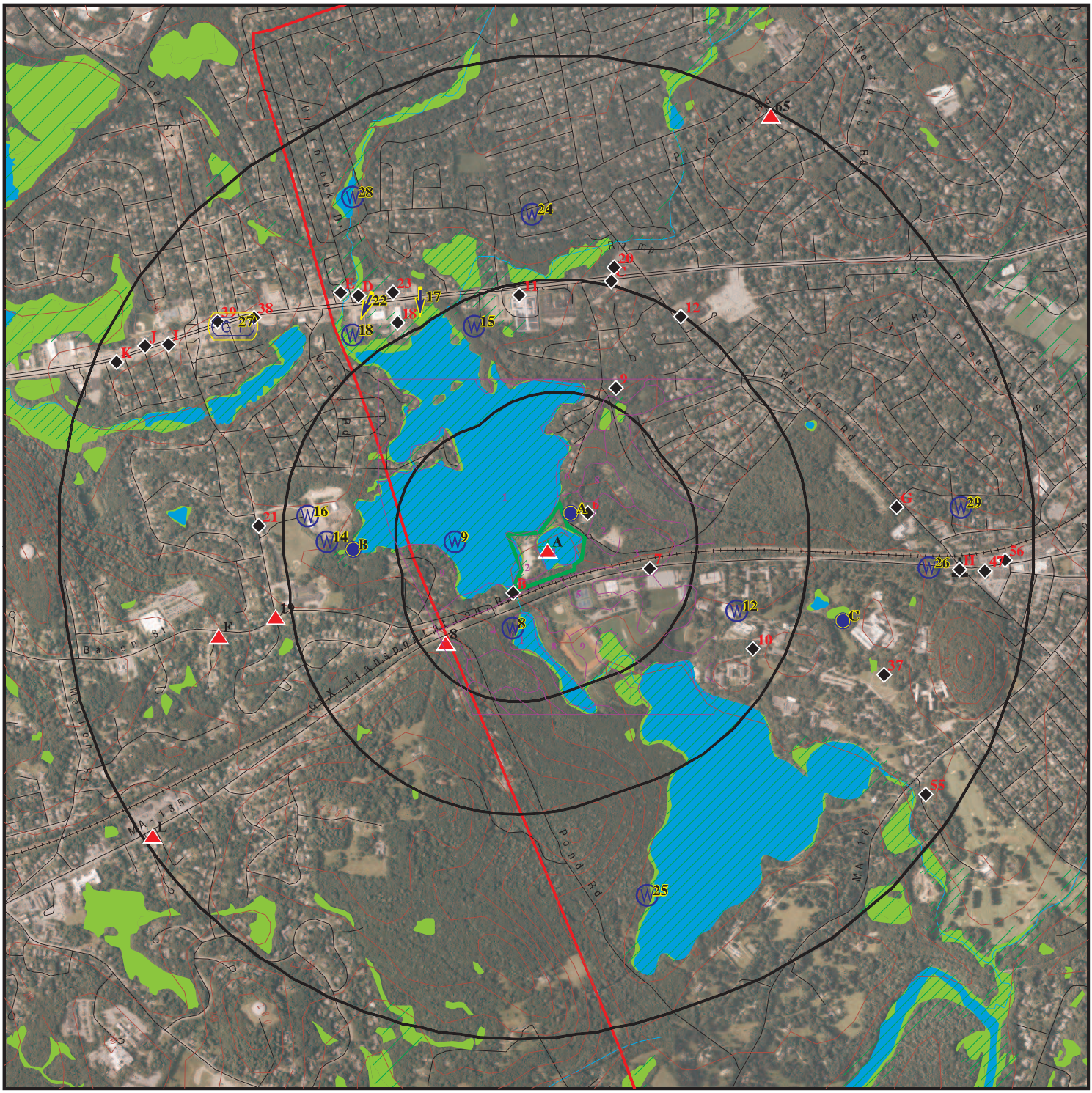
Lower Elevation	Address	Direction / Distance	Map ID	Page
WELLESLEY COLLEGE FO	106 CENTRAL ST	E 1/2 - 1 (0.836 mi.)	H44	214

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 24 records.

Site Name	Database(s)
REAR OF GASOLINE STATION	MA SHWS, MA RELEASE
NO LOCATION AID	MA SHWS, MA RELEASE
NATICK SERVICE PLAZA EASTBOUND	MA SHWS, MA RELEASE
NATICK SERVICE PLAZA 8E	MA SHWS, MA RELEASE
NATICK SERVICE PLAZA 8E MM 117.6	MA SHWS, MA RELEASE
NORTH ACCESS DRIVEWAY	MA SHWS, MA RELEASE, MA ENF
REAR OF 123 OAK ST LOTS 5, 6, 7 &	MA SHWS, MA RELEASE
REAR OF 123 OAK ST	MA SHWS, MA RELEASE
WILLOW AND MECHANIC STREETS	MA SHWS, MA LUST, MA RELEASE
PROPERTY	MA SHWS, MA LUST, MA RELEASE
PARK MANOR WEST	MA SHWS, MA RELEASE
NO LOCATION AID	MA SHWS, MA RELEASE
SPRAGUE SCHOOL	MA SHWS, MA RELEASE
SPRAGUE SCHOOL ATHLETIC FIELDS	MA SHWS, MA INST CONTROL, MA RELEASE
NO LOCATION AID	MA SHWS, MA INST CONTROL, MA RELEASE
WELLESLEY OFFICE PARK	MA SHWS, MA RELEASE
WELLESLEY OFFICE	MA SHWS, MA RELEASE
ROADWAY IN FRONT OF 272	MA SHWS, MA RELEASE
RTE 9 W	MA SHWS, MA LUST, MA RELEASE
CUMBERLAND FARMS	MA SHWS, MA RELEASE
GULF STA	MA LUST, MA RELEASE
GULF STATION	MA LUST, MA RELEASE
MORSES POND WATER TREATMENT PLANT	MA AST
MORSES POND	MA RGA HWS

OVERVIEW MAP - 8064784.2S



0 1/4 1/2 1 Miles

Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

Indian Reservations BIA
County Boundary
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Morses Pond	CLIENT:	Weston and Sampson Engineers
ADDRESS:	99 Turner Road Wellesley MA 02482	CONTACT:	Melissa Davis
LAT/LONG:	42.296475 / 71.316875	INQUIRY #:	8064784.2s
		DATE:	July 31, 2025 1:39 pm

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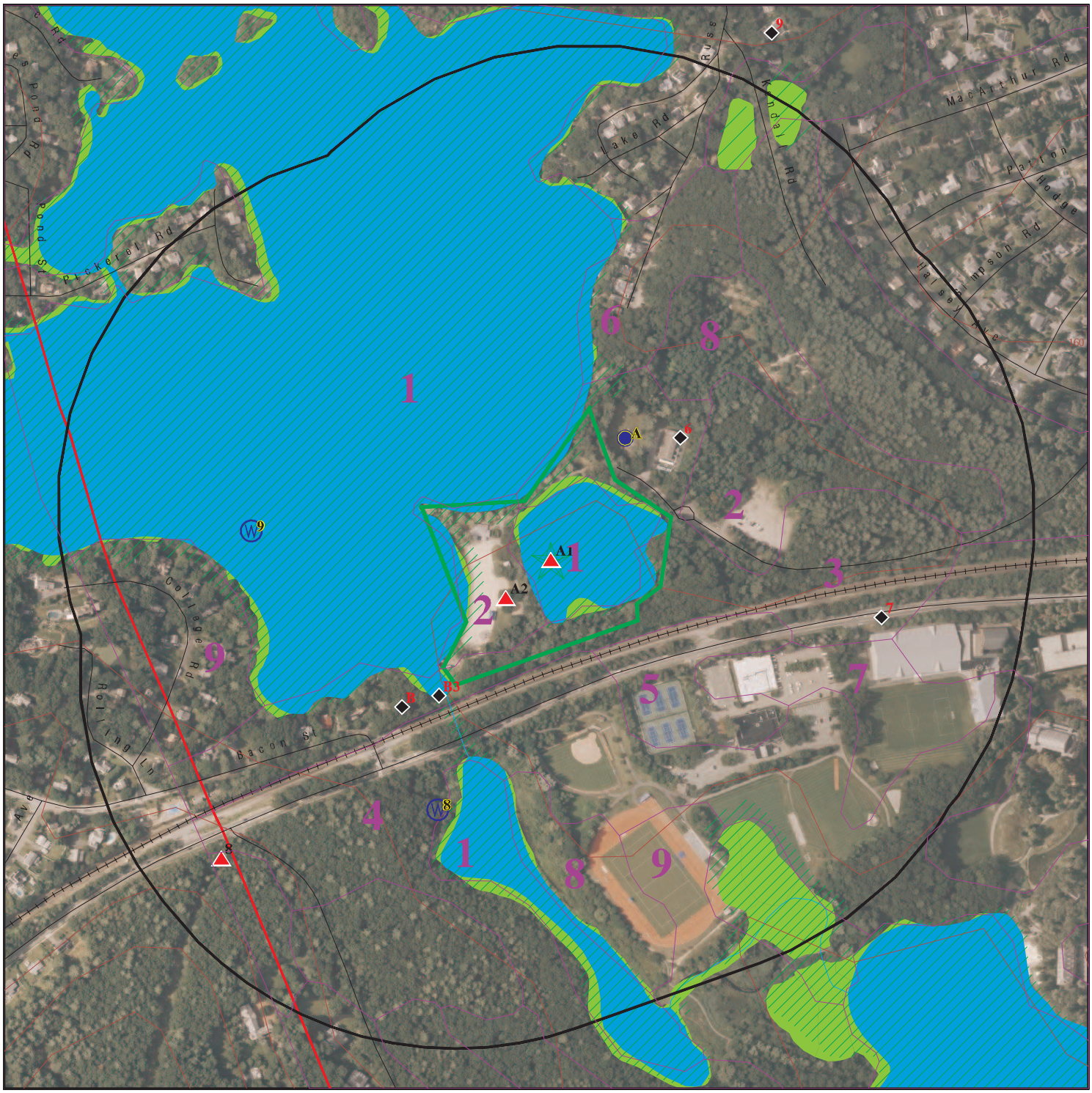
DETAIL MAP - 8064784.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

County Boundary

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Morses Pond	CLIENT:	Weston and Sampson Engineers
ADDRESS:	99 Turner Road Wellesley MA 02482	CONTACT:	Melissa Davis
		INQUIRY #:	8064784.2s
LAT/LONG:	42.296475 / 71.316875	DATE:	July 31, 2025 1:41 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		1	0	0	NR	NR	1
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	0	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
MA SHWS	1.000		2	2	3	52	NR	59
Lists of state and tribal landfills and solid waste disposal facilities								
MA SWF/LF	0.500		0	0	0	NR	NR	0
Lists of state and tribal leaking storage tanks								
MA LAST	0.500		0	0	2	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MA LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
MA UST	0.250		0	0	NR	NR	NR	0
MA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
MA INST CONTROL	0.500		0	0	1	NR	NR	1
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
MA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
MA LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
MA RELEASE	TP		NR	NR	NR	NR	NR	0
MA SPILLS	TP		NR	NR	NR	NR	NR	0
MA SPILLS 90	TP		NR	NR	NR	NR	NR	0
MA SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	0	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP	1	NR	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST FINDER	0.250		0	0	NR	NR	NR	0
E MANIFEST	0.250		0	0	NR	NR	NR	0
MA PFAS	0.250		0	0	NR	NR	NR	0
MA AIRS	TP		NR	NR	NR	NR	NR	0
MA ASBESTOS	TP		NR	NR	NR	NR	NR	0
MA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MA ENF	TP		NR	NR	NR	NR	NR	0
MA Financial Assurance	TP		NR	NR	NR	NR	NR	0
MA GWDP	TP		NR	NR	NR	NR	NR	0
MA HW GEN	0.250		1	0	NR	NR	NR	1
NY MANIFEST	0.250		1	0	NR	NR	NR	1
MA MERCURY	0.500		0	0	0	NR	NR	0
MA NPDES	TP		NR	NR	NR	NR	NR	0
MA TIER 2	TP		NR	NR	NR	NR	NR	0
MA TSD	0.500		0	0	0	NR	NR	0
MA UIC	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	1	NR	1
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
MA RGA HWS	TP		NR	NR	NR	NR	NR	0
MA RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		4	6	2	6	53	0	71

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **MORSES POND CULVERT SITE** **RCRA NonGen / NLR** **1004718665**
Target **99 TURNER RD** **ICIS** **MAR000502724**
Property **WELLESLEY, MA 02482** **FINDS**
ECHO

Site 1 of 2 in cluster A

Actual:
162 ft.

RCRA Listings:

Date Form Received by Agency:		20040319
Handler Name:		Morses Pond Culvert Site
Handler Address:		99 Turner Rd
Handler City,State,Zip:		WELLESLEY, MA 02181
EPA ID:		MAR000502724
Contact Name:		FRANK GARDNER
Contact Address:		1 CONGRESS ST
Contact City,State,Zip:		BOSTON, MA 02114
Contact Telephone:		617-918-1278
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		01
Land Type:		Private
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Ma
State District:		N
Mailing Address:		1 CONGRESS ST
Mailing City,State,Zip:		BOSTON, MA 02114-0000
Owner Name:	Superfund Site/ Multiple Prps	
Owner Type:		Other
Operator Name:	Morses Pond Culvert Site	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
202 GPRA Corrective Action Baseline:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No

MORSES POND CULVERT SITE (Continued) **1004718665**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20171020
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste
Waste Code:	D003
Waste Description:	Reactive Waste
Waste Code:	D004
Waste Description:	Arsenic
Waste Code:	D005
Waste Description:	Barium
Waste Code:	D006
Waste Description:	Cadmium
Waste Code:	D007
Waste Description:	Chromium
Waste Code:	D008
Waste Description:	Lead
Waste Code:	D009
Waste Description:	Mercury
Waste Code:	D010
Waste Description:	Selenium
Waste Code:	D011
Waste Description:	Silver
Waste Code:	D012

MORSES POND CULVERT SITE (Continued) **1004718665**

Waste Description:	Endrin (1,2,3,4,10,10-Hexachloro-1,7-Epoxy-1,4,4a,5,6,7,8,8a-Octahydro-1,4-Endo, Endo-5,8-Dimeth-Ano-Naphthalene)
Waste Code:	D013
Waste Description:	Lindane (1,2,3,4,5,6-Hexa-Chlorocyclohexane, Gamma Isomer)
Waste Code:	D014
Waste Description:	Methoxychlor (1,1,1-Trichloro-2,2-Bis [P-Methoxyphenyl] Ethane)
Waste Code:	D015
Waste Description:	Toxaphene (C10 H10 Cl8, Technical Chlorinated Camphene, 67-69 Percent Chlorine)
Waste Code:	D016
Waste Description:	2,4-D (2,4-Dichlorophenoxyacetic Acid)
Waste Code:	D017
Waste Description:	2,4,5-Tp Silvex (2,4,5-Trichlorophenoxypropionic Acid)
Waste Code:	D018
Waste Description:	Benzene
Waste Code:	D019
Waste Description:	Carbon Tetrachloride
Waste Code:	D020
Waste Description:	Chlordane
Waste Code:	D021
Waste Description:	Chlorobenzene
Waste Code:	D022
Waste Description:	Chloroform
Waste Code:	D023
Waste Description:	O-Cresol
Waste Code:	D024
Waste Description:	M-Cresol
Waste Code:	D025
Waste Description:	P-Cresol
Waste Code:	D026
Waste Description:	Cresol
Waste Code:	D027
Waste Description:	1,4-Dichlorobenzene
Waste Code:	D028
Waste Description:	1,2-Dichloroethane
Waste Code:	D029
Waste Description:	1,1-Dichloroethylene
Waste Code:	D030

MORSES POND CULVERT SITE (Continued) **1004718665**

Waste Description: 2,4-Dinitrotoluene

Waste Code: D031
Waste Description: Heptachlor (And Its Epoxide)

Waste Code: D032
Waste Description: Hexachlorobenzene

Waste Code: D033
Waste Description: Hexachlorobutadiene

Waste Code: D034
Waste Description: Hexachloroethane

Waste Code: D035
Waste Description: Methyl Ethyl Ketone

Waste Code: D036
Waste Description: Nitrobenzene

Waste Code: D037
Waste Description: Pentachlorophenol

Waste Code: D038
Waste Description: Pyridine

Waste Code: D039
Waste Description: Tetrachloroethylene

Waste Code: D040
Waste Description: Trichloroethylene

Waste Code: D041
Waste Description: 2,4,5-Trichlorophenol

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: MORSES POND CULVERT SITE
Legal Status: Private
Date Became Current: 20011015
Date Ended Current: 20040319
Owner/Operator Address: 1 CONGRESS ST
Owner/Operator City,State,Zip: BOSTON, MA 02114
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: USEPA REGION 1
Legal Status: Federal
Date Became Current: 20011017
Date Ended Current: Not reported
Owner/Operator Address: USEPA REGION 1(HBR) 1 CONGRESS ST ST
Owner/Operator City,State,Zip: BOSTON, MA 11420
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported

MORSES POND CULVERT SITE (Continued) **1004718665**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: MORSES POND CULVERT SITE
Legal Status: Private
Date Became Current: 20011015
Date Ended Current: 20040319
Owner/Operator Address: 1 CONGRESS ST
Owner/Operator City,State,Zip: BOSTON, MA 02114
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: US EPA REGION 1
Legal Status: Other
Date Became Current: 19000101
Date Ended Current: 20040319
Owner/Operator Address: 1 CONGRESS ST
Owner/Operator City,State,Zip: BOSTON, MA 02114
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: TOWN OF WELLESLEY
Legal Status: Municipal
Date Became Current: 19040401
Date Ended Current: Not reported
Owner/Operator Address: 99 TURNER ROAD
Owner/Operator City,State,Zip: WELLESLEY, MA 02482
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SUPERFUND SITE/ MULTIPLE PRPS
Legal Status: Other
Date Became Current: 19000101
Date Ended Current: 20040319
Owner/Operator Address: 1 CONGRESS ST
Owner/Operator City,State,Zip: BOSTON, MA 02114
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SUPERFUND SITE/ MULTIPLE PRPS
Legal Status: Other
Date Became Current: 19000101
Date Ended Current: Not reported
Owner/Operator Address: 1 CONGRESS ST

MORSES POND CULVERT SITE (Continued) **1004718665**

Owner/Operator City,State,Zip: BOSTON, MA 02114
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: US EPA REGION 1
Legal Status: Other
Date Became Current: 19000101
Date Ended Current: Not reported
Owner/Operator Address: 1 CONGRESS ST
Owner/Operator City,State,Zip: BOSTON, MA 02114
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20040319
Handler Name: MORSES POND CULVERT SITE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ma
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20011015
Handler Name: MORSES POND CULVERT SITE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ma
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20020227
Handler Name: MORSES POND CULVERT SUPERFUN SITE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

MORSES POND CULVERT SITE (Continued) **1004718665**

List of NAICS Codes and Descriptions:
NAICS Code: 92411
NAICS Description: Administration Of Air And Water Resource And Solid Waste Management Programs

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

ICIS:
Enforcement Action ID: 01-2004-0031
FRS ID: 110012241029
Action Name: AMERICAN PREMIER UNDERWRITERS INC
Facility Name: MORSES POND CULVERT SITE
Facility Address: 99 TURNER RD
WELLESLEY, MA 024824428
Enforcement Action Type: Civil Judicial Action
Facility County: NORFOLK
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 42.29807
Longitude in Decimal Degrees: -71.30909
Permit Type Desc: Not reported
Program System Acronym: MAN000103085
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Facility Name: MORSES POND CULVERT SITE
Address: 99 TURNER RD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MORSES POND CULVERT SITE
Address: 99 TURNER RD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MORSES POND CULVERT SITE
Address: 99 TURNER RD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

MORSES POND CULVERT SITE (Continued) **1004718665**

Facility Name: MORSES POND CULVERT SITE
Address: 99 TURNER RD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

FINDS:
Registry ID: 110012241029

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
All generators and treatment, storage, and disposal (TSD) facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years. The data collected is used to create the National Biennial Resource Conservation and Recovery Act (RCRA) Hazardous Waste Report. This data is processed within the RCRA Information (RCRAInfo) database
The Massachusetts - Environmental Protection Integrated Computer System (MA-EPICS) is the central repository for all environmental protection data for the State of Massachusetts.
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004718665
Registry ID: 110012241029

DFR URL:
Name: MORSES POND CULVERT SITE
Address: 99 Turner Rd
City,State,Zip: WELLESLEY, MA 02482

A2 **MORSES POND CULVERT** **SEMS-ARCHIVE** **1003072928**
OFF OF STATE HIGHWAY 135 **PRP** **MAN000103085**
< 1/8 **WELLESLEY, MA 02181** **NY MANIFEST**
1 ft.

Site 2 of 2 in cluster A

Relative: Higher
Actual: 175 ft.

SEMS Archive:
Site ID: 0103085
EPA ID: MAN000103085
Name: MORSES POND CULVERT
Address: OFF OF STATE HIGHWAY 135
Address 2: Not reported
City,State,Zip: WELLESLEY, MA 02181
Cong District: 04
FIPS Code: 25021
FF: N
NPL: Not on the NPL

MORSES POND CULVERT (Continued) **1003072928**

Non NPL Status: Removal Only Site (No Site Assessment Work Needed)

SEMS Archive Detail:

Region:	01
Site ID:	0103085
EPA ID:	MAN000103085
Site Name:	MORSES POND CULVERT
NPL:	N
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	2000-12-15 05:00:00
Finish Date:	Not reported
Qual:	V
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0103085
EPA ID:	MAN000103085
Site Name:	MORSES POND CULVERT
NPL:	N
FF:	N
OU:	00
Action Code:	RV
Action Name:	RMVL
SEQ:	1
Start Date:	2000-10-12 04:00:00
Finish Date:	2002-08-07 04:00:00
Qual:	C
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0103085
EPA ID:	MAN000103085
Site Name:	MORSES POND CULVERT
NPL:	N
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1999-06-18 04:00:00
Finish Date:	1999-11-24 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0103085
EPA ID:	MAN000103085
Site Name:	MORSES POND CULVERT
NPL:	N
FF:	N
OU:	00
Action Code:	HX
Action Name:	PRE-CERC
SEQ:	1

MORSES POND CULVERT (Continued) **1003072928**

Start Date:	1999-06-18 04:00:00
Finish Date:	1999-11-24 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0103085
EPA ID:	MAN000103085
Site Name:	MORSES POND CULVERT
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	2011-11-21 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

PRP:

PRP Name:	AMERICAN PREMIER UNDERWRITERS INC AMERICAN PREMIER UNDERWRITERS INC AMERICAN PREMIER UNDERWRITERS INC MASSACHUSETTS BAY TRANSIT AUTHORITY MASSACHUSETTS BAY TRANSIT AUTHORITY MASSACHUSETTS BAY TRANSIT AUTHORITY TOWN OF WELLESLEY

NY MANIFEST:

EPA ID:	MAN000103085
Country:	USA
Name:	Usepa
Address:	99 TURNER RD
Address 2:	Not reported
City,State,Zip:	WELLESLEY, MA 02482
Zip 4:	Not reported
Location Address 1:	99 TURNER RD
Location Address 2:	Not reported
Location City,State,Zip:	WELLESLEY, MA 02482
Location Zip 4:	Not reported
Facility Status:	Not reported
Total Tanks:	Not reported
Code:	BP

Mailing:

Mailing Name:	Usepa
Mailing Contact:	Frank Gardner
Mailing Address 1:	1 CONGRESS ST SUITE 100
Mailing Address 2:	Not reported
Mailing City,State,Zip:	BOSTON, MA 02114
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	6179181278

Manifest Data:

MORSES POND CULVERT (Continued) **1003072928**

Document ID:	NYB9585504
Manifest Status:	Not reported
Trans1 State ID:	61486GNY
Year:	2001
Trans2 State ID:	Not reported
Generator Ship Date:	10/17/2001
Trans1 Recv Date:	10/17/2001
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	10/18/2001
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	MAN000103085
Trans1 EPA ID:	PAD987347515
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD049836679
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code 1:	Chromium
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Quantity:	63980
Units:	Pounds
Number of Containers:	001
Container Type:	Dump truck
Handling Method:	Treat
Specific Gravity:	01.00

Document ID:	NYB9585513
Manifest Status:	Not reported
Trans1 State ID:	AC40405NY
Year:	2001
Trans2 State ID:	Not reported
Generator Ship Date:	10/17/2001
Trans1 Recv Date:	10/17/2001
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	10/18/2001
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	MAN000103085
Trans1 EPA ID:	PAD987347515
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD049836679
TSDF ID 2:	Not reported

MORSES POND CULVERT (Continued) **1003072928**

Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code 1:	Chromium
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Quantity:	56620
Units:	Pounds
Number of Containers:	001
Container Type:	Dump truck
Handling Method:	Treat
Specific Gravity:	01.00

B3 **MORSES POND OUTLET CULVERT 1 BACON ST** **MA SHWS S103811523**
SW **RTE 135** **MA RELEASE N/A**
< 1/8 **WELLESLEY, MA 02181** **MA ENF**
0.013 mi.
70 ft. **Site 1 of 3 in cluster B**

Relative: **Lower**
Actual: **137 ft.**

SHWS:

Name:	MORSES POND OUTLET CULVERT 1 BACON ST
Address:	RTE 135
City,State,Zip:	WELLESLEY, MA 02181
Facility ID:	3-0011653
Source Type:	UNKNOWN
Release Town:	WELLESLEY
Notification Date:	09/28/1994
Category:	TWO HR
Associated ID:	Not reported
Current Status:	TMPS
Status Date:	03/09/2016
Phase:	Not reported
Response Action Outcome:	TN
Oil Or Haz Material:	Not reported

Release:

Name:	MORSES POND OUTLET CULVERT 1 BACON ST
Address:	RTE 135
City,State,Zip:	WELLESLEY, MA 02181
Release Tracking Number/Current Status:	3-0011653 / TMPS
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	09/28/1994
Category:	TWO HR

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Status Date: 03/09/2016
Phase: Not reported
Response Action Outcome: TN - TN
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: An activity type that is related to an Audit
Action Status: Interim Deadline Letter Issued
Action Date: 1/10/2013
Response Action Outcome: TN

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 1/23/2018
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 1/23/2018
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 1/8/2019
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 1/8/2019
Response Action Outcome: TN

Action Type: An activity type that is related to an Audit
Action Status: Interim Deadline Letter Issued
Action Date: 10/16/2013
Response Action Outcome: TN

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 10/25/2013
Response Action Outcome: TN

Action Type: Compliance and Enforcement Action
Action Status: NORA
Action Date: 11/18/1998
Response Action Outcome: TN

Action Type: Immediate Response Action - DEP Lead
Action Status: Written Plan Received
Action Date: 11/29/1994
Response Action Outcome: TN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/29/1994
Response Action Outcome: TN

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Action Type: Immediate Response Action - DEP Lead
Action Status: Written Plan Received
Action Date: 12/20/1994
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/22/2016
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 12/22/2016
Response Action Outcome: TN

Action Type: Partial RAO for this RTN
Action Status: Inspection and Monitoring Report Received
Action Date: 12/24/2015
Response Action Outcome: TN

Action Type: Phase 4
Action Status: Modified Revised or Updated Plan Received
Action Date: 12/27/2013
Response Action Outcome: TN

Action Type: Compliance and Enforcement Action
Action Status: RFI
Action Date: 12/3/1998
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 2/11/2025
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 2/11/2025
Response Action Outcome: TN

Action Type: Compliance and Enforcement Action
Action Status: NORA
Action Date: 2/16/2000
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 2/17/2023
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 2/17/2023
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Action Date: 2/19/2020
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 2/19/2020
Response Action Outcome: TN

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 2/26/2010
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/1/2021
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/1/2021
Response Action Outcome: TN

Action Type: Partial RAO for this RTN
Action Status: Inspection and Monitoring Report Received
Action Date: 3/12/2015
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/18/2022
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/18/2022
Response Action Outcome: TN

Action Type: Partial RAO for this RTN
Action Status: Level I - Technical Screen Audit
Action Date: 3/19/2015
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 3/25/2002
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/5/2024
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/5/2024
Response Action Outcome: TN

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Action Type:	Partial RAO for this RTN
Action Status:	PSNRCD
Action Date:	3/9/2016
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	TSNRCD
Action Date:	3/9/2016
Response Action Outcome:	TN
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	4/11/2003
Response Action Outcome:	TN
Action Type:	BOL
Action Status:	SHPFAC
Action Date:	4/16/2014
Response Action Outcome:	TN
Action Type:	Partial RAO for this RTN
Action Status:	RAO Statement Received
Action Date:	4/25/2014
Response Action Outcome:	TN
Action Type:	Phase 4
Action Status:	Completion Statement Received
Action Date:	4/25/2014
Response Action Outcome:	TN
Action Type:	Tier Classification
Action Status:	Tier 1C Classification
Action Date:	4/27/2010
Response Action Outcome:	TN
Action Type:	Phase 1
Action Status:	Completion Statement Received
Action Date:	4/27/2010
Response Action Outcome:	TN
Action Type:	Tier Classification
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	4/27/2010
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	Periodic Review Opinion Evaluating Temp Solution
Action Date:	4/29/2019
Response Action Outcome:	TN
Action Type:	Phase 4
Action Status:	Completion Statement Received
Action Date:	4/29/2019
Response Action Outcome:	TN
Action Type:	Phase 4
Action Status:	Written Plan Received

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Action Date: 4/4/2013
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 5/16/2024
Response Action Outcome: TN

Action Type: Phase 3
Action Status: Revised Statement or Transmittal Received
Action Date: 6/13/2013
Response Action Outcome: TN

Action Type: An activity type that is related to an Audit
Action Status: Audit Follow-up Completion Statement Received
Action Date: 6/13/2013
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 6/15/2010
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 6/18/1996
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/25/2018
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 6/25/2018
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/27/2017
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 6/27/2017
Response Action Outcome: TN

Action Type: RLFA
Action Status: FOLOFF
Action Date: 6/6/2006
Response Action Outcome: TN

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 6/7/2010
Response Action Outcome: TN

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Action Type:	Phase 3
Action Status:	Completion Statement Received
Action Date:	6/7/2011
Response Action Outcome:	TN
Action Type:	Phase 2
Action Status:	Completion Statement Received
Action Date:	6/7/2011
Response Action Outcome:	TN
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	6/9/2015
Response Action Outcome:	TN
Action Type:	Compliance and Enforcement Action
Action Status:	Interim Deadline Letter Issued
Action Date:	7/11/1996
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	7/14/2016
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	7/14/2016
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	8/16/2023
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	8/16/2023
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	8/18/2020
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	8/18/2020
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	8/2/2024
Response Action Outcome:	TN
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Action Date: 8/2/2024
Response Action Outcome: TN

Action Type: Phase 4
Action Status: Written Approval of Plan
Action Date: 8/27/2014
Response Action Outcome: TN

Action Type: An activity type that is related to an Audit
Action Status: NOA
Action Date: 8/29/2011
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 8/5/2021
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 8/5/2021
Response Action Outcome: TN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 9/28/1994
Response Action Outcome: TN

Action Type: RLFA
Action Status: FOLOFF
Action Date: 9/28/1994
Response Action Outcome: TN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 9/29/1995
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/29/2022
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/29/2022
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 9/30/1994
Response Action Outcome: TN

Action Type: BWS03
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: TN

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Chemicals:

Chemical:	CHROMIUM (TOTAL)
Quantity:	129700 milligrams per kilogram
Chemical:	CHROMIUM (TOTAL)
Quantity:	129700 parts per million
Location Type:	RESIDNTIAL
Location Type:	RIGHTOFWAY
Location Type:	WATERBODY
Source:	UNKNOWN

ENFORCEMENT:

Name:	BLANK ROME, LLP
Address:	RTE 135
City,State,Zip:	WELLESLEY, MA 02181
Region:	NERO
DEP Region:	NERO
DEP Program:	3t
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0011653
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	Not reported
Date Executed:	06/07/2010
ENF #:	Faux Enf- 0274
Document Type:	IDL
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	NO
EJ Community (Y/N):	Not reported
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Commercially Owned

Name:	BLANK ROME, LLP
Address:	RTE 135
City,State,Zip:	WELLESLEY, MA 02181
Region:	NERO
DEP Region:	NERO
DEP Program:	3t
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0011653
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	Not reported
Date Executed:	02/26/2010
ENF #:	Faux Enf- 0273
Document Type:	IDL

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	NO
EJ Community (Y/N):	Not reported
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Commercially Owned

Name:	AMERICAN PREMIER UNDERWRITERS, INC.
Address:	RTE 135
City,State,Zip:	WELLESLEY, MA 02181
Region:	NERO
DEP Region:	NERO
DEP Program:	3t
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0011653
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	WELLESLEY
Date Executed:	01/10/2013
ENF #:	Faux Enf- 0140
Document Type:	IDL
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	NO
EJ Community (Y/N):	NO
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Commercially Owned

Name:	AMERICAN PREMIER UNDERWRITERS, INC.
Address:	RTE 135
City,State,Zip:	WELLESLEY, MA 02181
Region:	NERO
DEP Region:	NERO
DEP Program:	3t
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0011653
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	WELLESLEY

MORSES POND OUTLET CULVERT 1 BACON ST (Continued) **S103811523**

Date Executed:	10/16/2013
ENF #:	Faux Enf- 2303
Document Type:	IDL
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	NO
EJ Community (Y/N):	NO
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Commercially Owned

B4 **MBTA RAIL BRIDGE REPLC W13 011 893MP1607** **MA HW GEN** **S127573889**
SW **1 BACON ST** **N/A**
< 1/8 **WELLESLEY, MA 02482**
0.039 mi.
204 ft. **Site 2 of 3 in cluster B**

Relative: HW GEN:
Lower

Name:	MBTA RAIL BRIDGE REPLC W13 011 893MP1607
Address:	1 BACON ST
City,State,Zip:	WELLESLEY, MA 02482
EPA Id:	MAR000594572
RCRA Generator Status:	SQG
State Generator Status:	SQG-MA

Actual:
120 ft.

B5 **MBTA RAIL BRIDGE REPLC W13 011 893MP1607** **RCRA-SQG** **1026831823**
SW **1 BACON ST** **MAR000594572**
< 1/8 **WELLESLEY, MA 02482**
0.039 mi.
204 ft. **Site 3 of 3 in cluster B**

Relative: RCRA Listings:
Lower

Date Form Received by Agency:	20210329
Handler Name:	Mbta Rail Bridge Replc W13 011 893mp1607
Handler Address:	Bacon St
Handler City,State,Zip:	WELLESLEY, MA 02482
EPA ID:	MAR000594572
Contact Name:	JAMES CALLAHON
Contact Address:	RIVER BEACH PKWY
Contact City,State,Zip:	MEDFORD, MA 02155
Contact Telephone:	857-248-6854
Contact Fax:	Not reported
Contact Email:	JCALLAHON1@MBTA.COM
Contact Title:	RESIDENT ENGINEER
EPA Region:	01
Land Type:	State
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported

Actual:
120 ft.

MBTA RAIL BRIDGE REPLC W13 011 893MP1607 (Continued) **1026831823**

Accessibility:		Not reported
Active Site Indicator:		Handler Activities, State-specific Activities
State District Owner:		Ma
State District:		NE
Mailing Address:		RIVER BEACH PKWY
Mailing City,State,Zip:		MEDFORD, MA 02155
Owner Name:	Mbta	
Owner Type:		State
Operator Name:	Mbta	
Operator Type:		State
Short-Term Generator Activity:		Yes
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site State-Reg Handler:		--Y
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
202 GPRA Corrective Action Baseline:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported
Handler Date of Last Change:		20210407
Recognized Trader-Importer:		No
Recognized Trader-Exporter:		No
Importer of Spent Lead Acid Batteries:		No
Exporter of Spent Lead Acid Batteries:		No
Recycler Activity Without Storage:		No
Manifest Broker:		No
Sub-Part P Indicator:		No

Hazardous Waste Summary:

Waste Code:	D008
Waste Description:	Lead

MBTA RAIL BRIDGE REPLC W13 011 893MP1607 (Continued) **1026831823**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: MBTA	
Legal Status:	State
Date Became Current:	20210317
Date Ended Current:	Not reported
Owner/Operator Address:	10 PARK PLZ
Owner/Operator City,State,Zip:	BOSTON, MA 02116
Owner/Operator Telephone:	617-222-3169
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	DDARBY@MBTA.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name: MBTA	
Legal Status:	State
Date Became Current:	20210317
Date Ended Current:	Not reported
Owner/Operator Address:	10 PARK PLZ
Owner/Operator City,State,Zip:	BOSTON, MA 02116
Owner/Operator Telephone:	617-222-3169
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	DDARBY@MBTA.COM

Historic Generators:

Receive Date:	20210329
Handler Name:	MBTA RAIL BRIDGE REPLC W13 011 893MP1607
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Ma
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	48511
NAICS Description:	Urban Transit Systems

NAICS Code:	485112
NAICS Description:	Commuter Rail Systems

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

6
NE
< 1/8
0.049 mi.
261 ft.

MORSES POND
TURNER RD END OF
WELLESLEY, MA 02481

MA SHWS **S104941941**
MA RELEASE **N/A**

Relative:
Lower

Actual:
124 ft.

SHWS:

Name:	MORSES POND
Address:	TURNER RD END OF
City,State,Zip:	WELLESLEY, MA 024810000
Facility ID:	3-0020393
Source Type:	PIPE
Release Town:	WELLESLEY
Notification Date:	02/13/2001
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	03/26/2001
Phase:	Not reported
Response Action Outcome:	A1
Oil Or Haz Material:	Oil

Release:

Name:	MORSES POND
Address:	TURNER RD END OF
City,State,Zip:	WELLESLEY, MA 024810000
Release Tracking Number/Current Status:	3-0020393 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	02/13/2001
Category:	TWO HR
Status Date:	03/26/2001
Phase:	Not reported
Response Action Outcome:	A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type:	Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	2/13/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	2/13/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	3/26/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

MORSES POND (Continued) **S104941941**

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 3/26/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 3/8/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: HYDRAULIC FLUID
Quantity: 3 gallons
Location Type: MUNICIPAL
Source: PIPE

---

7 **NO LOCATION AID** **MA SHWS S132537244**
East **300 CENTRAL ST** **MA RELEASE N/A**
1/8-1/4 **WELLESLEY, MA**
0.153 mi.
809 ft.

Relative: **Lower**
Actual: **155 ft.**

SHWS:
Name: NO LOCATION AID
Address: 300 CENTRAL ST
City,State,Zip: WELLESLEY, MA
Facility ID: 3-0021420
Source Type: PIPE
Release Town: WELLESLEY
Notification Date: 01/23/2002
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 03/20/2002
Phase: Not reported
Response Action Outcome: A2
Oil Or Haz Material: Oil

Release:
Name: NO LOCATION AID
Address: 300 CENTRAL ST
City,State,Zip: WELLESLEY, MA
Release Tracking Number/Current Status: 3-0021420 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 01/23/2002
Category: TWO HR
Status Date: 03/20/2002
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Oil

NO LOCATION AID (Continued) **S132537244**

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	IRA Conducted Prior to Notification
Action Date:	1/23/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	1/23/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	2/28/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	3/12/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	3/20/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	3/20/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:

Chemical:	HYDRAULIC FLUID
Quantity:	22 gallons
Location Type:	SCHOOL
Source:	PIPE

8
SW
1/8-1/4
0.200 mi.
1057 ft.

WELLESLEY COLLEGE MAIN ENTRANCE
RTE 135 WASHINGTON ST
WELLESLEY, MA 02181

MA SHWS **S103811662**
MA RELEASE **N/A**

Relative:
Higher

Actual:
167 ft.

SHWS:

Name:	WELLESLEY COLLEGE MAIN ENTRANCE
Address:	RTE 135 WASHINGTON ST
City,State,Zip:	WELLESLEY, MA 021810000
Facility ID:	3-0013455
Source Type:	VEHICLE

WELLESLEY COLLEGE MAIN ENTRANCE (Continued) **S103811662**

Release Town:	WELLESLEY
Notification Date:	02/14/1996
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	04/16/1996
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Not reported

Release:

Name:	WELLESLEY COLLEGE MAIN ENTRANCE
Address:	RTE 135 WASHINGTON ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number/Current Status:	3-0013455 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	02/14/1996
Category:	TWO HR
Status Date:	04/16/1996
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	2/14/1996
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	RLFA
Action Status:	FOLFLD
Action Date:	2/14/1996
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	2/14/1996
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	2/14/1996
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	2/20/1996
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been

WELLESLEY COLLEGE MAIN ENTRANCE (Continued) **S103811662**

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 2/29/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 4/16/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 4/16/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: DIESEL FUEL
Quantity: 100 gallons
Source: VEHICLE

9
NNE
1/4-1/2
0.287 mi.
1517 ft.

NO LOCATION AID **MA SHWS** **S106775741**
18 KENDALL RD **MA LAST** **N/A**
WELLESLEY, MA 02482 **MA RELEASE**

Relative: Lower
Actual: 145 ft.

SHWS:
Name: NO LOCATION AID
Address: 18 KENDALL RD
City,State,Zip: WELLESLEY, MA 024824305
Facility ID: 3-0023928
Source Type: PIPE
Release Town: WELLESLEY
Notification Date: 06/03/2004
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 03/11/2005
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

LAST:
Name: NO LOCATION AID
Address: 18 KENDALL RD
City,State,Zip: WELLESLEY, MA 024824305
Release Tracking Number/Current Status: 3-0023928 / RAO
Source Type: AST
Release Town: WELLESLEY
Notification Date: 06/03/2004
Category: TWO HR
Associated ID: Not reported

NO LOCATION AID (Continued) **S106775741**

Status Date: 03/11/2005
Phase: Not reported
Response Action Outcome: -
Oil Or Haz Material: Not reported

Chemicals:
Chemical: FUEL OIL #2
Quantity: 100 gallons
Chemical: FUEL OIL #2
Quantity: 90 gallons
Location Type: RESIDNTIAL
Source: PIPE
Source: AST

Actions:
Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 11/30/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 3/11/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 3/14/2005
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 6/3/2004
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 6/30/2004
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 8/3/2004
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 8/3/2004
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 8/9/2004
Response Action Outcome: Not reported

Release:
Name: NO LOCATION AID

NO LOCATION AID (Continued) **S106775741**

Address:	18 KENDALL RD
City,State,Zip:	WELLESLEY, MA 024824305
Release Tracking Number/Current Status:	3-0023928 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	06/03/2004
Category:	TWO HR
Status Date:	03/11/2005
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	11/30/2004
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	3/11/2005
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Fee Received - FMCRA Use Only
Action Date:	3/14/2005
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	6/3/2004
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	6/30/2004
Response Action Outcome:	Not reported
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	8/3/2004
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	8/3/2004
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of a Modified Plan
Action Date:	8/9/2004
Response Action Outcome:	Not reported

Chemicals:

NO LOCATION AID (Continued) **S106775741**

Chemical:	FUEL OIL #2
Quantity:	100 gallons
Chemical:	FUEL OIL #2
Quantity:	90 gallons
Location Type:	RESIDNTIAL
Source:	PIPE
Source:	AST

10
ESE
1/4-1/2
0.430 mi.
2272 ft.

PAINTSHOP POND
CENTRAL ST RTE 135
WELLESLEY, MA

MA SHWS **S100829944**
MA INST CONTROL **N/A**
MA RELEASE

Relative:
Lower

Actual:
136 ft.

SHWS:

Name:	PAINTSHOP POND
Address:	CENTRAL ST RTE 135
City,State,Zip:	WELLESLEY, MA
Facility ID:	3-0000462
Source Type:	UNCONTAIN
Release Town:	WELLESLEY
Notification Date:	04/08/1986
Category:	NONE
Associated ID:	3-0000462
Current Status:	TIERI
Status Date:	09/09/1994
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Name:	PAINTSHOP POND
Address:	CENTRAL ST RTE 135
City,State,Zip:	WELLESLEY, MA
Facility ID:	3-0000462
Source Type:	PIPE
Release Town:	WELLESLEY
Notification Date:	04/08/1986
Category:	NONE
Associated ID:	3-0000462
Current Status:	TIERI
Status Date:	09/09/1994
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

INST CONTROL:

Name:	PAINTSHOP POND
Address:	CENTRAL ST RTE 135
City,State,Zip:	WELLESLEY, MA
Release Tracking Number:	3-0000462
Action Type:	AUL
Action Stat:	LEGNOT
Action Date:	01/14/2006
Response Action Outcome:	-

Name:	PAINTSHOP POND
Address:	CENTRAL ST RTE 135

PAINTSHOP POND (Continued) **S100829944**

City,State,Zip: WELLESLEY, MA
Release Tracking Number: 3-0000462
Action Type: AUL
Action Stat: RECPT
Action Date: 01/13/2006
Response Action Outcome: -

Release:
Name: PAINTSHOP POND
Address: CENTRAL ST RTE 135
City,State,Zip: WELLESLEY, MA
Release Tracking Number/Current Status: 3-0000462 / TIERI
Primary ID: 3-0000462
Official City: WELLESLEY
Notification: 04/08/1986
Category: NONE
Status Date: 09/09/1994
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Activity and Use Limitation
Action Status: Transmittal, Notice, or Notification Received
Action Date: 1/13/2006
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: Revised Statement or Transmittal Received
Action Date: 1/13/2006
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published
Action Date: 1/14/2006
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 1/18/2004
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 1/3/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 1/31/2014
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

PAINTSHOP POND (Continued) **S100829944**

Action Date: 1/31/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 1/6/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 1/6/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 1/9/2006
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 1/9/2008
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 10/1/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/14/2009
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 10/17/1994
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: RAO Statement Received
Action Date: 10/2/2007
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 10/28/2011
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 10/28/2019
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 11/17/2000
Response Action Outcome: Not reported

PAINTSHOP POND (Continued) **S100829944**

Action Type:	Tier Classification
Action Status:	Legal Notice Published
Action Date:	11/17/2005
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Written Plan Received
Action Date:	11/18/2014
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Level I - Technical Screen Audit
Action Date:	11/19/2014
Response Action Outcome:	Not reported
Action Type:	Phase 3
Action Status:	Completion Statement Received
Action Date:	11/20/2002
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Legal Notice Published
Action Date:	11/22/2007
Response Action Outcome:	Not reported
Action Type:	Compliance and Enforcement Action
Action Status:	Interim Deadline Letter Issued
Action Date:	11/25/1997
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	11/27/2023
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	11/30/2017
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	11/30/2021
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	12/10/2004
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	12/12/2003
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT

PAINTSHOP POND (Continued) **S100829944**

Action Date: 12/14/2015
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/21/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/21/2022
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 12/24/2011
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/29/2005
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/3/2019
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 12/31/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 2/11/2010
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 2/14/2012
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 2/2/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 2/23/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 2/26/2003
Response Action Outcome: Not reported

PAINTSHOP POND (Continued) **S100829944**

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/16/2015
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 3/25/2019
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/28/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 3/3/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/30/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 3/8/2022
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 4/10/1989
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 4/12/1996
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: Revised Statement or Transmittal Received
Action Date: 4/15/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 4/18/1997
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

PAINTSHOP POND (Continued) **S100829944**

Action Date: 4/2/2019
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 4/20/2005
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: As-Built Construction Report Received
Action Date: 4/20/2005
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 4/21/2000
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/23/1996
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/3/2012
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 4/7/2022
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/8/1986
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 4/8/1986
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 4/8/2003
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: Revised Statement or Transmittal Received
Action Date: 4/8/2004
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 5/1/1998
Response Action Outcome: Not reported

PAINTSHOP POND (Continued) **S100829944**

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 5/24/2002
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 5/24/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 5/3/1988
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 5/7/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/11/2009
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/14/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/15/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 6/17/2014
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: RAO Statement Received
Action Date: 6/17/2014
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 6/23/2000
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/23/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

PAINTSHOP POND (Continued) **S100829944**

Action Date: 6/23/2022
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 6/26/2012
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 7/22/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 7/23/2019
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Revised Statement or Transmittal Received
Action Date: 7/28/2008
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 7/28/2008
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 7/6/2001
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: RAO Statement Received
Action Date: 7/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 8/2/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 8/25/2003
Response Action Outcome: Not reported

PAINTSHOP POND (Continued) **S100829944**

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 8/26/1994
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 9/19/2022
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 9/22/2017
Response Action Outcome: Not reported

Action Type: Partial RAO for this RTN
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 9/24/2012
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 9/24/2021
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 9/25/2015
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVREC
Action Date: 9/28/1993
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVDN
Action Date: 9/28/1993
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 9/28/2021
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 9/30/1997
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 9/30/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved

PAINTSHOP POND (Continued) **S100829944**

Action Date: 9/8/1997
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: BWSC04
Action Date: 9/9/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 9/9/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1A Classification
Action Date: 9/9/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 9/9/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 9/9/1999
Response Action Outcome: Not reported

Action Type: BWS20
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: Not reported

Chemicals:
Chemical: METALS
Quantity: Not reported
Location Type: MANUFACT
Location Type: FORMER
Location Type: WETLANDS
Location Type: INDUSTRIAL
Location Type: WATERBODY
Location Type: UTILEASE
Source: UNCONTAIN
Source: PIPE

11
North
1/4-1/2
0.473 mi.
2499 ft.

FORMER ST JAMES THE GREAT CHURCH **MA SHWS** **S117405673**
900 WORCESTER STREET **MA RELEASE** **N/A**
WELLESLEY, MA 02482 **MA ASBESTOS**
MA TIER 2

Relative:
Lower

Actual:
124 ft.

SHWS:
Name: FORMER ST JAMES THE GREAT CHURCH
Address: 900 WORCESTER STREET
City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0032556
Source Type: UNKNOWN

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Release Town:	WELLESLEY
Notification Date:	11/24/2014
Category:	120 DY
Associated ID:	Not reported
Current Status:	PSNC
Status Date:	11/23/2015
Phase:	Not reported
Response Action Outcome:	PN
Oil Or Haz Material:	Hazardous Material

Release:

Name:	FORMER ST JAMES THE GREAT CHURCH
Address:	900 WORCESTER STREET
City,State,Zip:	WELLESLEY, MA 024820000
Release Tracking Number/Current Status:	3-0032556 / PSNC
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	11/24/2014
Category:	120 DY
Status Date:	11/23/2015
Phase:	Not reported
Response Action Outcome:	PN - PN
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Response Action Outcome - RAO
Action Status:	Fee Received - FMCRA Use Only
Action Date:	1/20/2016
Response Action Outcome:	PN

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	10/2/2015
Response Action Outcome:	PN

Action Type:	RNFE
Action Status:	Revised Statement or Transmittal Received
Action Date:	10/2/2015
Response Action Outcome:	PN

Action Type:	Response Action Outcome - RAO
Action Status:	PSNRCD
Action Date:	11/23/2015
Response Action Outcome:	PN

Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	11/24/2014
Response Action Outcome:	PN

Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	11/24/2014
Response Action Outcome:	PN

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/24/2014
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/19/2014
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 9/14/2015
Response Action Outcome: PN

Chemicals:
Chemical: LEAD
Quantity: 291 milligrams per kilogram
Source: UNKNOWN

ASBESTOS:
Name: JAMES THE GREAT CHURCH & RECTORY
Address: 900 WORCESTER STREET
City,State,Zip: WELLESLEY, MA
Notification: Not reported
DEP Region: Not reported
Notifiers Name: Not reported
Start Date: 07/27/2015
End Date: 08/31/2015
Date Entered: Not reported
Entry Date: 07/15/2015
Quantity Materical Removed SF: 27000.00
Quantity Material Removed LF: 1200.00
Project Description: PIPEINSUL OTHER FLOOR TILE ROOF CEILING
AR Tracking ID: 217507
Super Lic Number: AS001694
Monitor Lic Number: AM033814
Lab Lic Number: AA000044
Year: 2015
Sticker Number: 100224569
Form Type: ANF-001
Fee Status: EXEMPT
Facility Phone: 7814311019
Sub Town: Not reported
Worksite: CHURCH
Occupied: 0
Contractor: AC000837
Contract Type: WRITTEN
Hours: 7AM-3:30PM
Project Type: Dem
Abatement Process: Fcontain
Location: INOUTDOORS
Decon Process: 3 STAGE DCON
Disposal Methods: TWO LAYERS 6-MIL POLY
Facility Usage: CHURCH
Waiver Given: Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	0
Owner Name:	TOWN OF WELLESLEY
Owner Address:	525 WASHINGTON STREET
Owner City:	WELLESLEY
Owner State:	MA
On Site Manager Name:	TERRY TOLOSKO
On Site Manager Phone:	5082451342
Ins Comp:	AMERICAN ZURICH INSURANCE COMPANY
Policy Number:	6ZZUB2E2800514
EXP Date:	6/12/2016
Facility Size:	10000
Transporter Name:	J. R. VINAGRO CORPORATION
Transporter Address:	2208 PLAINFIELD PIKE
Transporter City:	JOHNSTON
Transporter State:	RI
Final Site:	Not reported
Certified Name:	VANESSA DEL VALLE
Cert Sign Date:	07/15/2015
Certified Company:	J.R. VINAGRO CORPORATION
Certified Phone:	4019437100
Entered_by:	VINAGRONESS

Name:	JAMES THE GREAT CHURCH & RECTORY
Address:	900 WORCESTER STREET
City,State,Zip:	WELLESLEY, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	07/27/2015
End Date:	08/31/2015
Date Entered:	Not reported
Entry Date:	07/15/2015
Quantity Materical Removed SF:	2200.00
Quantity Material Removed LF:	1000.00
Project Description:	PIPEINSUL OTHER FLOOR TILE WALLS ROOF
AR Tracking ID:	217508
Super Lic Number:	AS001694
Monitor Lic Number:	AM033814
Lab Lic Number:	AA000044
Year:	2015
Sticker Number:	100224577
Form Type:	ANF-001
Fee Status:	EXEMPT
Facility Phone:	7814311019
Sub Town:	Not reported
Worksite:	RECTORY
Occupied:	0
Contractor:	AC000837
Contract Type:	WRITTEN
Hours:	7AM-3:30PM
Project Type:	Dem
Abatement Process:	Fcontain
Location:	INOUTDOORS
Decon Process:	3 STAGE DCON
Disposal Methods:	TWO LAYERS 6-MIL POLY

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Facility Usage:	RECTORY
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	0
Owner Name:	TOWN OF WELLESLEY
Owner Address:	525 WASHINGTON STREET
Owner City:	WELLESLEY
Owner State:	MA
On Site Manager Name:	TERRY TOLOSKO
On Site Manager Phone:	5082451342
Ins Comp:	AMERICAN ZURICH INSURANCE COMPANY
Policy Number:	6ZZUB2E2800514
EXP Date:	6/12/2016
Facility Size:	3100
Transporter Name:	J. R. VINAGRO CORPORATION
Transporter Address:	2208 PLAINFIELD PIKE
Transporter City:	JOHNSTON
Transporter State:	RI
Final Site:	Not reported
Certified Name:	VANESSA DEL VALLE
Cert Sign Date:	07/15/2015
Certified Company:	J.R. VINAGRO CORPORATION
Certified Phone:	4019437100
Entered_by:	VINAGRONESS

Name:	ST. JAMES THE GREAT CHURCH
Address:	900 WORCESTER STREET
City,State,Zip:	WELLESLEY, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	01/26/2007
End Date:	01/26/2007
Date Entered:	Not reported
Entry Date:	01/17/2007
Quantity Materical Removed SF:	.00
Quantity Material Removed LF:	6.00
Project Description:	Spr
AR Tracking ID:	78309
Super Lic Number:	AS060847
Monitor Lic Number:	Not reported
Lab Lic Number:	Not reported
Year:	2007
Sticker Number:	100050448
Form Type:	ANF-001
Fee Status:	Fifty
Facility Phone:	7812371160
Sub Town:	Not reported
Worksite:	SAME
Occupied:	-1
Contractor:	AC000464
Contract Type:	Off
Hours:	Week days: 7:00-5:00 Week end:
Project Type:	Rpr
Abatement Process:	Glv
Location:	Indoors

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Decon Process:	3 CHAMBER
Disposal Methods:	6 MIL POLY LABELLED DOUBLE BAGS
Facility Usage:	CHURCH
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	4
Owner Name:	SAME
Owner Address:	Not reported
Owner City:	Not reported
Owner State:	MA
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	AIR SAFE, INC.
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	Not reported
Final Site:	47
Certified Name:	DAVID F. WALSH
Cert Sign Date:	01/17/2007
Certified Company:	AIR SAFE, INC.
Certified Phone:	7817623390
Entered_by:	Not reported

TIER 2:

Facility ID:	FATR2020000000050338
Name:	BOSTON SPORTS INSTITUTE
Address:	900 WORCESTER STREET
City,State,Zip:	WELLESLEY, MA 02482
Country:	Not reported
Mailing Address:	900 Worcester Street
Mailing City,State,Zip:	Wellesley, MA 02482
Mailing Country:	Not reported
Report Year:	2020
All Chemicals Same As Last Year:	Not reported
Longitude:	-71.318300
Date Signed:	2021-02-25
Notes:	Not reported
Dike Or Other Safeguard:	Not reported
Latitude:	42.304500
Facility Dept:	Not reported
Failed Validation:	Not reported
Date Modified:	02/23/2021
Fees Total:	Not reported
Number of Employees:	1450
Site Coord Abbreviated?:	false
Site Map:	Not reported
State Label Code:	Not reported
Submitted By:	Not reported
Validation Report:	Not reported
Fire District:	Not reported
Latlong Location Description:	Not reported
Latlong Method:	Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

LEPC Name: Not reported
Facility Status: Not reported
Latest Report: Not reported
EHS Above TPQ: Not reported

TIER 2:
Record Key: FDTR20200000000017145
ID: 11569
Type: T2M Facility ID
Description: T2M Facility ID
Last Modified: 02/23/2021

Record Key: FDTR20200000000017146
ID: 312113
Type: NAICS
Description: Ice Manufacturing
Last Modified: 02/23/2021

Record Key: FDTR20200000000017147
ID: N/A
Type: DUN & BradStreet
Description: DUN & BradStreet
Last Modified: 02/23/2021

Record Key: FDTR20200000000017145
ID: 11569
Type: T2M Facility ID
Description: T2M Facility ID
Last Modified: 02/23/2021

Record Key: FDTR20200000000017146
ID: 312113
Type: NAICS
Description: Ice Manufacturing
Last Modified: 02/23/2021

Record Key: FDTR20200000000017147
ID: N/A
Type: DUN & BradStreet
Description: DUN & BradStreet
Last Modified: 02/23/2021

Chemcials:
Acute: Not reported
Average Amount: 9.154000000000000e+003
Average Amount Code: 5
Chem Inv Record ID: CVTR20200000000190533
Chem Same As Last Year: false
Chronic: Not reported
CICAS: Not reported
CI EHS Chemical: false
CI Last Modified: 2021-02-25
Days On Site: 365
Entered Chemical Name: Glycol
Fire: Not reported
Gas: false
Liquid: true

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Max Amount:	9.154
Max Amount Code:	5
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	3.000000000000000e+002
Average Amount Code:	2
Chem Inv Record ID:	CVTR2020000000189008
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365
Entered Chemical Name:	R717 Anhydrous Ammonia
Fire:	Not reported
Gas:	true

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Liquid:	false
Max Amount:	3.000
Max Amount Code:	2
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	8.280000000000000e+002
Average Amount Code:	3
Chem Inv Record ID:	CVTR2020000000189034
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-25
Days On Site:	365
Entered Chemical Name:	Acid
Fire:	Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Gas:	false
Liquid:	true
Max Amount:	8.280
Max Amount Code:	3
Max Amount Container:	414.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	4.480000000000000e+003
Average Amount Code:	4
Chem Inv Record ID:	CVTR2020000000189226
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365
Entered Chemical Name:	Lead Compounds

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Fire:	Not reported
Gas:	false
Liquid:	false
Max Amount:	4.480
Max Amount Code:	4
Max Amount Container:	2240.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	true
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000189226
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Entered Chemical Name:	Lead Compounds
Fire:	Not reported
Gas:	false
Liquid:	false
Max Amount:	4.480
Max Amount Code:	4
Max Amount Container:	2240.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	true
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000189008
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Days On Site:	365
Entered Chemical Name:	R717 Anhydrous Ammonia
Fire:	Not reported
Gas:	true
Liquid:	false
Max Amount:	3.000
Max Amount Code:	2
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000189034
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

CI Last Modified:	2021-02-25
Days On Site:	365
Entered Chemical Name:	Acid
Fire:	Not reported
Gas:	false
Liquid:	true
Max Amount:	8.280
Max Amount Code:	3
Max Amount Container:	414.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000190533
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

CI EHS Chemical:	false
CI Last Modified:	2021-02-25
Days On Site:	365
Entered Chemical Name:	Glycol
Fire:	Not reported
Gas:	false
Liquid:	true
Max Amount:	9.154
Max Amount Code:	5
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Facility ID:	11569
Name:	BOSTON SPORTS INSTITUTE
Address:	900 WORCESTER STREET
City,State,Zip:	WELLESLEY, MA 02482
Country:	Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Mailing Address:	Not reported
Mailing City,State,Zip:	Not reported
Mailing Country:	Not reported
Report Year:	2023
All Chemicals Same As Last Year:	Not reported
Longitude:	Not reported
Date Signed:	Not reported
Notes:	Not reported
Dike Or Other Safeguard:	Not reported
Latitude:	Not reported
Facility Dept:	Not reported
Failed Validation:	Not reported
Date Modified:	Not reported
Fees Total:	Not reported
Number of Employees:	Not reported
Site Coord Abbreviated?:	Not reported
Site Map:	Not reported
State Label Code:	Not reported
Submitted By:	Not reported
Validation Report:	Not reported
Fire District:	Not reported
Latlong Location Description:	Not reported
Latlong Method:	Not reported
LEPC Name:	Not reported
Facility Status:	ACTIVE
Latest Report:	2023 Tier II Report Annual (02/22/2024)
EHS Above TPQ:	No

Facility ID:	FATR2020000000050338
Name:	BOSTON SPORTS INSTITUTE
Address:	900 WORCESTER STREET
City,State,Zip:	WELLESLEY, MA 02482
Country:	Not reported
Mailing Address:	900 Worcester Street
Mailing City,State,Zip:	Wellesley, MA 02482
Mailing Country:	Not reported
Report Year:	2020
All Chemicals Same As Last Year:	Not reported
Longitude:	-71.318300
Date Signed:	2021-02-25
Notes:	Not reported
Dike Or Other Safeguard:	Not reported
Latitude:	42.304500
Facility Dept:	Not reported
Failed Validation:	Not reported
Date Modified:	02/23/2021
Fees Total:	Not reported
Number of Employees:	1450
Site Coord Abbreviated?:	false
Site Map:	Not reported
State Label Code:	Not reported
Submitted By:	Not reported
Validation Report:	Not reported
Fire District:	Not reported
Latlong Location Description:	Not reported
Latlong Method:	Not reported
LEPC Name:	Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Facility Status: Not reported
Latest Report: Not reported
EHS Above TPQ: Not reported

TIER 2:
Record Key: FDTR2020000000017145
ID: 11569
Type: T2M Facility ID
Description: T2M Facility ID
Last Modified: 02/23/2021

Record Key: FDTR2020000000017146
ID: 312113
Type: NAICS
Description: Ice Manufacturing
Last Modified: 02/23/2021

Record Key: FDTR2020000000017147
ID: N/A
Type: DUN & BradStreet
Description: DUN & BradStreet
Last Modified: 02/23/2021

Record Key: FDTR2020000000017145
ID: 11569
Type: T2M Facility ID
Description: T2M Facility ID
Last Modified: 02/23/2021

Record Key: FDTR2020000000017146
ID: 312113
Type: NAICS
Description: Ice Manufacturing
Last Modified: 02/23/2021

Record Key: FDTR2020000000017147
ID: N/A
Type: DUN & BradStreet
Description: DUN & BradStreet
Last Modified: 02/23/2021

Chemcials:
Acute: Not reported
Average Amount: 9.154000000000000e+003
Average Amount Code: 5
Chem Inv Record ID: CVTR2020000000190533
Chem Same As Last Year: false
Chronic: Not reported
CICAS: Not reported
CI EHS Chemical: false
CI Last Modified: 2021-02-25
Days On Site: 365
Entered Chemical Name: Glycol
Fire: Not reported
Gas: false
Liquid: true
Max Amount: 9.154

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Max Amount Code:	5
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	3.000000000000000e+002
Average Amount Code:	2
Chem Inv Record ID:	CVTR2020000000189008
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365
Entered Chemical Name:	R717 Anhydrous Ammonia
Fire:	Not reported
Gas:	true
Liquid:	false

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Max Amount:	3.000
Max Amount Code:	2
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	8.280000000000000e+002
Average Amount Code:	3
Chem Inv Record ID:	CVTR2020000000189034
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-25
Days On Site:	365
Entered Chemical Name:	Acid
Fire:	Not reported
Gas:	false

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Liquid:	true
Max Amount:	8.280
Max Amount Code:	3
Max Amount Container:	414.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	4.480000000000000e+003
Average Amount Code:	4
Chem Inv Record ID:	CVTR2020000000189226
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365
Entered Chemical Name:	Lead Compounds
Fire:	Not reported

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Gas:	false
Liquid:	false
Max Amount:	4.480
Max Amount Code:	4
Max Amount Container:	2240.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	true
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000189226
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365
Entered Chemical Name:	Lead Compounds

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Fire:	Not reported
Gas:	false
Liquid:	false
Max Amount:	4.480
Max Amount Code:	4
Max Amount Container:	2240.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	true
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Garage Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000189008
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-23
Days On Site:	365

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Entered Chemical Name:	R717 Anhydrous Ammonia
Fire:	Not reported
Gas:	true
Liquid:	false
Max Amount:	3.000
Max Amount Code:	2
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors
Pressure Code:	Greater than ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000189034
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false
CI Last Modified:	2021-02-25

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

Days On Site:	365
Entered Chemical Name:	Acid
Fire:	Not reported
Gas:	false
Liquid:	true
Max Amount:	8.280
Max Amount Code:	3
Max Amount Container:	414.000
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Zamboni Batteries
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Location:	Zamboni Batteries
Amount:	Not reported
Amount Unit:	lbs

Acute:	Not reported
Average Amount:	Not reported
Average Amount Code:	Not reported
Chem Inv Record ID:	CVTR2020000000190533
Chem Same As Last Year:	false
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	false

FORMER ST JAMES THE GREAT CHURCH (Continued) **S117405673**

CI Last Modified:	2021-02-25
Days On Site:	365
Entered Chemical Name:	Glycol
Fire:	Not reported
Gas:	false
Liquid:	true
Max Amount:	9.154
Max Amount Code:	5
Max Amount Container:	Not reported
Mixture:	false
Pressure:	Not reported
Pure:	true
Reactive:	Not reported
Solid:	false
State01 Checkbox:	Not reported
State01 Number:	Not reported
State01 Text:	Not reported
State02 Checkbox:	Not reported
State02 Number:	Not reported
State02 Text:	Not reported
State03 Checkbox:	Not reported
State03 Number:	Not reported
State03 Text:	Not reported
State04 Checkbox:	Not reported
State04 Number:	Not reported
State04 Text:	Not reported
State05 Checkbox:	Not reported
State05 Text:	Not reported
State06 Checkbox:	Not reported
State06 Text:	Not reported
State07 Checkbox:	Not reported
State07 Text:	Not reported
State Label Code:	Not reported
Trade Secret:	false

Location:

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

Type Code:	Ice Compressors and piping
Pressure Code:	Ambient pressure
Temperature Code:	Greater than ambient temperature
Location:	Ice Compressors and piping
Amount:	Not reported
Amount Unit:	lbs

12
NNE
1/4-1/2
0.497 mi.
2622 ft.

293 WESTON ROAD, WELLESLEY
293 WESTON ROAD
WELLESLEY, MA 02482

MA LAST
MA RELEASE
MA ASBESTOS
MA HW GEN

S119955509
N/A

Relative:
Lower

Actual:
160 ft.

LAST:

Name:	293 WESTON ROAD, WELLESLEY
Address:	293 WESTON ROAD
City,State,Zip:	WELLESLEY, MA 02482
Release Tracking Number/Current Status:	3-0050297 / UNCLSS
Source Type:	AST
Release Town:	WELLESLEY
Notification Date:	06/07/2024
Category:	TWO HR
Associated ID:	Not reported
Status Date:	06/06/2025
Phase:	Not reported
Response Action Outcome:	-
Oil Or Haz Material:	Not reported

Chemicals:

Chemical:	DIESEL FUEL
Quantity:	775 gallons
Location Type:	SCHOOL
Source:	AST

Actions:

Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	10/19/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Imminent Hazard Evaluation Received
Action Date:	10/4/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	10/4/2024
Response Action Outcome:	Not reported
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	12/27/2024
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	AENOTF
Action Date:	4/1/2025
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	4/10/2025
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received

293 WESTON ROAD, WELLESLEY (Continued) **S119955509**

Action Date: 4/2/2025
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Imminent Hazard Evaluation Received
Action Date: 4/2/2025
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 6/12/2024
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 6/13/2024
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 6/13/2024
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 6/19/2024
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 6/21/2024
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDD1U
Action Date: 6/7/2024
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 6/7/2024
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 6/7/2024
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/10/2024
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 7/16/2024
Response Action Outcome: Not reported

293 WESTON ROAD, WELLESLEY (Continued) **S119955509**

Action Type:	Immediate Response Action
Action Status:	Written Approval of Plan
Action Date:	7/17/2024
Response Action Outcome:	Not reported

Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	7/2/2024
Response Action Outcome:	Not reported

Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	7/23/2024
Response Action Outcome:	Not reported

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	7/3/2024
Response Action Outcome:	Not reported

Action Type:	Immediate Response Action
Action Status:	Oral Approval of a Modified Plan
Action Date:	7/3/2024
Response Action Outcome:	Not reported

Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	7/5/2024
Response Action Outcome:	Not reported

Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	7/9/2024
Response Action Outcome:	Not reported

Action Type:	An activity type that is related to an Audit
Action Status:	AUDMOU
Action Date:	8/6/2024
Response Action Outcome:	Not reported

Release:

Name:	293 WESTON ROAD, WELLESLEY
Address:	293 WESTON ROAD
City,State,Zip:	WELLESLEY, MA 02482
Release Tracking Number/Current Status:	3-0050297 / UNCLSS
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	06/07/2024
Category:	TWO HR
Status Date:	06/06/2025
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

293 WESTON ROAD, WELLESLEY (Continued) **S119955509**

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	10/19/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Imminent Hazard Evaluation Received
Action Date:	10/4/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	10/4/2024
Response Action Outcome:	Not reported
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	12/27/2024
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	AENOTF
Action Date:	4/1/2025
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	4/10/2025
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	4/2/2025
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Imminent Hazard Evaluation Received
Action Date:	4/2/2025
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of a Modified Plan
Action Date:	6/12/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	6/13/2024
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	6/13/2024
Response Action Outcome:	Not reported

293 WESTON ROAD, WELLESLEY (Continued) **S119955509**

Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	6/19/2024
Response Action Outcome:	Not reported
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	6/21/2024
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FLDD1U
Action Date:	6/7/2024
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	6/7/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	6/7/2024
Response Action Outcome:	Not reported
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	7/10/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	7/16/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Approval of Plan
Action Date:	7/17/2024
Response Action Outcome:	Not reported
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	7/2/2024
Response Action Outcome:	Not reported
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	7/23/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	7/3/2024
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of a Modified Plan

293 WESTON ROAD, WELLESLEY (Continued) **S119955509**

Action Date: 7/3/2024
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 7/5/2024
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/9/2024
Response Action Outcome: Not reported

Action Type: An activity type that is related to an Audit
Action Status: AUDMOU
Action Date: 8/6/2024
Response Action Outcome: Not reported

Chemicals:
Chemical: DIESEL FUEL
Quantity: 775 gallons
Location Type: SCHOOL
Source: AST

ASBESTOS:
Name: HARDY SCHOOL
Address: 293 WESTON RD
City,State,Zip: WELLESLEY, MA
Notification: Not reported
DEP Region: Not reported
Notifiers Name: Not reported
Start Date: 06/28/2004
End Date: 07/09/2004
Date Entered: Not reported
Entry Date: 06/15/2004
Quantity Materical Removed SF: 20000.00
Quantity Material Removed LF: Not reported
Project Description: VAT
AR Tracking ID: 40909
Super Lic Number: AS040577
Monitor Lic Number: AM050620
Lab Lic Number: AA000177
Year: 2004
Sticker Number: 774292
Form Type: ANF-001
Fee Status: E
Facility Phone: Not reported
Sub Town: Not reported
Worksite: THROUGHOUT
Occupied: -1
Contractor: AC000196
Contract Type: Not reported
Hours: 8A-11P
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported

293 WESTON ROAD, WELLESLEY (Continued) **S119955509**

Decon Process:	AS REQUIRED
Disposal Methods:	2 PLY POLY BAG WITH LABEL
Facility Usage:	Not reported
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	Not reported
Owner Name:	TOWN OF WELLESLEY
Owner Address:	Not reported
Owner City:	Not reported
Owner State:	Not reported
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	NEW ENGLAND SURFACE MAINTENANCE
Transporter Address:	850 WASHINGTON STREET
Transporter City:	WEYMOUTH
Transporter State:	MA
Final Site:	7
Certified Name:	JIM DOYLE
Cert Sign Date:	06/14/2004
Certified Company:	Not reported
Certified Phone:	Not reported
Entered_by:	MMitchell

HW GEN:

Name:	JOHN D HARDY SCHOOL
Address:	293 WESTON RD
City,State,Zip:	WELLESLEY, MA 02482
EPA Id:	MAR000640573
RCRA Generator Status:	VSQG
State Generator Status:	SQG-MA

C13 **376-378-380 CENTRE STREET REALTY TRUST** **MA SHWS** **S106953968**
North **874-878 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA**
0.500 mi.
2642 ft. **Site 1 of 5 in cluster C**

Relative: **Lower**
Actual: **153 ft.**

SHWS:

Name:	376-378-380 CENTRE STREET REALTY TRUST
Address:	874-878 WORCESTER ST
City,State,Zip:	WELLESLEY, MA
Facility ID:	3-0024811
Source Type:	Not reported
Release Town:	WELLESLEY
Notification Date:	04/28/2005
Category:	120 DY
Associated ID:	Not reported
Current Status:	DPS
Status Date:	02/22/2006
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

376-378-380 CENTRE STREET REALTY TRUST (Continued) **S106953968**

Release:

Name:	376-378-380 CENTRE STREET REALTY TRUST
Address:	874-878 WORCESTER ST
City,State,Zip:	WELLESLEY, MA
Release Tracking Number/Current Status:	3-0024811 / DPS
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	04/28/2005
Category:	120 DY
Status Date:	02/22/2006
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Downgradient Property Status
Action Status:	Modified Transmittal Received - DPS Transfer
Action Date:	11/16/2009
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	12/12/2006
Response Action Outcome:	Not reported
Action Type:	Downgradient Property Status
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	2/22/2006
Response Action Outcome:	Not reported
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	4/28/2005
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	4/28/2005
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	5/18/2005
Response Action Outcome:	Not reported

Chemicals:

Chemical:	AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity:	6.3 milligrams per liter
Chemical:	ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity:	3 milligrams per liter

C14 **WESTON RD** **MA SHWS** **S132536649**
NNE **870 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA**
0.503 mi.
2655 ft. **Site 2 of 5 in cluster C**

Relative:
Lower

Actual:
161 ft.

SHWS:

Name:	WESTON RD
Address:	870 WORCESTER ST
City,State,Zip:	WELLESLEY, MA
Facility ID:	3-0020072
Source Type:	Not reported
Release Town:	WELLESLEY
Notification Date:	09/29/2000
Category:	120 DY
Associated ID:	Not reported
Current Status:	RTNCLOSED
Status Date:	10/03/2001
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

Release:

Name:	WESTON RD
Address:	870 WORCESTER ST
City,State,Zip:	WELLESLEY, MA
Release Tracking Number/Current Status:	3-0020072 / RTNCLOSED
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	09/29/2000
Category:	120 DY
Status Date:	10/03/2001
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	RAO Not Required
Action Status:	Linked to a Tier Classified Site
Action Date:	10/3/2001
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	2/6/2001
Response Action Outcome:	Not reported
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	9/29/2000
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	9/29/2000
Response Action Outcome:	Not reported

WESTON RD (Continued) **S132536649**

Chemicals:
- Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C12
- Quantity: 10.1 parts per million
- Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
- Quantity: 21.3 parts per million
- Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
- Quantity: 7.77 parts per million

C15 **SUNOCO STATION FMR** **MA SHWS** **S132539969**
NNE **870 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA 02181**
0.503 mi.
2655 ft. **Site 3 of 5 in cluster C**

Relative:
Lower

Actual:
161 ft.

SHWS:
- Name: SUNOCO STATION FMR
- Address: 870 WORCESTER ST
- City,State,Zip: WELLESLEY, MA 021810000
- Facility ID: 3-0028251
- Source Type: Not reported
- Release Town: WELLESLEY
- Notification Date: 12/30/2008
- Category: 120 DY
- Associated ID: 3-0010169
- Current Status: RTNCLOSED
- Status Date: 09/28/2009
- Phase: Not reported
- Response Action Outcome: Not reported
- Oil Or Haz Material: Hazardous Material

Release:
- Name: SUNOCO STATION FMR
- Address: 870 WORCESTER ST
- City,State,Zip: WELLESLEY, MA 021810000
- Release Tracking Number/Current Status: 3-0028251 / RTNCLOSED
- Primary ID: 3-0010169
- Official City: WELLESLEY
- Notification: 12/30/2008
- Category: 120 DY
- Status Date: 09/28/2009
- Phase: Not reported
- Response Action Outcome: -
- Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:
- Action Type: Tier Classification
- Action Status: Revised Statement or Transmittal Received
- Action Date: 10/3/2001
- Response Action Outcome: Not reported

- Action Type: Tier Classification
- Action Status: Tier 2 Extension
- Action Date: 10/3/2001
- Response Action Outcome: Not reported

SUNOCO STATION FMR (Continued) **S132539969**

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 10/5/2000
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 11/10/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/10/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 11/10/1994
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 12/30/2008
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 12/30/2008
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 2/24/2009
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 2/24/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Transfer
Action Date: 3/27/2014
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 6/26/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 6/26/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT

SUNOCO STATION FMR (Continued) **S132539969**

Action Date: 8/10/2018
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 8/5/2022
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 8/7/2020
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/11/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/13/2002
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/15/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/15/2010
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/19/2011
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/21/2004
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/21/2012
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/25/2006
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/26/2008
Response Action Outcome: Not reported

SUNOCO STATION FMR (Continued) **S132539969**

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/28/2007
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 9/28/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/28/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 9/28/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 9/5/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 9/7/2016
Response Action Outcome: Not reported

Chemicals:
Chemical: ARSENIC
Quantity: 14.7 micrograms per liter

C16 **SUNOCO STATION** **MA SHWS** **S132533038**
NNE **870 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA 02181**
0.503 mi.
2655 ft. **Site 4 of 5 in cluster C**

Relative: **Lower**

Actual: **161 ft.**

SHWS:
Name: SUNOCO STATION
Address: 870 WORCESTER ST
City,State,Zip: WELLESLEY, MA 021810000
Facility ID: 3-0010169
Source Type: SEPARATOR
Release Town: WELLESLEY
Notification Date: 11/10/1993
Category: 120 DY
Associated ID: 3-0010169
Current Status: RAO
Status Date: 03/31/2010
Phase: PHASE IV
Response Action Outcome: C2
Oil Or Haz Material: Hazardous Material

SUNOCO STATION (Continued) **S132533038**

Release:

Name:	SUNOCO STATION
Address:	870 WORCESTER ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number/Current Status:	3-0010169 / RAO
Primary ID:	3-0010169
Official City:	WELLESLEY
Notification:	11/10/1993
Category:	120 DY
Status Date:	03/31/2010
Phase:	PHASE IV
Response Action Outcome:	C2 - C2
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	1/20/1994
Response Action Outcome:	C2
Action Type:	BOL
Action Status:	SHPFAC
Action Date:	1/20/2025
Response Action Outcome:	C2
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	1/3/2025
Response Action Outcome:	C2
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	10/2/2023
Response Action Outcome:	C2
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	10/2/2023
Response Action Outcome:	C2
Action Type:	Tier Classification
Action Status:	Revised Statement or Transmittal Received
Action Date:	10/3/2001
Response Action Outcome:	C2
Action Type:	Tier Classification
Action Status:	Tier 2 Extension
Action Date:	10/3/2001
Response Action Outcome:	C2
Action Type:	Tier Classification
Action Status:	Tier 2 Extension
Action Date:	10/5/2000
Response Action Outcome:	C2

SUNOCO STATION (Continued) **S132533038**

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 10/6/2006
Response Action Outcome: C2

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/10/1993
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 11/10/1994
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 11/10/1994
Response Action Outcome: C2

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 11/10/1994
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/10/1994
Response Action Outcome: C2

Action Type: Phase 4
Action Status: Modified Revised or Updated Plan Received
Action Date: 11/22/2024
Response Action Outcome: C2

Action Type: Phase 3
Action Status: Revised Statement or Transmittal Received
Action Date: 11/27/2023
Response Action Outcome: C2

Action Type: RLFA
Action Status: FOLOFF
Action Date: 12/12/2006
Response Action Outcome: C2

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/21/1993
Response Action Outcome: C2

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 12/23/2008
Response Action Outcome: C2

Action Type: Phase 4
Action Status: Status or Interim Report Received

SUNOCO STATION (Continued) **S132533038**

Action Date: 12/23/2009
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/12/2018
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/12/2018
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/18/2020
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/18/2020
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/18/2022
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/18/2022
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/21/2019
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/21/2019
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/22/2021
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/22/2021
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/24/2017
Response Action Outcome: C2

SUNOCO STATION (Continued) **S132533038**

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/24/2017
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/26/2014
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/26/2014
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/27/2013
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/27/2013
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Transfer
Action Date: 3/27/2014
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/27/2015
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/27/2015
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/28/2016
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/28/2016
Response Action Outcome: C2

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 3/29/1994
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT

SUNOCO STATION (Continued) **S132533038**

Action Date: 3/29/2012
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/29/2012
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 3/31/2010
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/31/2011
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/31/2011
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 3/31/2023
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 3/31/2023
Response Action Outcome: C2

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 3/4/1994
Response Action Outcome: C2

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 3/7/2005
Response Action Outcome: C2

Action Type: Phase 3
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 3/7/2005
Response Action Outcome: C2

Action Type: RLFA
Action Status: FOLOFF
Action Date: 3/9/1994
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Level II - Audit Inspection
Action Date: 4/10/2013
Response Action Outcome: C2

SUNOCO STATION (Continued) **S132533038**

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/10/2013
Response Action Outcome: C2

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 4/29/2013
Response Action Outcome: C2

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/8/2014
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 5/21/2024
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 5/21/2024
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Level II - Audit Inspection
Action Date: 6/10/2010
Response Action Outcome: C2

Action Type: RLFA
Action Status: FLDRAN
Action Date: 6/10/2010
Response Action Outcome: C2

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 6/21/2002
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Level II - Audit Inspection
Action Date: 6/22/2010
Response Action Outcome: C2

Action Type: RLFA
Action Status: FOLFLD
Action Date: 6/22/2010
Response Action Outcome: C2

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 6/25/1996
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal

SUNOCO STATION (Continued) **S132533038**

Action Date: 6/26/2009
Response Action Outcome: C2

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 6/26/2009
Response Action Outcome: C2

Action Type: Compliance and Enforcement Action
Action Status: ACOP
Action Date: 7/24/2008
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 8/10/2018
Response Action Outcome: C2

Action Type: RLFA
Action Status: FLDRUN
Action Date: 8/15/2016
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Level II - Audit Inspection
Action Date: 8/15/2016
Response Action Outcome: C2

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 8/31/2016
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 8/5/2022
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 8/7/2020
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/11/2013
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/11/2013
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/11/2013
Response Action Outcome: C2

SUNOCO STATION (Continued) **S132533038**

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/13/2002
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/15/2003
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/15/2010
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/16/2022
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/16/2022
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/17/2024
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/17/2024
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/19/2011
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/19/2011
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/19/2011
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/19/2019
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received

SUNOCO STATION (Continued) **S132533038**

Action Date: 9/19/2019
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/20/2021
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/20/2021
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/21/2004
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/21/2012
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/21/2012
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/21/2012
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/22/2020
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/22/2020
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/24/2018
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/24/2018
Response Action Outcome: C2

Action Type: Phase 3
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 9/25/2006
Response Action Outcome: C2

SUNOCO STATION (Continued) **S132533038**

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/25/2006
Response Action Outcome: C2

Action Type: Phase 4
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 9/25/2006
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 9/25/2006
Response Action Outcome: C2

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 9/25/2006
Response Action Outcome: C2

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/26/2008
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/26/2008
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/28/2007
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/28/2009
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 9/28/2009
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/28/2017
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/28/2017
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINI

SUNOCO STATION (Continued) **S132533038**

Action Date: 9/30/2010
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/30/2010
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/30/2015
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/30/2015
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 9/5/2014
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/5/2014
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/5/2014
Response Action Outcome: C2

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 9/7/2010
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 9/7/2016
Response Action Outcome: C2

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 9/7/2016
Response Action Outcome: C2

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 9/7/2016
Response Action Outcome: C2

Chemicals:
Chemical: METHYLENE CHLORIDE
Quantity: 1.5 milligrams per kilogram
Chemical: TOTAL PETROLEUM HYDROCARBONS (TPH)

SUNOCO STATION (Continued) **S132533038**

Quantity:	6900 milligrams per kilogram
Chemical:	TETRACHLOROETHYLENE
Quantity:	3.1 milligrams per kilogram
Chemical:	WASTE OIL
Quantity:	1200 parts per million
Location Type:	COMMERCIAL
Source:	SEPARATOR

C17 **NO LOCATION AID** **MA SHWS** **S132537265**
NNE **870 WORCESTER RD** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA**
0.509 mi.
2687 ft. **Site 5 of 5 in cluster C**

Relative:
Lower

Actual:
158 ft.

SHWS:

Name:	NO LOCATION AID
Address:	870 WORCESTER RD
City,State,Zip:	WELLESLEY, MA
Facility ID:	3-0021473
Source Type:	UNKNOWN
Release Town:	WELLESLEY
Notification Date:	02/11/2002
Category:	72 HR
Associated ID:	Not reported
Current Status:	RTNCLOSED
Status Date:	04/11/2002
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

Release:

Name:	NO LOCATION AID
Address:	870 WORCESTER RD
City,State,Zip:	WELLESLEY, MA
Release Tracking Number/Current Status:	3-0021473 / RTNCLOSED
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	02/11/2002
Category:	72 HR
Status Date:	04/11/2002
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	2/11/2002
Response Action Outcome:	Not reported

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	2/11/2002
Response Action Outcome:	Not reported

NO LOCATION AID (Continued) **S132537265**

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 3/6/2002
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/10/2002
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 4/11/2002
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 4/11/2002
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 4/11/2002
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 4/11/2002
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 4/11/2002
Response Action Outcome: Not reported

Chemicals:
Chemical: NAPL
Quantity: 1 inches
Chemical: GASOLINE
Quantity: 1 inches
Location Type: COMMERCIAL
Source: UNKNOWN

18
NNW
1/2-1
0.530 mi.
2801 ft.

FORMER LEE VOLVO
962 WORCESTER ST
WELLESLEY, MA 02482

MA SHWS **S132541177**
MA LUST **N/A**
MA INST CONTROL
MA RELEASE

Relative:
Lower

Actual:
124 ft.

SHWS:
Name: FORMER LEE VOLVO
Address: 962 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0031472
Source Type: TANK
Release Town: WELLESLEY
Notification Date: 04/17/2013

FORMER LEE VOLVO (Continued) **S132541177**

Category:	120 DY
Associated ID:	Not reported
Current Status:	TMPS
Status Date:	05/10/2019
Phase:	Not reported
Response Action Outcome:	TN
Oil Or Haz Material:	Hazardous Material
Name:	FORMER LEE VOLVO
Address:	962 WORCESTER ST
City,State,Zip:	WELLESLEY, MA 024820000
Facility ID:	3-0031472
Source Type:	UNKNOWN
Release Town:	WELLESLEY
Notification Date:	04/17/2013
Category:	120 DY
Associated ID:	Not reported
Current Status:	TMPS
Status Date:	05/10/2019
Phase:	Not reported
Response Action Outcome:	TN
Oil Or Haz Material:	Hazardous Material

LUST:

Facility:

Name:	FORMER LEE VOLVO
Address:	962 WORCESTER ST
City,State,Zip:	WELLESLEY, MA 024820000
Current Status:	**Temporary Solution**
Release Tracking Number/Current Status:	3-0031472 / TMPS
Status Date:	05/10/2019
Source Type:	UST
Release Town:	WELLESLEY
Notification Date:	04/17/2013
Category:	120 DY
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	TN - TN
Oil Or Haz Material:	Hazardous Material
Source:	UNKNOWN
Source:	UST
Source:	TANK

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	2-METHYLNAPHTHALENE
Quantity:	4 milligrams per kilogram
Chemical:	1,4-DICHLOROBENZENE
Quantity:	13 micrograms per liter
Chemical:	DICHLORODIFLUOROMETHANE
Quantity:	10 micrograms per liter
Chemical:	BENZO[A]PYRENE

FORMER LEE VOLVO (Continued) **S132541177**

Quantity: 0.27 micrograms per liter
Chemical: 2-METHYLNAPHTHALENE
Quantity: 23 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 870 micrograms per liter
Chemical: NAPHTHALENE
Quantity: 4.5 milligrams per kilogram
Chemical: METHYLENE CHLORIDE
Quantity: 160 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity: 2500 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C12
Quantity: 1600 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 2600 micrograms per liter
Chemical: METHYL TERT-BUTYL ETHER
Quantity: 91 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 2000 micrograms per liter
Chemical: BENZENE
Quantity: 44 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 410 milligrams per kilogram
Chemical: ARSENIC
Quantity: 13 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity: 750 milligrams per kilogram

Actions:

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 10/11/2018
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/23/2017
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 2/12/2014
Response Action Outcome: TN

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 2/12/2018
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 2/28/2014
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 2/29/2016
Response Action Outcome: TN

FORMER LEE VOLVO (Continued) **S132541177**

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/14/2017
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/2/2015
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/9/2018
Response Action Outcome: TN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 4/17/2013
Response Action Outcome: TN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 4/17/2013
Response Action Outcome: TN

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/17/2013
Response Action Outcome: TN

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 4/17/2017
Response Action Outcome: TN

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/24/2014
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/24/2014
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/24/2014
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 4/25/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

FORMER LEE VOLVO (Continued) **S132541177**

Action Date: 4/29/2013
Response Action Outcome: TN

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Activity and Use Limitation
Action Status: Transmittal, Notice, or Notification Received
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: TSNRCD
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 5/11/2024
Response Action Outcome: TN

Action Type: Activity and Use Limitation
Action Status: Fee Received - FMCRA Use Only
Action Date: 5/13/2019
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only
Action Date: 5/2/2013
Response Action Outcome: TN

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 5/22/2013
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/3/2013
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 5/8/2014
Response Action Outcome: TN

Action Type: BOL
Action Status: SHPFAC
Action Date: 6/4/2013
Response Action Outcome: TN

FORMER LEE VOLVO (Continued) **S132541177**

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/16/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 8/22/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/22/2016
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/30/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/31/2015
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 9/2/2014
Response Action Outcome: TN

INST CONTROL:
Name: FORMER LEE VOLVO
Address: 962 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number: 3-0031472
Action Type: AUL
Action Stat: FEEREC
Action Date: 05/13/2019
Response Action Outcome: TN - TN

Name: FORMER LEE VOLVO
Address: 962 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number: 3-0031472
Action Type: AUL
Action Stat: RECPT
Action Date: 05/10/2019
Response Action Outcome: TN - TN

Release:
Name: FORMER LEE VOLVO
Address: 962 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number/Current Status: 3-0031472 / TMPS
Primary ID: Not reported

FORMER LEE VOLVO (Continued) **S132541177**

Official City: WELLESLEY
Notification: 04/17/2013
Category: 120 DY
Status Date: 05/10/2019
Phase: Not reported
Response Action Outcome: TN - TN
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 10/11/2018
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/23/2017
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 2/12/2014
Response Action Outcome: TN

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 2/12/2018
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 2/28/2014
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 2/29/2016
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/14/2017
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/2/2015
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/9/2018
Response Action Outcome: TN

Action Type: Release Disposition

FORMER LEE VOLVO (Continued) **S132541177**

Action Status: Reportable Release under MGL 21E
Action Date: 4/17/2013
Response Action Outcome: TN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 4/17/2013
Response Action Outcome: TN

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/17/2013
Response Action Outcome: TN

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 4/17/2017
Response Action Outcome: TN

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/24/2014
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/24/2014
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/24/2014
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 4/25/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 4/29/2013
Response Action Outcome: TN

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Activity and Use Limitation
Action Status: Transmittal, Notice, or Notification Received
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 5/10/2019

FORMER LEE VOLVO (Continued) **S132541177**

Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: TSNRCD
Action Date: 5/10/2019
Response Action Outcome: TN

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 5/11/2024
Response Action Outcome: TN

Action Type: Activity and Use Limitation
Action Status: Fee Received - FMCRA Use Only
Action Date: 5/13/2019
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only
Action Date: 5/2/2013
Response Action Outcome: TN

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 5/22/2013
Response Action Outcome: TN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/3/2013
Response Action Outcome: TN

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 5/8/2014
Response Action Outcome: TN

Action Type: BOL
Action Status: SHPFAC
Action Date: 6/4/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/16/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 8/22/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/22/2016
Response Action Outcome: TN

FORMER LEE VOLVO (Continued) **S132541177**

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/30/2013
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/31/2015
Response Action Outcome: TN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 9/2/2014
Response Action Outcome: TN

Chemicals:
Chemical: 2-METHYLNAPHTHALENE
Quantity: 4 milligrams per kilogram
Chemical: 1,4-DICHLOROBENZENE
Quantity: 13 micrograms per liter
Chemical: DICHLORODIFLUOROMETHANE
Quantity: 10 micrograms per liter
Chemical: BENZO[A]PYRENE
Quantity: 0.27 micrograms per liter
Chemical: 2-METHYLNAPHTHALENE
Quantity: 23 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 870 micrograms per liter
Chemical: NAPHTHALENE
Quantity: 4.5 milligrams per kilogram
Chemical: METHYLENE CHLORIDE
Quantity: 160 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity: 2500 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C12
Quantity: 1600 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 2600 micrograms per liter
Chemical: METHYL TERT-BUTYL ETHER
Quantity: 91 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 2000 micrograms per liter
Chemical: BENZENE
Quantity: 44 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 410 milligrams per kilogram
Chemical: ARSENIC
Quantity: 13 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity: 750 milligrams per kilogram
Source: UNKNOWN
Source: UST
Source: TANK

19
WSW
1/2-1
0.536 mi.
2828 ft.

LILJA SCHOOL
OAK AND BACON STS
NATICK, MA 01760

MA SHWS **1004517659**
MA RELEASE **N/A**

Relative:
Higher

Actual:
168 ft.

SHWS:

Name:	LILJA SCHOOL
Address:	OAK AND BACON STS
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0004232
Source Type:	Not reported
Release Town:	NATICK
Notification Date:	12/30/1992
Category:	NONE
Associated ID:	3-0004232
Current Status:	REMOPS
Status Date:	12/22/2016
Phase:	PHASE V
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

Release:

Name:	LILJA SCHOOL
Address:	OAK AND BACON STS
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0004232 / REMOPS
Primary ID:	3-0004232
Official City:	NATICK
Notification:	12/30/1992
Category:	NONE
Status Date:	12/22/2016
Phase:	PHASE V
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Phase 5
Action Status:	Remedy Operation Status Report Received
Action Date:	1/11/2011
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	RMRINT
Action Date:	1/11/2011
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	RMRINT
Action Date:	1/12/2016
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	Remedy Operation Status Submittal Received
Action Date:	1/12/2016
Response Action Outcome:	Not reported

LILJA SCHOOL (Continued) **1004517659**

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/18/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/18/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/2/2018
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/2/2018
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/21/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/21/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/23/2019
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/23/2019
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/28/2025
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/28/2025
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/29/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received

LILJA SCHOOL (Continued) **1004517659**

Action Date: 1/29/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/31/2020
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/31/2020
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/5/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/5/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/8/2014
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/8/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 10/18/2000
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Level II - Audit Inspection
Action Date: 10/9/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 11/1/2001
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 11/30/2011
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 11/30/2011
Response Action Outcome: Not reported

LILJA SCHOOL (Continued) **1004517659**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 12/17/2009
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/17/2009
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/18/2007
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 12/18/2007
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 12/18/2008
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/18/2008
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/18/2014
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 12/18/2014
Response Action Outcome: Not reported

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 12/19/2001
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/19/2012
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 12/19/2012
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received

LILJA SCHOOL (Continued) **1004517659**

Action Date: 12/22/2006
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/22/2006
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 12/22/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 12/22/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 12/27/2004
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 12/27/2005
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 12/30/1992
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 3/1/2000
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 3/30/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 3/30/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 3/31/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1B Classification
Action Date: 3/31/1995
Response Action Outcome: Not reported

LILJA SCHOOL (Continued) **1004517659**

Action Type: TREGS
Action Status: LSPFA
Action Date: 3/31/1995
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/1/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 4/1/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 5/13/2003
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 5/14/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 5/14/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 5/31/2012
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 5/31/2012
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/13/2017
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/13/2017
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 6/16/1999
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT

LILJA SCHOOL (Continued) **1004517659**

Action Date: 6/18/2009
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/18/2009
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/19/2013
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/19/2013
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/20/2008
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/20/2008
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/22/2007
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/22/2007
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement
Action Date: 6/23/2006
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/23/2006
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINI
Action Date: 6/23/2006
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/24/2010
Response Action Outcome: Not reported

LILJA SCHOOL (Continued) **1004517659**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/24/2010
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/24/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/24/2022
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 6/26/1998
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 6/26/2000
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/27/1996
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 6/29/2005
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 6/30/2000
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 6/4/2020
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 6/4/2020
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 7/1/2004
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received

LILJA SCHOOL (Continued) **1004517659**

Action Date: 7/10/2018
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/10/2018
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/11/2011
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/11/2011
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/24/2019
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/24/2019
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/27/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/27/2023
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 7/3/2002
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 7/8/2015
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/8/2015
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/9/2021
Response Action Outcome: Not reported

LILJA SCHOOL (Continued) **1004517659**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/9/2021
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 8/12/1998
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 8/12/2004
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 8/12/2004
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 8/14/2014
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 8/14/2014
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 8/2/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 8/2/2016
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: RAM or Special Project Suspended
Action Date: 8/5/1996
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Level III - Comprehensive Audit
Action Date: 9/20/2001
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Level III - Comprehensive Audit
Action Date: 9/20/2001
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date

LILJA SCHOOL (Continued) **1004517659**

Action Date: 9/29/1995
Response Action Outcome: Not reported

Action Type: BWS20
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: Not reported

Chemicals:
Chemical: UNKNOWN
Quantity: Not reported
Location Type: SCHOOL

20
NNE
1/2-1
0.541 mi.
2855 ft.

FMR RUSSELLS TEXACO SERVICE STATION **MA SHWS S113411665**
873 WORCESTER ST **MA RELEASE N/A**
WELLESLEY, MA 02181

Relative:
Lower

Actual:
153 ft.

SHWS:
Name: FMR RUSSELLS TEXACO SERVICE STATION
Address: 873 WORCESTER ST
City,State,Zip: WELLESLEY, MA 021810000
Facility ID: 3-0004571
Source Type: Not reported
Release Town: WELLESLEY
Notification Date: 10/01/1993
Category: NONE
Associated ID: Not reported
Current Status: RAO
Status Date: 01/22/2014
Phase: PHASE V
Response Action Outcome: A2
Oil Or Haz Material: Not reported

Release:
Name: FMR RUSSELLS TEXACO SERVICE STATION
Address: 873 WORCESTER ST
City,State,Zip: WELLESLEY, MA 021810000
Release Tracking Number/Current Status: 3-0004571 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 10/01/1993
Category: NONE
Status Date: 01/22/2014
Phase: PHASE V
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Not reported

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Actions:
Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 1/12/2004

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/14/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/14/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/20/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/20/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/21/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/21/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 1/22/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/25/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/25/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 1/29/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 1/29/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 1/4/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVACC
Action Date: 1/4/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 1/4/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 10/4/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/4/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 11/10/1998

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 11/5/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Revised Statement or Transmittal Received
Action Date: 11/5/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 11/5/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/11/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/14/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVSIG
Action Date: 12/23/1993
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 12/29/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 2/1/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 2/1/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 2/3/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 2/5/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 2/5/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/30/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 3/4/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 5/15/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 5/15/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 5/30/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 5/31/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 6/13/2002

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 6/3/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/21/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/21/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/22/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/22/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/25/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/25/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/25/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/25/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/27/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/27/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/28/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 7/28/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 7/30/1993
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVREC
Action Date: 7/30/1993
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 7/30/1993
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 7/31/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINI
Action Date: 7/31/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 8/22/2001

FMR RUSSELLS TEXACO SERVICE STATION (Continued) **S113411665**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 8/22/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 8/3/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 8/3/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Transfer
Action Date: 9/15/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/23/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 9/23/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: UNKNOWN
Quantity: Not reported

21
West
1/2-1
0.554 mi.
2923 ft.

NATICK DPW **MA SHWS** **S103383839**
25 OAK ST **MA RELEASE** **N/A**
NATICK, MA 01760

Relative:
Lower

Actual:
143 ft.

SHWS:
Name: NATICK DPW
Address: 25 OAK ST
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0017210
Source Type: TRANSFORM
Release Town: NATICK
Notification Date: 08/25/1998

NATICK DPW (Continued) **S103383839**

Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	09/22/1998
Phase:	Not reported
Response Action Outcome:	A1
Oil Or Haz Material:	Oil and Hazardous Material

Release:

Name:	NATICK DPW
Address:	25 OAK ST
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0017210 / RAO
Primary ID:	Not reported
Official City:	NATICK
Notification:	08/25/1998
Category:	TWO HR
Status Date:	09/22/1998
Phase:	Not reported
Response Action Outcome:	A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type:	Oil and Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	8/25/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	8/25/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	9/22/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	9/22/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	9/28/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

NATICK DPW (Continued) **S103383839**

Chemicals:
- Chemical: MINERAL OIL
- Quantity: 10 gallons
- Chemical: MODF NON PCB
- Quantity: 10 gallons
- Chemical: PCBs
- Quantity: 50 parts per million
- Location Type: MUNICIPAL
- Source: TRANSFORM

D22 **NO LOCATION AID** **MA SHWS** **S132540122**
NW **984 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA 02482**
0.595 mi.
3140 ft. **Site 1 of 5 in cluster D**

Relative: **Lower**
Actual: **124 ft.**

SHWS:
- Name: NO LOCATION AID
- Address: 984 WORCESTER ST
- City,State,Zip: WELLESLEY, MA 024823709
- Facility ID: 3-0028632
- Source Type: VEHICLE
- Release Town: WELLESLEY
- Notification Date: 07/24/2009
- Category: TWO HR
- Associated ID: Not reported
- Current Status: RAO
- Status Date: 08/21/2009
- Phase: Not reported
- Response Action Outcome: A2
- Oil Or Haz Material: Oil

- Name: NO LOCATION AID
- Address: 984 WORCESTER ST
- City,State,Zip: WELLESLEY, MA 024823709
- Facility ID: 3-0028632
- Source Type: VAC TRUCK
- Release Town: WELLESLEY
- Notification Date: 07/24/2009
- Category: TWO HR
- Associated ID: Not reported
- Current Status: RAO
- Status Date: 08/21/2009
- Phase: Not reported
- Response Action Outcome: A2
- Oil Or Haz Material: Oil

Release:
- Name: NO LOCATION AID
- Address: 984 WORCESTER ST
- City,State,Zip: WELLESLEY, MA 024823709
- Release Tracking Number/Current Status: 3-0028632 / RAO
- Primary ID: Not reported
- Official City: WELLESLEY
- Notification: 07/24/2009
- Category: TWO HR
- Status Date: 08/21/2009

NO LOCATION AID (Continued) **S132540122**

Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 10/22/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 7/24/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 7/24/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 8/12/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 8/17/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 8/17/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 8/21/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 8/21/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNFE

NO LOCATION AID (Continued) **S132540122**

Action Status: Transmittal, Notice, or Notification Received
Action Date: 8/21/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: HYDRAULIC FLUID
Quantity: 75 gallons
Chemical: HYDRAULIC OIL
Quantity: 75 gallons
Location Type: ROADWAY
Source: VAC TRUCK
Source: VEHICLE

23
NNW
1/2-1
0.595 mi.
3143 ft.

NO LOCATION AID **MA SHWS S132535834**
965 WORCESTER ST **MA RELEASE N/A**
WELLESLEY, MA 02481

Relative: Lower

Actual: 124 ft.

SHWS:
Name: NO LOCATION AID
Address: 965 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024810000
Facility ID: 3-0018213
Source Type: Not reported
Release Town: WELLESLEY
Notification Date: 04/16/1999
Category: 120 DY
Associated ID: 3-0004555
Current Status: RTNCLOSED
Status Date: 08/19/1999
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

Release:
Name: NO LOCATION AID
Address: 965 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024810000
Release Tracking Number/Current Status: 3-0018213 / RTNCLOSED
Primary ID: 3-0004555
Official City: WELLESLEY
Notification: 04/16/1999
Category: 120 DY
Status Date: 08/19/1999
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 10/27/1997

NO LOCATION AID (Continued) **S132535834**

Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 10/27/1997
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 4/16/1999
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 4/16/1999
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 6/25/1999
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 8/18/1999
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 8/19/1999
Response Action Outcome: Not reported

Chemicals:
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 920 milligrams per kilogram

D24 **984 990 AND 990R WORCESTER ST** **MA SHWS** **S109489268**
NW **984 990 990R WORCESTER ST** **MA LUST** **N/A**
1/2-1 **WELLESLEY, MA 02482** **MA RELEASE**
0.597 mi.
3152 ft. **Site 2 of 5 in cluster D**

Relative: Lower
Actual: 124 ft.

SHWS:
Name: 984 990 AND 990R WORCESTER ST
Address: 984 990 990R WORCESTER ST
City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0028167
Source Type: UNKNOWN
Release Town: WELLESLEY
Notification Date: 11/24/2008
Category: 120 DY
Associated ID: Not reported
Current Status: RAO
Status Date: 10/19/2009
Phase: Not reported
Response Action Outcome: A2
Oil Or Haz Material: Oil and Hazardous Material

984 990 AND 990R WORCESTER ST (Continued) **S109489268**

LUST:

Facility:

Name:	984 990 AND 990R WORCESTER ST
Address:	984 990 990R WORCESTER ST
City,State,Zip:	WELLESLEY, MA 024820000
Current Status:	**Response Action Outcome**
Release Tracking Number/Current Status:	3-0028167 / RAO
Status Date:	10/19/2009
Source Type:	UST
Release Town:	WELLESLEY
Notification Date:	11/24/2008
Category:	120 DY
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil Or Haz Material:	Oil and Hazardous Material
Source:	UNKNOWN
Source:	UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	TOTAL XYLENES
Quantity:	8100 micrograms per liter
Chemical:	AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity:	1200 micrograms per liter
Chemical:	2-METHYLNAPHTHALENE
Quantity:	3.66 milligrams per kilogram
Chemical:	NAPHTHALENE
Quantity:	370 micrograms per liter
Chemical:	NAPHTHALENE
Quantity:	168 micrograms per liter
Chemical:	ETHYLBENZENE
Quantity:	1000 micrograms per liter
Chemical:	ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity:	859 milligrams per kilogram
Chemical:	AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity:	4410 micrograms per liter
Chemical:	ALIPHATIC HYDROCARBONS C19 THROUGH C36
Quantity:	221 micrograms per liter
Chemical:	BENZO[A]PYRENE
Quantity:	0.24 micrograms per liter
Chemical:	1,3,5-TRIMETHYL BENZENE
Quantity:	490 micrograms per liter
Chemical:	METHYL TERT-BUTYL ETHER
Quantity:	0.17 milligrams per kilogram
Chemical:	AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity:	1100 milligrams per kilogram
Chemical:	2-METHYLNAPHTHALENE
Quantity:	106 micrograms per liter
Chemical:	NAPHTHALENE
Quantity:	22 milligrams per kilogram

984 990 AND 990R WORCESTER ST (Continued) **S109489268**

Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 1720 micrograms per liter

Actions:

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 10/19/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 10/19/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 10/20/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 12/1/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 12/2/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

984 990 AND 990R WORCESTER ST (Continued) **S109489268**

Action Type: RLFA
Action Status: FOLOFF
Action Date: 12/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/2/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/21/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 9/10/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Release:
Name: 984 990 AND 990R WORCESTER ST
Address: 984 990 990R WORCESTER ST
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number/Current Status: 3-0028167 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 11/24/2008
Category: 120 DY
Status Date: 10/19/2009
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Oil and Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 10/19/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure

984 990 AND 990R WORCESTER ST (Continued) **S109489268**

Action Status: Completion Statement Received
Action Date: 10/19/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 10/20/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only
Action Date: 11/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 12/1/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 12/2/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 12/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/24/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

984 990 AND 990R WORCESTER ST (Continued) **S109489268**

reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/2/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/21/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 9/10/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: TOTAL XYLENES
Quantity: 8100 micrograms per liter
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 1200 micrograms per liter
Chemical: 2-METHYLNAPHTHALENE
Quantity: 3.66 milligrams per kilogram
Chemical: NAPHTHALENE
Quantity: 370 micrograms per liter
Chemical: NAPHTHALENE
Quantity: 168 micrograms per liter
Chemical: ETHYLBENZENE
Quantity: 1000 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity: 859 milligrams per kilogram
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 4410 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C19 THROUGH C36
Quantity: 221 micrograms per liter
Chemical: BENZO[A]PYRENE
Quantity: 0.24 micrograms per liter
Chemical: 1,3,5-TRIMETHYL BENZENE
Quantity: 490 micrograms per liter
Chemical: METHYL TERT-BUTYL ETHER
Quantity: 0.17 milligrams per kilogram
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 1100 milligrams per kilogram
Chemical: 2-METHYLNAPHTHALENE
Quantity: 106 micrograms per liter
Chemical: NAPHTHALENE
Quantity: 22 milligrams per kilogram
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 1720 micrograms per liter
Source: UNKNOWN
Source: UST

D25
NW
1/2-1
0.599 mi.
3164 ft.

NO LOCATION AID
986 WORCESTER ST
WELLESLEY, MA 02481

Site 3 of 5 in cluster D

MA SHWS **S104942008**
MA RELEASE **N/A**
MA HW GEN

Relative:
Lower

Actual:
124 ft.

SHWS:

Name:	NO LOCATION AID
Address:	986 WORCESTER ST
City,State,Zip:	WELLESLEY, MA 024810000
Facility ID:	3-0020491
Source Type:	Not reported
Release Town:	WELLESLEY
Notification Date:	03/01/2001
Category:	120 DY
Associated ID:	Not reported
Current Status:	RAO
Status Date:	03/30/2004
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Not reported

Release:

Name:	NO LOCATION AID
Address:	986 WORCESTER ST
City,State,Zip:	WELLESLEY, MA 024810000
Release Tracking Number/Current Status:	3-0020491 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	03/01/2001
Category:	120 DY
Status Date:	03/30/2004
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	11/14/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	3/1/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	3/1/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

NO LOCATION AID (Continued) **S104942008**

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 3/30/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 3/7/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/7/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/7/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 3/7/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 3/7/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 6/19/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 7/20/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only
Action Date: 7/25/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 1 milligrams per liter

NO LOCATION AID (Continued) **S104942008**

Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 30 milligrams per liter
Chemical: ALIPHATIC HYDROCARBONS C5 THROUGH C8
Quantity: 0.4 milligrams per liter
Chemical: AROMATIC HYDROCARBONS C9 THROUGH C10
Quantity: 4 milligrams per liter

HW GEN:
Name: KEHOE CHRYSLER INC
Address: 986 WORCESTER ST
City,State,Zip: WELLESLEY, MA 02181
EPA Id: MAD019692748
RCRA Generator Status: VSQG
State Generator Status: Not reported

D26 **OVERBROOK DRIVE** **MA SHWS** **S132534760**
NW **987 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA 02181**
0.626 mi.
3304 ft. **Site 4 of 5 in cluster D**

Relative: **Lower**
Actual: **124 ft.**

SHWS:
Name: OVERBROOK DRIVE
Address: 987 WORCESTER ST
City,State,Zip: WELLESLEY, MA 021810000
Facility ID: 3-0015224
Source Type: Not reported
Release Town: WELLESLEY
Notification Date: 06/18/1997
Category: 120 DY
Associated ID: Not reported
Current Status: RAO
Status Date: 06/25/1998
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

Release:
Name: OVERBROOK DRIVE
Address: 987 WORCESTER ST
City,State,Zip: WELLESLEY, MA 021810000
Release Tracking Number/Current Status: 3-0015224 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 06/18/1997
Category: 120 DY
Status Date: 06/25/1998
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

OVERBROOK DRIVE (Continued) **S132534760**

Action Date: 10/20/1997
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 6/18/1997
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 6/18/1997
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 6/25/1998
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 6/25/1998
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 6/30/1998
Response Action Outcome: Not reported

Chemicals:
Chemical: TOTAL PETROLEUM HYDROCARBONS (TPH)
Quantity: 19014 milligrams per kilogram

D27 **SHELL SERVICE STATION** **MA SHWS** **S132532233**
NW **987 WORCESTER ST** **MA LUST** **N/A**
1/2-1 **WELLESLEY, MA 02482** **MA RELEASE**
0.626 mi.
3304 ft. **Site 5 of 5 in cluster D**

Relative:
Lower

Actual:
124 ft.

SHWS:
Name: SHELL SERVICE STATION
Address: 987 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024823705
Facility ID: 3-0002336
Source Type: PIPE
Release Town: WELLESLEY
Notification Date: 07/15/1991
Category: NONE
Associated ID: Not reported
Current Status: RAO
Status Date: 12/20/2012
Phase: PHASE V
Response Action Outcome: A2
Oil Or Haz Material: Not reported

LUST:

Facility:

SHELL SERVICE STATION (Continued) **S132532233**

Name:	SHELL SERVICE STATION
Address:	987 WORCESTER ST
City,State,Zip:	WELLESLEY, MA 024823705
Current Status:	**Response Action Outcome**
Release Tracking Number/Current Status:	3-0002336 / RAO
Status Date:	12/20/2012
Source Type:	UST
Release Town:	WELLESLEY
Notification Date:	07/15/1991
Category:	NONE
Associated ID:	Not reported
Phase:	PHASE V
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil Or Haz Material:	Not reported
Location Type:	GASSTATION
Source:	PIPE
Source:	UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	UNKNOWN
Quantity:	Not reported

Actions:

Action Type:	Release Disposition
Action Status:	Valid Transition Site
Action Date:	1/7/1991
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	TREGS
Action Status:	WAVREC
Action Date:	1/7/1991
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Tier Classification
Action Status:	Tier 2 Transfer
Action Date:	10/1/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Abatement Measure
Action Status:	Level I - Technical Screen Audit
Action Date:	10/1/2008
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Phase 5
Action Status:	RMRINT
Action Date:	10/24/2007
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been

SHELL SERVICE STATION (Continued) **S132532233**

reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/24/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/28/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/28/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/29/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/30/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/30/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5

SHELL SERVICE STATION (Continued) **S132532233**

Action Status: Remedy Operation Status Report Received
Action Date: 10/30/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/30/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/31/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 10/5/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 11/1/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 11/1/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 11/2/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 11/2/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 11/27/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/1/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

SHELL SERVICE STATION (Continued) **S132532233**

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 12/20/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/28/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 2/25/1997
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 2/27/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 2/28/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 3/15/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/2/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/29/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/4/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification

SHELL SERVICE STATION (Continued) **S132532233**

Action Status: Tier 2 Extension
Action Date: 3/9/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVSIG
Action Date: 4/18/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/20/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/20/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/26/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/26/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/27/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/27/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/27/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

SHELL SERVICE STATION (Continued) **S132532233**

reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVACC
Action Date: 4/30/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/30/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/30/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 4/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 4/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 4/30/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/30/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/30/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4

SHELL SERVICE STATION (Continued) **S132532233**

Action Status: Written Plan Received
Action Date: 5/1/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 5/1/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 5/1/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 5/2/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Modified Transmittal Received - DPS Transfer
Action Date: 6/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 7/21/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 8/13/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 8/15/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FLDRAN
Action Date: 8/29/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Level II - Audit Inspection
Action Date: 8/29/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

SHELL SERVICE STATION (Continued) **S132532233**

reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 9/24/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 9/25/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Release:
Name: SHELL SERVICE STATION
Address: 987 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024823705
Release Tracking Number/Current Status: 3-0002336 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 07/15/1991
Category: NONE
Status Date: 12/20/2012
Phase: PHASE V
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 1/7/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVREC
Action Date: 1/7/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Transfer
Action Date: 10/1/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 10/1/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

SHELL SERVICE STATION (Continued) **S132532233**

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/24/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/24/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/28/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/28/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/29/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/30/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/30/2008

SHELL SERVICE STATION (Continued) **S132532233**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/30/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/30/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/31/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 10/5/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 11/1/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 11/1/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 11/2/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 11/2/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 11/27/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

SHELL SERVICE STATION (Continued) **S132532233**

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/1/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 12/20/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/28/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 2/25/1997
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 2/27/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 2/28/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 3/15/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/2/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/29/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/4/2002

SHELL SERVICE STATION (Continued) **S132532233**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/9/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVSIG
Action Date: 4/18/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/20/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/20/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/26/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/26/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/27/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/27/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/27/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

SHELL SERVICE STATION (Continued) **S132532233**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/28/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: WAVACC
Action Date: 4/30/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/30/1991
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/30/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 4/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 4/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 4/30/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 4/30/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 4/30/2008

SHELL SERVICE STATION (Continued) **S132532233**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 5/1/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 5/1/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: RMRINT
Action Date: 5/1/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 5/2/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Modified Transmittal Received - DPS Transfer
Action Date: 6/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 7/21/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 8/13/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 8/15/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FLDRAN
Action Date: 8/29/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

SHELL SERVICE STATION (Continued) **S132532233**

Action Type:	Phase 5
Action Status:	Level II - Audit Inspection
Action Date:	8/29/2006
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	9/24/2001
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Abatement Measure
Action Status:	Written Plan Received
Action Date:	9/25/2008
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:

Chemical:	UNKNOWN
Quantity:	Not reported
Location Type:	GASSTATION
Source:	PIPE
Source:	UST

E28 **ROUTE 9 WEST** **MA SHWS S132541670**
NW **1005 WORCESTER ROAD** **MA LUST N/A**
1/2-1 **WELLESLEY, MA 02482** **MA RELEASE**
0.642 mi.
3390 ft. **Site 1 of 4 in cluster E**

Relative: **Lower**
Actual: **124 ft.**

SHWS:

Name:	ROUTE 9 WEST
Address:	1005 WORCESTER ROAD
City,State,Zip:	WELLESLEY, MA 024820000
Facility ID:	3-0032821
Source Type:	TANKER
Release Town:	WELLESLEY
Notification Date:	04/16/2015
Category:	TWO HR
Associated ID:	Not reported
Current Status:	REMOPS
Status Date:	10/20/2021
Phase:	PHASE V
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported
Name:	ROUTE 9 WEST
Address:	1005 WORCESTER ROAD
City,State,Zip:	WELLESLEY, MA 024820000
Facility ID:	3-0032821
Source Type:	HOSE
Release Town:	WELLESLEY
Notification Date:	04/16/2015
Category:	TWO HR
Associated ID:	Not reported
Current Status:	REMOPS

ROUTE 9 WEST (Continued) **S132541670**

Status Date:	10/20/2021
Phase:	PHASE V
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported
Name:	ROUTE 9 WEST
Address:	1005 WORCESTER ROAD
City,State,Zip:	WELLESLEY, MA 024820000
Facility ID:	3-0032821
Source Type:	OHMDELIVER
Release Town:	WELLESLEY
Notification Date:	04/16/2015
Category:	TWO HR
Associated ID:	Not reported
Current Status:	REMOPS
Status Date:	10/20/2021
Phase:	PHASE V
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

LUST:

Facility:

Name:	ROUTE 9 WEST
Address:	1005 WORCESTER ROAD
City,State,Zip:	WELLESLEY, MA 024820000
Current Status:	**(Remedy Operation Status): A site where a remedial system which relies upon Active Operation and Maintenance is being operated for the purpose of achieving a Permanent Solution.**
Release Tracking Number/Current Status:	3-0032821 / REMOPS
Status Date:	10/20/2021
Source Type:	UST
Release Town:	WELLESLEY
Notification Date:	04/16/2015
Category:	TWO HR
Associated ID:	Not reported
Phase:	PHASE V
Response Action Outcome:	-
Oil Or Haz Material:	Not reported
Location Type:	ROADWAY
Location Type:	COMMERCIAL
Source:	UST
Source:	TANKER
Source:	OHMDELIVER
Source:	HOSE
Source:	USTPIPE

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	GASOLINE
Quantity:	20 gallons

Actions:

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 1/5/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/12/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/12/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 10/12/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINT
Action Date: 11/25/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINT
Action Date: 11/3/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/31/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRFIN
Action Date: 12/31/2015
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 2/10/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/1/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/1/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/3/2025
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/3/2025
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Status or Interim Report Received
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Work Started
Action Date: 3/4/2021
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 4/11/2020
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 4/11/2020
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 4/12/2019
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 4/15/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINI
Action Date: 4/15/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/19/2015
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 5/6/2016
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/7/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 6/16/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 6/16/2015
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 6/9/2015
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/20/2015
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/13/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 8/17/2015
Response Action Outcome: Not reported

Action Type: BOL
Action Status: SHPFAC
Action Date: 8/6/2015
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINI
Action Date: 9/23/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 9/24/2015
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Facility:

Name:	ROUTE 9 WEST
Address:	1005 WORCESTER ROAD
City,State,Zip:	WELLESLEY, MA 024820000
Current Status:	**(Remedy Operation Status): A site where a remedial system which relies upon Active Operation and Maintenance is being operated for the purpose of achieving a Permanent Solution.**
Release Tracking Number/Current Status:	3-0032821 / REMOPS
Status Date:	10/20/2021
Source Type:	USTPIPE
Release Town:	WELLESLEY
Notification Date:	04/16/2015
Category:	TWO HR
Associated ID:	Not reported
Phase:	PHASE V
Response Action Outcome:	-
Oil Or Haz Material:	Not reported
Location Type:	ROADWAY
Location Type:	COMMERCIAL
Source:	UST
Source:	TANKER
Source:	OHMDELIVER
Source:	HOSE
Source:	USTPIPE

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	GASOLINE
Quantity:	20 gallons

Actions:

Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	1/5/2016
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	Remedy Operation Status Report Received
Action Date:	10/12/2022
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	RMRINT
Action Date:	10/12/2022
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	Status or Interim Report Received
Action Date:	10/12/2022
Response Action Outcome:	Not reported
Action Type:	Phase 5
Action Status:	Status or Interim Report Received

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINT
Action Date: 11/25/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINT
Action Date: 11/3/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/31/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRFIN
Action Date: 12/31/2015
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 2/10/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/1/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/1/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/20/2023
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/3/2025
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/3/2025
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Status or Interim Report Received
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Work Started
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 4/11/2020
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 4/11/2020
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 4/12/2019
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 4/15/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINI
Action Date: 4/15/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 4/16/2015
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/19/2015
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 5/6/2016
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/7/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 6/16/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 6/16/2015
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 6/9/2015
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/20/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/13/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 8/17/2015
Response Action Outcome: Not reported

Action Type: BOL
Action Status: SHPFAC
Action Date: 8/6/2015
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINI
Action Date: 9/23/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 9/24/2015
Response Action Outcome: Not reported

Release:
Name: ROUTE 9 WEST
Address: 1005 WORCESTER ROAD
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number/Current Status: 3-0032821 / REMOPS
Primary ID: Not reported
Official City: WELLESLEY
Notification: 04/16/2015
Category: TWO HR
Status Date: 10/20/2021
Phase: PHASE V
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 1/5/2016
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 10/12/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/12/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 10/12/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 10/20/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINT
Action Date: 11/25/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINT
Action Date: 11/3/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/31/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRFIN
Action Date: 12/31/2015
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 2/10/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 3/1/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/1/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/20/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/3/2025
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/3/2025
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Status or Interim Report Received
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Work Started
Action Date: 3/4/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 3/9/2022
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Phase 5
Action Status: RMRINT
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 3/9/2022
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 4/11/2020
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 4/11/2020
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 4/12/2019
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/14/2016
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 4/15/2021
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINI

ROUTE 9 WEST (Continued) **S132541670**

Action Date: 4/15/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 4/16/2015
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/19/2015
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 5/6/2016
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/7/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 6/16/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 6/16/2015
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 6/9/2015
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/20/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/13/2015
Response Action Outcome: Not reported

ROUTE 9 WEST (Continued) **S132541670**

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 8/17/2015
Response Action Outcome: Not reported

Action Type: BOL
Action Status: SHPFAC
Action Date: 8/6/2015
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 9/19/2024
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: RMRINT
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Status or Interim Report Received
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 9/21/2023
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: RMRINI
Action Date: 9/23/2015
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 9/24/2015
Response Action Outcome: Not reported

Chemicals:
Chemical: GASOLINE
Quantity: 20 gallons
Location Type: ROADWAY
Location Type: COMMERCIAL
Source: UST
Source: TANKER

ROUTE 9 WEST (Continued) **S132541670**

Source: OHMDELIVER
Source: HOSE
Source: USTPIPE

E29
NW
1/2-1
0.653 mi.
3449 ft.

Relative:
Lower

Actual:
124 ft.

999 WORCESTER STREET **MA SHWS** **S123244298**
999 WORCESTER STREET **MA RELEASE** **N/A**
WELLESLEY, MA 02457

Site 2 of 4 in cluster E

SHWS:
Name: 999 WORCESTER STREET
Address: 999 WORCESTER STREET
City,State,Zip: WELLESLEY, MA 024570000
Facility ID: 3-0035056
Source Type: UNKNOWN
Release Town: WELLESLEY
Notification Date: 07/24/2018
Category: 120 DY
Associated ID: Not reported
Current Status: DPS
Status Date: 08/21/2018
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

Release:
Name: 999 WORCESTER STREET
Address: 999 WORCESTER STREET
City,State,Zip: WELLESLEY, MA 024570000
Release Tracking Number/Current Status: 3-0035056 / DPS
Primary ID: Not reported
Official City: WELLESLEY
Notification: 07/24/2018
Category: 120 DY
Status Date: 08/21/2018
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Downgradient Property Status
Action Status: Modified Transmittal Received - DPS Transfer
Action Date: 12/19/2019
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 7/24/2018
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/24/2018
Response Action Outcome: Not reported

999 WORCESTER STREET (Continued) **S123244298**

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 7/24/2018
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 8/20/2018
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 8/20/2018
Response Action Outcome: Not reported

Action Type: Downgradient Property Status
Action Status: Transmittal, Notice, or Notification Received
Action Date: 8/21/2018
Response Action Outcome: Not reported

Chemicals:
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 460 micrograms per liter
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 1800 micrograms per liter
Source: UNKNOWN

E30 **MOBIL STATION 01-PG2** **MA SHWS S132531877**
NW **1005 WORCESTER ST** **MA RELEASE N/A**
1/2-1 **WELLESLEY, MA 02482**
0.656 mi.
3465 ft. **Site 3 of 4 in cluster E**

Relative: Lower
Actual: 125 ft.

SHWS:
Name: MOBIL STATION 01-PG2
Address: 1005 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024823706
Facility ID: 3-0001058
Source Type: Not reported
Release Town: WELLESLEY
Notification Date: 01/15/1988
Category: NONE
Associated ID: Not reported
Current Status: RAO
Status Date: 11/17/2009
Phase: PHASE V
Response Action Outcome: A2
Oil Or Haz Material: Not reported

Release:
Name: MOBIL STATION 01-PG2
Address: 1005 WORCESTER ST
City,State,Zip: WELLESLEY, MA 024823706
Release Tracking Number/Current Status: 3-0001058 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 01/15/1988

MOBIL STATION 01-PG2 (Continued) **S132531877**

Category: NONE
Status Date: 11/17/2009
Phase: PHASE V
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 1/15/1988
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Inspection and Monitoring Report Received
Action Date: 10/29/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 11/13/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 11/17/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Completion Statement Received
Action Date: 11/17/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 11/17/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 11/23/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 11/29/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

MOBIL STATION 01-PG2 (Continued) **S132531877**

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 11/4/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: As-Built Construction Report Received
Action Date: 2/24/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Completion Statement Received
Action Date: 2/24/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Inspection and Monitoring Report Received
Action Date: 2/24/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: As-Built Construction Report Received
Action Date: 2/28/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/26/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Inspection and Monitoring Report Received
Action Date: 4/28/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 4/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Inspection and Monitoring Report Received
Action Date: 4/30/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Report Received
Action Date: 5/18/2006

MOBIL STATION 01-PG2 (Continued) **S132531877**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Inspection and Monitoring Report Received
Action Date: 5/20/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Remedy Operation Status Submittal Received
Action Date: 5/20/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Revised Statement or Transmittal Received
Action Date: 5/24/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 5/24/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Modified Revised or Updated Plan Received
Action Date: 5/24/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 5
Action Status: Action Status or AUL Terminated
Action Date: 5/24/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 6/16/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 6/6/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 6/7/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

MOBIL STATION 01-PG2 (Continued) **S132531877**

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 6/7/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 8/2/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: TREGS
Action Status: LSPFA
Action Date: 8/8/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 8/9/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 8/9/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 8/9/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: UNKNOWN
Quantity: Not reported

E31 **PROPERTY** **MA SHWS S100829253**
NW **1 WORCESTER ST** **MA RELEASE N/A**
1/2-1 **NATICK, MA 01760**
0.662 mi.
3496 ft. **Site 4 of 4 in cluster E**

Relative: **Lower**
Actual: **127 ft.**

SHWS:
Name: PROPERTY
Address: 1 WORCESTER ST
City,State,Zip: NATICK, MA 01760
Facility ID: 3-0002658
Source Type: Not reported
Release Town: NATICK
Notification Date: 01/15/1990
Category: NONE
Associated ID: Not reported
Current Status: RAO

PROPERTY (Continued) **S100829253**

Status Date: 02/27/1995
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Not reported

Release:
Name: PROPERTY
Address: 1 WORCESTER ST
City,State,Zip: NATICK, MA 01760
Release Tracking Number/Current Status: 3-0002658 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 01/15/1990
Category: NONE
Status Date: 02/27/1995
Phase: Not reported
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 1/15/1990
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 2/27/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 2/27/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: PETROLEUM BASED OIL
Quantity: Not reported
Location Type: COMMERCIAL

F32 **NO LOCATION AID** **MA SHWS** **S132535018**
WSW **72 BACON ST** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.667 mi.
3523 ft. **Site 1 of 2 in cluster F**

Relative: Higher
Actual: 208 ft.

SHWS:
Name: NO LOCATION AID
Address: 72 BACON ST
City,State,Zip: NATICK, MA 017600000

NO LOCATION AID (Continued) **S132535018**

Facility ID:	3-0015880
Source Type:	Not reported
Release Town:	NATICK
Notification Date:	01/05/1998
Category:	120 DY
Associated ID:	Not reported
Current Status:	RAO
Status Date:	05/01/2002
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Hazardous Material

Release:

Name:	NO LOCATION AID
Address:	72 BACON ST
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0015880 / RAO
Primary ID:	Not reported
Official City:	NATICK
Notification:	01/05/1998
Category:	120 DY
Status Date:	05/01/2002
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Phase 1
Action Status:	Completion Statement Received
Action Date:	1/15/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Tier Classification
Action Status:	Tier 2 Classification
Action Date:	1/15/1999
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Tier Classification
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	1/15/1999
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	1/5/1998
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E

NO LOCATION AID (Continued) **S132535018**

Action Date: 1/5/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 12/26/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Transfer
Action Date: 12/29/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/8/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 4/17/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 5/1/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/8/1998
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: CHRYSENE
Quantity: 0.96 parts per million
Chemical: BENZO[A]ANTHRACENE
Quantity: 0.8 parts per million
Chemical: 2-METHYLNAPHTHALENE
Quantity: 0.78 parts per million

F33
WSW
1/2-1
0.667 mi.
3523 ft.

NO LOCATION AID
72 BACON ST
NATICK, MA 01760

Site 2 of 2 in cluster F

MA SHWS **S132534902**
MA RELEASE **N/A**

Relative:
Higher

Actual:
208 ft.

SHWS:

Name:	NO LOCATION AID
Address:	72 BACON ST
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0015577
Source Type:	UNKNOWN
Release Town:	NATICK
Notification Date:	09/30/1997
Category:	120 DY
Associated ID:	Not reported
Current Status:	RAO
Status Date:	08/28/1998
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

Release:

Name:	NO LOCATION AID
Address:	72 BACON ST
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0015577 / RAO
Primary ID:	Not reported
Official City:	NATICK
Notification:	09/30/1997
Category:	120 DY
Status Date:	08/28/1998
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Abatement Measure
Action Status:	Modified Revised or Updated Plan Received
Action Date:	1/5/1998
Response Action Outcome:	Not reported

Action Type:	Release Abatement Measure
Action Status:	Fee Received - FMCRA Use Only
Action Date:	10/23/1997
Response Action Outcome:	Not reported

Action Type:	Release Abatement Measure
Action Status:	Modified Revised or Updated Plan Received
Action Date:	10/27/1997
Response Action Outcome:	Not reported

Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	11/5/1997
Response Action Outcome:	Not reported

NO LOCATION AID (Continued) **S132534902**

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 8/26/1998
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 8/28/1998
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 9/30/1997
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Oral Approval of Plan or Action
Action Date: 9/30/1997
Response Action Outcome: Not reported

Chemicals:
Chemical: DIESEL
Quantity: 5800 parts per million
Location Type: RESIDNTIAL
Location Type: COMMERCIAL
Source: UNKNOWN

G34 **NORTH 40 PROPERTY** **MA SHWS S132541575**
East **156 WESTON ROAD** **MA RELEASE N/A**
1/2-1 **WELLESLEY, MA 02482**
0.697 mi.
3678 ft. **Site 1 of 3 in cluster G**

Relative: Lower
Actual: 153 ft.

SHWS:
Name: NORTH 40 PROPERTY
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0032582
Source Type: UNKNOWN
Release Town: WELLESLEY
Notification Date: 12/22/2014
Category: 120 DY
Associated ID: Not reported
Current Status: PSNC
Status Date: 06/12/2015
Phase: Not reported
Response Action Outcome: PN
Oil Or Haz Material: Not reported

Release:
Name: NORTH 40 PROPERTY
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number/Current Status: 3-0032582 / PSNC
Primary ID: Not reported
Official City: WELLESLEY
Notification: 12/22/2014

NORTH 40 PROPERTY (Continued) **S132541575**

Category: 120 DY
Status Date: 06/12/2015
Phase: Not reported
Response Action Outcome: PN - PN
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 1/2/2015
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 1/9/2015
Response Action Outcome: PN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 12/22/2014
Response Action Outcome: PN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 12/22/2014
Response Action Outcome: PN

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/22/2014
Response Action Outcome: PN

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/23/2014
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/23/2014
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only
Action Date: 12/24/2014
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 4/28/2015
Response Action Outcome: PN

Action Type: BOL
Action Status: SHPFAC
Action Date: 6/12/2015

NORTH 40 PROPERTY (Continued) **S132541575**

Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: PSNRCD
Action Date: 6/12/2015
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 6/12/2015
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 6/15/2015
Response Action Outcome: PN

Chemicals:
Chemical: TOTAL PETROLEUM HYDROCARBONS (TPH)
Quantity: 8790 parts per million
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 7830 parts per million
Source: UNKNOWN

G35 **NORTH 40** **MA SHWS** **S132541574**
East **156 WESTON ROAD** **MA INST CONTROL** **N/A**
1/2-1 **WELLESLEY, MA 02482** **MA RELEASE**
0.697 mi.
3678 ft. **Site 2 of 3 in cluster G**

Relative: **Lower**
Actual: **153 ft.**

SHWS:
Name: NORTH 40
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0032580
Source Type: UNKNOWN
Release Town: WELLESLEY
Notification Date: 12/16/2014
Category: 120 DY
Associated ID: Not reported
Current Status: PSC
Status Date: 12/15/2020
Phase: Not reported
Response Action Outcome: PA
Oil Or Haz Material: Hazardous Material

INST CONTROL:
Name: NORTH 40
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number: 3-0032580
Action Type: AUL
Action Stat: CONFRM
Action Date: 02/22/2021
Response Action Outcome: PA - PA

Name: NORTH 40

NORTH 40 (Continued) **S132541574**

Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number: 3-0032580
Action Type: AUL
Action Stat: RECPT
Action Date: 12/15/2020
Response Action Outcome: PA - PA

Release:
Name: NORTH 40
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number/Current Status: 3-0032580 / PSC
Primary ID: Not reported
Official City: WELLESLEY
Notification: 12/16/2014
Category: 120 DY
Status Date: 12/15/2020
Phase: Not reported
Response Action Outcome: PA - PA
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:
Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 1/9/2015
Response Action Outcome: PA

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 10/5/2015
Response Action Outcome: PA

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 12/14/2018
Response Action Outcome: PA

Action Type: Tier Classification
Action Status: TIERI
Action Date: 12/15/2015
Response Action Outcome: PA

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 12/15/2015
Response Action Outcome: PA

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/15/2015
Response Action Outcome: PA

Action Type: Response Action Outcome - RAO

NORTH 40 (Continued) **S132541574**

Action Status:	PSARCD
Action Date:	12/15/2020
Response Action Outcome:	PA
Action Type:	Activity and Use Limitation
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	12/15/2020
Response Action Outcome:	PA
Action Type:	Phase 4
Action Status:	Completion Statement Received
Action Date:	12/15/2020
Response Action Outcome:	PA
Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	12/16/2014
Response Action Outcome:	PA
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	12/16/2014
Response Action Outcome:	PA
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	12/16/2014
Response Action Outcome:	PA
Action Type:	Phase 3
Action Status:	Completion Statement Received
Action Date:	12/16/2019
Response Action Outcome:	PA
Action Type:	Phase 4
Action Status:	Written Plan Received
Action Date:	12/16/2019
Response Action Outcome:	PA
Action Type:	Activity and Use Limitation
Action Status:	Confirmatory AUL received
Action Date:	2/22/2021
Response Action Outcome:	PA
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	6/16/2015
Response Action Outcome:	PA
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	6/8/2015
Response Action Outcome:	PA
Action Type:	RNFE
Action Status:	Revised Statement or Transmittal Received
Action Date:	6/8/2015

NORTH 40 (Continued) **S132541574**

Response Action Outcome: PA

Chemicals:
Chemical: BENZO[A]PYRENE
Quantity: 2.3 milligrams per kilogram
Chemical: CHROMIUM (TOTAL)
Quantity: 120 milligrams per kilogram
Chemical: 2-METHYLNAPHTHALENE
Quantity: 1.5 milligrams per kilogram
Chemical: PHENOL
Quantity: 6.1 milligrams per kilogram
Chemical: BENZENE, 1,4-DICHLORO-
Quantity: 2.9 milligrams per kilogram
Chemical: ACENAPHTHYLENE
Quantity: 1.7 milligrams per kilogram
Chemical: AROCLOR 1242
Quantity: 1.78 milligrams per kilogram
Chemical: ARSENIC
Quantity: 0.018 milligrams per liter
Source: UNKNOWN

G36 **WELLESLEY COLLEGE COMMUNITY GARDEN** **MA SHWS** **S132541253**
East **156 WESTON ROAD** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA 02481**
0.697 mi.
3678 ft. **Site 3 of 3 in cluster G**

Relative: **Lower**
Actual: **153 ft.**

SHWS:
Name: WELLESLEY COLLEGE COMMUNITY GARDEN
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024810000
Facility ID: 3-0031682
Source Type: VEHICLE
Release Town: WELLESLEY
Notification Date: 07/27/2013
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 09/23/2013
Phase: Not reported
Response Action Outcome: A2
Oil Or Haz Material: Not reported

Release:
Name: WELLESLEY COLLEGE COMMUNITY GARDEN
Address: 156 WESTON ROAD
City,State,Zip: WELLESLEY, MA 024810000
Release Tracking Number/Current Status: 3-0031682 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 07/27/2013
Category: TWO HR
Status Date: 09/23/2013
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Not reported

WELLESLEY COLLEGE COMMUNITY GARDEN (Continued) **S132541253**

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	7/27/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	7/27/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	BOL
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	8/13/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	8/15/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	9/23/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	9/23/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	9/23/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	BOL
Action Status:	SHPFAC
Action Date:	9/24/2013
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:

Chemical:	GASOLINE
Quantity:	10 gallons
Location Type:	PRIVPROP
Location Type:	OPENSPACE

WELLESLEY COLLEGE COMMUNITY GARDEN (Continued) **S132541253**

Source: VEHICLE

37
ESE
1/2-1
0.720 mi.
3803 ft.

WELLESLEY COLLEGE
CENTRAL ST (RTE 135)
WELLESLEY, MA 02481

MA SHWS **S100829946**
MA INST CONTROL **N/A**
MA RELEASE

Relative:
Lower

Actual:
135 ft.

SHWS:

Name:	WELLESLEY COLLEGE
Address:	CENTRAL ST (RTE 135)
City,State,Zip:	WELLESLEY, MA 024810000
Facility ID:	3-0002581
Source Type:	Not reported
Release Town:	WELLESLEY
Notification Date:	07/15/1993
Category:	NONE
Associated ID:	3-0002581
Current Status:	PSC
Status Date:	08/11/2020
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

INST CONTROL:

Name:	WELLESLEY COLLEGE
Address:	CENTRAL ST (RTE 135)
City,State,Zip:	WELLESLEY, MA 024810000
Release Tracking Number:	3-0002581
Action Type:	AUL
Action Stat:	AMEND
Action Date:	07/30/2020
Response Action Outcome:	-

Name:	WELLESLEY COLLEGE
Address:	CENTRAL ST (RTE 135)
City,State,Zip:	WELLESLEY, MA 024810000
Release Tracking Number:	3-0002581
Action Type:	AUL
Action Stat:	FEEREC
Action Date:	08/10/2020
Response Action Outcome:	-

Name:	WELLESLEY COLLEGE
Address:	CENTRAL ST (RTE 135)
City,State,Zip:	WELLESLEY, MA 024810000
Release Tracking Number:	3-0002581
Action Type:	AUL
Action Stat:	LEGNOT
Action Date:	08/11/2020
Response Action Outcome:	-

Release:

Name:	WELLESLEY COLLEGE
Address:	CENTRAL ST (RTE 135)
City,State,Zip:	WELLESLEY, MA 024810000
Release Tracking Number/Current Status:	3-0002581 / PSC

WELLESLEY COLLEGE (Continued) **S100829946**

Primary ID: 3-0002581
Official City: WELLESLEY
Notification: 07/15/1993
Category: NONE
Status Date: 08/11/2020
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 1/23/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 1/31/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/14/2009
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 10/2/1997
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/10/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/10/2019
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/12/2003
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 12/14/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Revised Statement or Transmittal Received
Action Date: 12/14/2004
Response Action Outcome: Not reported

WELLESLEY COLLEGE (Continued) **S100829946**

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 12/15/2006
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/15/2006
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/19/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 12/20/1999
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 12/20/1999
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 12/20/1999
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 12/22/2014
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/29/2005
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/4/1997
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received

WELLESLEY COLLEGE (Continued) **S100829946**

Action Date: 3/3/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/30/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 4/8/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/11/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 6/13/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/14/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/20/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/21/2006
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 6/21/2006
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/23/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2005
Response Action Outcome: Not reported

WELLESLEY COLLEGE (Continued) **S100829946**

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 7/14/2011
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 7/15/1993
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Amendment Received or Issued
Action Date: 7/30/2020
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Fee Received - FMCRA Use Only
Action Date: 8/10/2020
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published
Action Date: 8/11/2020
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: PSARCD
Action Date: 8/11/2020
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 8/4/1997
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 8/4/1997
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 9/1/2020
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 9/24/2021
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 9/28/2021
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement

WELLESLEY COLLEGE (Continued) **S100829946**

Action Date: 9/4/1998
Response Action Outcome: Not reported

Action Type: BWS03
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: Not reported

Action Type: BWS20
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: Not reported

Chemicals:
Chemical: UNKNOWN CHEMICAL OF TYPE - HAZARDOUS MATERIAL
Quantity: Not reported

38
NW
1/2-1
0.742 mi.
3916 ft.

NO LOCATION AID **MA SHWS S132541307**
104 WORCESTER ROAD **MA RELEASE N/A**
NATICK, MA 01760

Relative:
Lower

Actual:
160 ft.

SHWS:
Name: NO LOCATION AID
Address: 104 WORCESTER ROAD
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0031861
Source Type: VEHICLE
Release Town: NATICK
Notification Date: 11/11/2013
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 01/06/2014
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Oil

Name: NO LOCATION AID
Address: 104 WORCESTER ROAD
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0031861
Source Type: LINE
Release Town: NATICK
Notification Date: 11/11/2013
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 01/06/2014
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Oil

Release:
Name: NO LOCATION AID
Address: 104 WORCESTER ROAD

NO LOCATION AID (Continued) **S132541307**

City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0031861 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 11/11/2013
Category: TWO HR
Status Date: 01/06/2014
Phase: Not reported
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 1/6/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 1/6/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 1/6/2014
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 11/11/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/11/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/2/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:

Chemical: HYDRAULIC FLUID
Quantity: 14 gallons
Location Type: COMMERCIAL
Source: LINE

NO LOCATION AID (Continued) **S132541307**

Source: VEHICLE

39
NW
1/2-1
0.800 mi.
4225 ft.

WHITTIER RD
111 WORCESTER RD
NATICK, MA 01760

MA SHWS **S121826532**
MA RELEASE **N/A**

Relative:
Lower

Actual:
159 ft.

SHWS:

Name:	WHITTIER RD
Address:	111 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0019321
Source Type:	UNKNOWN
Release Town:	NATICK
Notification Date:	02/25/2000
Category:	72 HR
Associated ID:	3-0000715
Current Status:	RTNCLOSED
Status Date:	12/29/2000
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

Release:

Name:	WHITTIER RD
Address:	111 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0019321 / RTNCLOSED
Primary ID:	3-0000715
Official City:	NATICK
Notification:	02/25/2000
Category:	72 HR
Status Date:	12/29/2000
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Tier Classification
Action Status:	Tier 2 Extension
Action Date:	10/16/2002
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	10/16/2015
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Tier 2 Extension
Action Date:	10/20/2003
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action

WHITTIER RD (Continued) **S121826532**

Action Status: Modified Revised or Updated Plan Received
Action Date: 10/9/2001
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 10/9/2001
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 12/29/2000
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 12/29/2000
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/29/2000
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 2/25/2000
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 2/25/2000
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 3/10/2000
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 3/10/2000
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 3/8/2000
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 4/11/2001
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 4/24/2000

WHITTIER RD (Continued) **S121826532**

Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 4/24/2000
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/4/2000
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 5/13/1992
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 5/29/2001
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 6/29/2000
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 7/16/2012
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 9/6/2001
Response Action Outcome: Not reported

Chemicals:
Chemical: GASOLINE
Quantity: Not reported
Chemical: NAPL
Quantity: Not reported
Location Type: COMMERCIAL
Source: UNKNOWN

H40 **KEOHANE SPORTS CENTER/WELLESLEY COLLEGE** **MA SHWS** **S132543567**
East **106 CENTRAL STREET** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA 02482**
0.836 mi.
4415 ft. **Site 1 of 5 in cluster H**

Relative: SHWS:
Lower Name: KEOHANE SPORTS CENTER/WELLESLEY COLLEGE
Actual: Address: 106 CENTRAL STREET
145 ft. City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0038523
Source Type: PIPE

KEOHANE SPORTS CENTER/WELLESLEY COLLEGE (Continued) **S132543567**

Release Town:	WELLESLEY
Notification Date:	12/27/2023
Category:	120 DY
Associated ID:	Not reported
Current Status:	URAM
Status Date:	12/29/2023
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Name:	KEOHANE SPORTS CENTER/WELLESLEY COLLEGE
Address:	106 CENTRAL STREET
City,State,Zip:	WELLESLEY, MA 024820000
Facility ID:	3-0038523
Source Type:	SEE RTN 3-
Release Town:	WELLESLEY
Notification Date:	12/27/2023
Category:	120 DY
Associated ID:	Not reported
Current Status:	URAM
Status Date:	12/29/2023
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Release:

Name:	KEOHANE SPORTS CENTER/WELLESLEY COLLEGE
Address:	106 CENTRAL STREET
City,State,Zip:	WELLESLEY, MA 024820000
Release Tracking Number/Current Status:	3-0038523 / URAM
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	12/27/2023
Category:	120 DY
Status Date:	12/29/2023
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	12/27/2023
Response Action Outcome:	Not reported

Action Type:	Utility-related Abatement Measure
Action Status:	Notice of Intent to Conduct a URAM
Action Date:	12/27/2023
Response Action Outcome:	Not reported

Action Type:	Utility-related Abatement Measure
Action Status:	Notice of Intent to Conduct a URAM
Action Date:	12/29/2023
Response Action Outcome:	Not reported

KEOHANE SPORTS CENTER/WELLESLEY COLLEGE (Continued) **S132543567**

Action Type: Utility-related Abatement Measure
Action Status: Notification of URAM Received
Action Date: 12/29/2023
Response Action Outcome: Not reported

Action Type: Utility-related Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/26/2024
Response Action Outcome: Not reported

Chemicals:
Chemical: LEAD
Quantity: 200 milligrams per kilogram
Location Type: SCHOOL
Location Type: PRIVPROP
Location Type: UTILEASE
Source: PIPE
Source: SEE RTN 3-

H41 **WELLESLEY COLLEGE ALUMNAE HALL** **MA SHWS** **S132534225**
East **106 CENTRAL ST** **MA INST CONTROL** **N/A**
1/2-1 **WELLESLEY, MA 02181** **MA RELEASE**
0.836 mi.
4415 ft. **Site 2 of 5 in cluster H**

Relative:
Lower

Actual:
145 ft.

SHWS:
Name: WELLESLEY COLLEGE ALUMNAE HALL
Address: 106 CENTRAL ST
City,State,Zip: WELLESLEY, MA 021810000
Facility ID: 3-0013767
Source Type: HAZARDOUS
Release Town: WELLESLEY
Notification Date: 05/13/1996
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 05/13/1997
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Hazardous Material

Name: WELLESLEY COLLEGE ALUMNAE HALL
Address: 106 CENTRAL ST
City,State,Zip: WELLESLEY, MA 021810000
Facility ID: 3-0013767
Source Type: MATERIAL
Release Town: WELLESLEY
Notification Date: 05/13/1996
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 05/13/1997
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Hazardous Material

WELLESLEY COLLEGE ALUMNAE HALL (Continued) **S132534225**

INST CONTROL:

Name:	WELLESLEY COLLEGE ALUMNAE HALL
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number:	3-0013767
Action Type:	AUL
Action Stat:	LEGNOT
Action Date:	01/14/2006
Response Action Outcome:	-

Name:	WELLESLEY COLLEGE ALUMNAE HALL
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number:	3-0013767
Action Type:	AUL
Action Stat:	RECPT
Action Date:	05/13/1997
Response Action Outcome:	-

Name:	WELLESLEY COLLEGE ALUMNAE HALL
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number:	3-0013767
Action Type:	AUL
Action Stat:	TERMIN
Action Date:	01/13/2006
Response Action Outcome:	-

Release:

Name:	WELLESLEY COLLEGE ALUMNAE HALL
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number/Current Status:	3-0013767 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	05/13/1996
Category:	TWO HR
Status Date:	05/13/1997
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Activity and Use Limitation
Action Status:	Action Status or AUL Terminated
Action Date:	1/13/2006
Response Action Outcome:	Not reported

Action Type:	Activity and Use Limitation
Action Status:	Legal Notice Published
Action Date:	1/14/2006
Response Action Outcome:	Not reported

Action Type:	Release Abatement Measure

WELLESLEY COLLEGE ALUMNAE HALL (Continued) **S132534225**

Action Status: Status or Interim Report Received
Action Date: 1/31/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/14/2009
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 11/14/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/10/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/12/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/29/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 3/3/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/30/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 4/8/2003
Response Action Outcome: Not reported

Action Type: An activity type that is related to an Audit
Action Status: NOA
Action Date: 5/10/1999
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 5/13/1996

WELLESLEY COLLEGE ALUMNAE HALL (Continued) **S132534225**

Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 5/13/1996
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 5/13/1997
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Transmittal, Notice, or Notification Received
Action Date: 5/13/1997
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 5/14/1997
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 5/21/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/11/2009
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/14/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/23/2003
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 6/6/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2005
Response Action Outcome: Not reported

WELLESLEY COLLEGE ALUMNAE HALL (Continued) **S132534225**

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 7/12/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Imminent Hazard Evaluation Received
Action Date: 7/12/1996
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 7/12/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 9/24/2021
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 9/28/2021
Response Action Outcome: Not reported

Chemicals:
Chemical: LEAD
Quantity: 1200 milligrams per kilogram
Chemical: ARSENIC
Quantity: 70 parts per million
Chemical: CHROMIUM (TOTAL)
Quantity: 2300 milligrams per kilogram
Location Type: SCHOOL
Source: MATERIAL
Source: HAZARDOUS

H42 **WELLESLEY COLLEGE** **MA SHWS** **S132535322**
East **106 CENTRAL ST** **MA INST CONTROL** **N/A**
1/2-1 **WELLESLEY, MA 02181** **MA RELEASE**
0.836 mi.
4415 ft. **Site 3 of 5 in cluster H**

Relative: **Lower**
Actual: **145 ft.**

SHWS:
Name: WELLESLEY COLLEGE
Address: 106 CENTRAL ST
City,State,Zip: WELLESLEY, MA 021810000
Facility ID: 3-0016983
Source Type: UNKNOWN
Release Town: WELLESLEY
Notification Date: 06/26/1998
Category: TWO HR
Associated ID: 3-0002581
Current Status: PSC
Status Date: 08/11/2020
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

WELLESLEY COLLEGE (Continued) **S132535322**

INST CONTROL:

Name:	WELLESLEY COLLEGE
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number:	3-0016983
Action Type:	AUL
Action Stat:	AMEND
Action Date:	07/30/2020
Response Action Outcome:	-

Name:	WELLESLEY COLLEGE
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number:	3-0016983
Action Type:	AUL
Action Stat:	FEEREC
Action Date:	08/10/2020
Response Action Outcome:	-

Name:	WELLESLEY COLLEGE
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number:	3-0016983
Action Type:	AUL
Action Stat:	LEGNOT
Action Date:	08/11/2020
Response Action Outcome:	-

Release:

Name:	WELLESLEY COLLEGE
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 021810000
Release Tracking Number/Current Status:	3-0016983 / PSC
Primary ID:	3-0002581
Official City:	WELLESLEY
Notification:	06/26/1998
Category:	TWO HR
Status Date:	08/11/2020
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Tier Classification
Action Status:	Permit Effective Date
Action Date:	1/23/1998
Response Action Outcome:	Not reported

Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	1/31/2022
Response Action Outcome:	Not reported

Action Type:	Release Abatement Measure

WELLESLEY COLLEGE (Continued) **S132535322**

Action Status: Status or Interim Report Received
Action Date: 10/14/2009
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/10/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/10/2019
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/12/2003
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Revised Statement or Transmittal Received
Action Date: 12/14/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 12/14/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/15/2006
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 12/15/2006
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/19/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 12/20/1999
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 12/22/2014
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/29/2005

WELLESLEY COLLEGE (Continued) **S132535322**

Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 3/3/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 3/30/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 4/8/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/11/2009
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 6/13/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/14/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/20/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 6/21/2006
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/21/2006
Response Action Outcome: Not reported

WELLESLEY COLLEGE (Continued) **S132535322**

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/23/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 6/26/1998
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 6/26/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Periodic Review Opinion Evaluating Temp Solution
Action Date: 7/14/2011
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Amendment Received or Issued
Action Date: 7/30/2020
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Fee Received - FMCRA Use Only
Action Date: 8/10/2020
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: PSARCD
Action Date: 8/11/2020
Response Action Outcome: Not reported

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published
Action Date: 8/11/2020
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 8/3/1998
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received

WELLESLEY COLLEGE (Continued) **S132535322**

Action Date: 8/4/1997
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 8/4/1997
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 9/1/2020
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 9/15/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 9/24/2021
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 9/28/2021
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 9/4/1998
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement
Action Date: 9/4/1998
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 9/4/1998
Response Action Outcome: Not reported

Chemicals:
Chemical: WASTE OIL
Quantity: Not reported
Chemical: FUEL OIL #6
Quantity: Not reported
Location Type: SCHOOL
Source: UNKNOWN

H43 **WELLESLEY COLLEGE GAS PLANT SITE** **MA SHWS** **S132537622**
East **106 CENTRAL ST** **MA RELEASE** **N/A**
1/2-1 **WELLESLEY, MA**
0.836 mi.
4415 ft. **Site 4 of 5 in cluster H**

Relative:
Lower

Actual:
145 ft.

SHWS:

Name:	WELLESLEY COLLEGE GAS PLANT SITE
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA
Facility ID:	3-0022331
Source Type:	UNKNOWN
Release Town:	WELLESLEY
Notification Date:	11/20/2002
Category:	72 HR
Associated ID:	3-0021839
Current Status:	RTNCLOSED
Status Date:	06/10/2003
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Release:

Name:	WELLESLEY COLLEGE GAS PLANT SITE
Address:	106 CENTRAL ST
City,State,Zip:	WELLESLEY, MA
Release Tracking Number/Current Status:	3-0022331 / RTNCLOSED
Primary ID:	3-0021839
Official City:	WELLESLEY
Notification:	11/20/2002
Category:	72 HR
Status Date:	06/10/2003
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	1/17/2003
Response Action Outcome:	Not reported
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	1/17/2003
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	1/31/2022
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	10/14/2009
Response Action Outcome:	Not reported

WELLESLEY COLLEGE GAS PLANT SITE (Continued) **S132537622**

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 11/20/2002
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/20/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/10/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/12/2003
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/19/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/19/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 12/29/2005
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 2/27/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 2/7/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 3/20/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 3/3/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

WELLESLEY COLLEGE GAS PLANT SITE (Continued) **S132537622**

Action Date: 3/30/2022
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 4/8/2003
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 6/10/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 6/10/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1B Classification
Action Date: 6/10/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/11/2009
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/14/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/23/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2005
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 8/11/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/4/2003
Response Action Outcome: Not reported

WELLESLEY COLLEGE GAS PLANT SITE (Continued) **S132537622**

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/4/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 9/24/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 9/24/2021
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 9/28/2021
Response Action Outcome: Not reported

Chemicals:
Chemical: DNAPL
Quantity: 1.2 inches
Chemical: NAPL
Quantity: 1.2 inches
Location Type: SCHOOL
Source: UNKNOWN

H44 **WELLESLEY COLLEGE FORMER MGP** **EDR MGP** **1012008466**
East **106 CENTRAL ST** **N/A**
1/2-1 **WELLESLEY, MA**
0.836 mi.
4415 ft. **Site 5 of 5 in cluster H**

Relative: **Lower**
Actual: **145 ft.**

EDR MGP:
No additional information available

I45 **PAD MOUNT TRANSFORMER AT SCRUB-A-DUB** **MA SHWS** **S128182806**
WNW **172 WORCESTER STREET** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 02090**
0.837 mi.
4421 ft. **Site 1 of 2 in cluster I**

Relative: **Higher**
Actual: **162 ft.**

SHWS:
Name: PAD MOUNT TRANSFORMER AT SCRUB-A-DUB
Address: 172 WORCESTER STREET
City,State,Zip: NATICK, MA 020900000
Facility ID: 3-0037161
Source Type: UNKNOWN
Release Town: NATICK
Notification Date: 11/19/2021
Category: 120 DY
Associated ID: Not reported
Current Status: PSNC

PAD MOUNT TRANSFORMER AT SCRUB-A-DUB (Continued) **S128182806**

Status Date: 11/18/2022
Phase: Not reported
Response Action Outcome: PN
Oil Or Haz Material: Not reported

Release:
Name: PAD MOUNT TRANSFORMER AT SCRUB-A-DUB
Address: 172 WORCESTER STREET
City,State,Zip: NATICK, MA 020900000
Release Tracking Number/Current Status: 3-0037161 / PSNC
Primary ID: Not reported
Official City: NATICK
Notification: 11/19/2021
Category: 120 DY
Status Date: 11/18/2022
Phase: Not reported
Response Action Outcome: PN - PN
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 1/4/2022
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: PSNRCD
Action Date: 11/18/2022
Response Action Outcome: PN

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/19/2021
Response Action Outcome: PN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/19/2021
Response Action Outcome: PN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/19/2021
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 11/28/2022
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 3/29/2023
Response Action Outcome: PN

PAD MOUNT TRANSFORMER AT SCRUB-A-DUB (Continued) **S128182806**

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 8/30/2022
Response Action Outcome: PN

Chemicals:
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 2170 milligrams per kilogram
Chemical: ALIPHATIC HYDROCARBONS C19 THROUGH C36
Quantity: 7740 milligrams per kilogram
Chemical: ALIPHATIC HYDROCARBONS C9 THROUGH C18
Quantity: 7730 milligrams per kilogram
Source: UNKNOWN

I46 **NO LOCATION AID** **MA SHWS** **S105200221**
WNW **172 WORCESTER RD** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760** **MA HW GEN**
0.864 mi.
4563 ft. **Site 2 of 2 in cluster I**

Relative:
Lower

Actual:
159 ft.

SHWS:
Name: NO LOCATION AID
Address: 172 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0021351
Source Type: VEHICLE
Release Town: NATICK
Notification Date: 12/27/2001
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 02/05/2002
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Oil

Release:
Name: NO LOCATION AID
Address: 172 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0021351 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 12/27/2001
Category: TWO HR
Status Date: 02/05/2002
Phase: Not reported
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:
Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

NO LOCATION AID (Continued) **S105200221**

Action Date: 1/15/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 1/2/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 12/27/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 12/27/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 2/5/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 2/5/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: HYDRAULIC FLUID
Quantity: 30 gallons
Location Type: COMMERCIAL
Source: VEHICLE

HW GEN:
Name: SCRUBADUB NATICK
Address: 172 WORCESTER RD
City,State,Zip: NATICK, MA 01760
EPA Id: MAR000538884
RCRA Generator Status: Not reported
State Generator Status: VQG-MA

47
East
1/2-1
0.893 mi.
4714 ft.

BEHIND BEL CANTO RESTAURANT
92 CENTRAL ST
WELLESLEY, MA 02181

MA SHWS **S102084984**
MA LUST **N/A**
MA RELEASE
MA ASBESTOS

Relative:
Lower

Actual:
140 ft.

SHWS:

Name:	BEHIND BEL CANTO RESTAURANT
Address:	92 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 02181
Facility ID:	3-0010219
Source Type:	PIPE
Release Town:	WELLESLEY
Notification Date:	11/23/1993
Category:	72 HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	11/28/1994
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Not reported

LUST:

Facility:

Name:	BEHIND BEL CANTO RESTAURANT
Address:	92 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 02181
Current Status:	**Response Action Outcome**
Release Tracking Number/Current Status:	3-0010219 / RAO
Status Date:	11/28/1994
Source Type:	UST
Release Town:	WELLESLEY
Notification Date:	11/23/1993
Category:	72 HR
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	-
Oil Or Haz Material:	Not reported
Location Type:	COMMERCIAL
Source:	PIPE
Source:	UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	FUEL OIL #2
Quantity:	150 parts per million
Chemical:	FUEL OIL #2
Quantity:	87 parts per million

Actions:

Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	1/20/1994
Response Action Outcome:	Not reported

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	1/25/1994
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	11/23/1993
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	11/23/1993
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	11/24/1993
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	11/28/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	11/28/1994
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Fee Received - FMCRA Use Only
Action Date:	11/30/1994
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	12/9/1993
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	2/7/1994
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	3/7/1994
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	4/28/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Action Date: 6/6/1994
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 6/6/1994
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 7/14/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/8/1994
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 7/8/1994
Response Action Outcome: Not reported

Release:
Name: BEHIND BEL CANTO RESTAURANT
Address: 92 CENTRAL ST
City,State,Zip: WELLESLEY, MA 02181
Release Tracking Number/Current Status: 3-0010219 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 11/23/1993
Category: 72 HR
Status Date: 11/28/1994
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: RLFA
Action Status: FOLOFF
Action Date: 1/20/1994
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 1/25/1994
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/23/1993
Response Action Outcome: Not reported

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	11/23/1993
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	11/24/1993
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	11/28/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	11/28/1994
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Fee Received - FMCRA Use Only
Action Date:	11/30/1994
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	12/9/1993
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	2/7/1994
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	3/7/1994
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	4/28/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	6/6/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	6/6/1994
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FOLOFF

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Action Date: 7/14/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/8/1994
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 7/8/1994
Response Action Outcome: Not reported

Chemicals:
Chemical: FUEL OIL #2
Quantity: 150 parts per million
Chemical: FUEL OIL #2
Quantity: 87 parts per million
Location Type: COMMERCIAL
Source: PIPE
Source: UST

ASBESTOS:
Name: FIGS
Address: 92 CENTRAL ST.
City,State,Zip: WELLESLEY, MA
Notification: Not reported
DEP Region: Not reported
Notifiers Name: Not reported
Start Date: 10/26/2006
End Date: 10/28/2006
Date Entered: Not reported
Entry Date: 10/13/2006
Quantity Materical Removed SF: 400.00
Quantity Material Removed LF: .00
Project Description: Trns
AR Tracking ID: 74565
Super Lic Number: AS041152
Monitor Lic Number: Not reported
Lab Lic Number: Not reported
Year: 2006
Sticker Number: 100043915
Form Type: ANF-001
Fee Status: Fifty
Facility Phone: Not reported
Sub Town: Not reported
Worksite: FIGS
Occupied: 0
Contractor: AC000601
Contract Type: Off
Hours: Week days: 7-5 Week end: 7-5
Project Type: Renv
Abatement Process: FLOOR TILE SET UP
Location: Indoors
Decon Process: NEG. AIR APPROPRIATE
Disposal Methods: DOUBLE 6MILL POLY BAGS

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Facility Usage:	RESTAURANT
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	5
Owner Name:	HUNNIMAN REALTY
Owner Address:	CONGRESS ST.
Owner City:	BOSTON
Owner State:	MA
On Site Manager Name:	NA
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	2500
Transporter Name:	A-D&T
Transporter Address:	7 DOVER
Transporter City:	WALPOLE
Transporter State:	Not reported
Final Site:	39
Certified Name:	TED CASE
Cert Sign Date:	10/12/2006
Certified Company:	A-D&T
Certified Phone:	5088509713
Entered_by:	Not reported

Name:	92 CENTRAL ST
Address:	92 CENTRAL ST
City,State,Zip:	WELLESLEY, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	10/23/2006
End Date:	10/27/2006
Date Entered:	Not reported
Entry Date:	10/23/2006
Quantity Materical Removed SF:	600.00
Quantity Material Removed LF:	.00
Project Description:	Clth
AR Tracking ID:	75004
Super Lic Number:	AS041152
Monitor Lic Number:	Not reported
Lab Lic Number:	Not reported
Year:	2006
Sticker Number:	100045175
Form Type:	ANF-001
Fee Status:	Fifty
Facility Phone:	Not reported
Sub Town:	Not reported
Worksite:	92 CENTRAL ST
Occupied:	0
Contractor:	AC000601
Contract Type:	Off
Hours:	Week days: 7-5 Week end: NA
Project Type:	Renv
Abatement Process:	Fcontain
Location:	Indoors

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Decon Process:	NEG AIR DECON AS REQUIRED
Disposal Methods:	DOUBLE BAGGED 6 MIL POLY
Facility Usage:	RESTRAUNT
Waiver Given:	Not reported
DEP Waiver Number:	0610880
DLWD Waiver Number:	NWA063242
Small Owner Occ:	5
Owner Name:	HUNNAMAN REALITY
Owner Address:	CONGRESS ST
Owner City:	BOSTON
Owner State:	MA
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	A- D & T ENTERPRISES
Transporter Address:	7 DOVER DR
Transporter City:	WALPOLE
Transporter State:	Not reported
Final Site:	39
Certified Name:	TED CASE
Cert Sign Date:	10/23/2006
Certified Company:	A- D & T
Certified Phone:	5088509713
Entered_by:	Not reported

Name:	92CENTRAL ST.
Address:	92 CENTRAL ST.
City,State,Zip:	WELLESLEY, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	11/03/2006
End Date:	11/03/2006
Date Entered:	Not reported
Entry Date:	11/02/2006
Quantity Materical Removed SF:	600.00
Quantity Material Removed LF:	.00
Project Description:	Trns
AR Tracking ID:	75533
Super Lic Number:	AS041152
Monitor Lic Number:	Not reported
Lab Lic Number:	Not reported
Year:	2006
Sticker Number:	100047011
Form Type:	ANF-001
Fee Status:	Fifty
Facility Phone:	Not reported
Sub Town:	Not reported
Worksite:	92 CENTRAL ST.
Occupied:	0
Contractor:	AC000601
Contract Type:	WRITTEN
Hours:	Week days: 7-5 Week end: 0
Project Type:	Renv

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Abatement Process:	FLOOR TILE
Location:	Indoors
Decon Process:	NEG. AIR APPROPRIATE
Disposal Methods:	DOUBLE 6MILL POLY BAGS
Facility Usage:	RESTAURANT
Waiver Given:	Not reported
DEP Waiver Number:	06-10818
DLWD Waiver Number:	HV-06-342
Small Owner Occ:	5
Owner Name:	HUNNAMAN REALTY
Owner Address:	CONGREES ST.
Owner City:	BOSTON
Owner State:	MA
On Site Manager Name:	DAN
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	12000
Transporter Name:	A-D&T
Transporter Address:	7 DOVER
Transporter City:	WALPOLE
Transporter State:	Not reported
Final Site:	39
Certified Name:	TED CASE
Cert Sign Date:	11/02/2006
Certified Company:	A-D&T
Certified Phone:	5088509713
Entered_by:	Not reported

J48 **FMR SHELL** **MA SHWS S132533853**
WNW **193 WORCESTER RD** **MA RELEASE N/A**
1/2-1 **NATICK, MA 01760**
0.909 mi.
4797 ft. **Site 1 of 9 in cluster J**

Relative:
Lower

Actual:
158 ft.

SHWS:

Name:	FMR SHELL
Address:	193 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0012757
Source Type:	UNKNOWN
Release Town:	NATICK
Notification Date:	07/31/1995
Category:	72 HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	05/25/2004
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Not reported

Release:

Name:	FMR SHELL
Address:	193 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0012757 / RAO

FMR SHELL (Continued) **S132533853**

Primary ID:	Not reported
Official City:	NATICK
Notification:	07/31/1995
Category:	72 HR
Status Date:	05/25/2004
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Tier Classification
Action Status:	Permit Effective Date
Action Date:	1/22/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	An activity type that is related to an Audit
Action Status:	NOA
Action Date:	1/24/2006
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	10/4/1995
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Tier Classification
Action Status:	Tier 1C Classification
Action Date:	12/2/2003
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Tier Classification
Action Status:	Revised Statement or Transmittal Received
Action Date:	12/2/2003
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Tier Classification
Action Status:	Legal Notice Published
Action Date:	12/5/2003
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Immediate Response Action
Action Status:	Modified Revised or Updated Plan Received
Action Date:	2/12/1996
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	An activity type that is related to an Audit
Action Status:	NAFNVD

FMR SHELL (Continued) **S132533853**

Action Date: 3/3/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 3/5/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 3/5/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 4/22/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 4/22/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 5/2/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 5/25/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 5/25/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 5/7/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 7/25/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

FMR SHELL (Continued) **S132533853**

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 7/29/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 7/29/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 7/29/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 7/31/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 7/31/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 7/31/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 8/11/2003
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 8/2/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 8/9/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 9/24/2003

FMR SHELL (Continued) **S132533853**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 9/8/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: BWS03
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: PETROLEUM BASED OIL
Quantity: 12 inches
Chemical: FUEL OIL #2
Quantity: 13 inches
Location Type: COMMERCIAL
Source: UNKNOWN

J49 **SHELL SERVICE STATION** **MA SHWS S132532220**
WNW **193 WORCESTER ST** **MA RELEASE N/A**
1/2-1 **NATICK, MA 01760**
0.909 mi.
4797 ft. **Site 2 of 9 in cluster J**

Relative:
Lower

Actual:
158 ft.

SHWS:
Name: SHELL SERVICE STATION
Address: 193 WORCESTER ST
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0002307
Source Type: Not reported
Release Town: NATICK
Notification Date: 01/15/1990
Category: NONE
Associated ID: Not reported
Current Status: RAO
Status Date: 07/29/1996
Phase: Not reported
Response Action Outcome: A2
Oil Or Haz Material: Not reported

Release:
Name: SHELL SERVICE STATION
Address: 193 WORCESTER ST
City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0002307 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 01/15/1990
Category: NONE
Status Date: 07/29/1996
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

SHELL SERVICE STATION (Continued) **S132532220**

been reduced to background.
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 1/15/1990
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: An activity type that is related to an Audit
Action Status: NOA
Action Date: 1/24/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 10/4/1995
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: An activity type that is related to an Audit
Action Status: NAFNVD
Action Date: 3/3/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 5/14/1993
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 7/29/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 7/29/1996
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:

Chemical: UNKNOWN
Quantity: Not reported

J50
WNW
1/2-1
0.915 mi.
4831 ft.

NO LOCATION AID
206 WORCESTER RD
NATICK, MA 01760

Site 3 of 9 in cluster J

MA SHWS **S102086974**
MA RELEASE **N/A**

Relative:
Lower

Actual:
159 ft.

SHWS:

Name:	NO LOCATION AID
Address:	206 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0012880
Source Type:	UNKNOWN
Release Town:	NATICK
Notification Date:	09/01/1995
Category:	72 HR
Associated ID:	3-0012479
Current Status:	RTNCLOSED
Status Date:	07/19/2003
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Oil

Release:

Name:	NO LOCATION AID
Address:	206 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0012880 / RTNCLOSED
Primary ID:	3-0012479
Official City:	NATICK
Notification:	09/01/1995
Category:	72 HR
Status Date:	07/19/2003
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Tier Classification
Action Status:	Tier 2 Extension
Action Date:	1/31/2001
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	10/31/1995
Response Action Outcome:	Not reported
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	10/31/1995
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	11/7/1995
Response Action Outcome:	Not reported

NO LOCATION AID (Continued) **S102086974**

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/20/1995
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/11/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/11/1996
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/12/1996
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 4/17/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement
Action Date: 4/17/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 5/5/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 5/5/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal

NO LOCATION AID (Continued) **S102086974**

Action Date: 7/18/1997
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 7/19/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 7/19/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 9/1/1995
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 9/1/1995
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 9/15/1995
Response Action Outcome: Not reported

Chemicals:
Chemical: UNKNOWN CHEMICAL OF TYPE - OIL
Quantity: inches
Location Type: COMMERCIAL
Source: UNKNOWN

J51 **HESS GAS STATION** **MA SHWS S132538522**
WNW **207 WORCESTER ST** **MA RELEASE N/A**
1/2-1 **NATICK, MA 01760**
0.926 mi.
4889 ft. **Site 4 of 9 in cluster J**

Relative: **Lower**
Actual: **157 ft.**

SHWS:
Name: HESS GAS STATION
Address: 207 WORCESTER ST
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0024706
Source Type: PIPE
Release Town: NATICK
Notification Date: 03/16/2005
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 07/18/2005
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Not reported

Name: HESS GAS STATION

HESS GAS STATION (Continued) **S132538522**

Address:	207 WORCESTER ST
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0024706
Source Type:	TANKER
Release Town:	NATICK
Notification Date:	03/16/2005
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	07/18/2005
Phase:	Not reported
Response Action Outcome:	A1
Oil Or Haz Material:	Not reported

Release:

Name:	HESS GAS STATION
Address:	207 WORCESTER ST
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0024706 / RAO
Primary ID:	Not reported
Official City:	NATICK
Notification:	03/16/2005
Category:	TWO HR
Status Date:	07/18/2005
Phase:	Not reported
Response Action Outcome:	A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	3/16/2005
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	3/16/2005
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	3/16/2005
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	3/29/2005
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

HESS GAS STATION (Continued) **S132538522**

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 6/12/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 6/20/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 7/18/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 7/18/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 7/18/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: GASOLINE
Quantity: 20 gallons
Chemical: GASOLINE
Quantity: 5 gallons
Location Type: COMMERCIAL
Source: TANKER
Source: PIPE

J52 **MERIT SERVICE STATION** **MA SHWS** **S132532862**
WNW **207 WORCESTER ST** **MA LUST** **N/A**
1/2-1 **NATICK, MA 01760** **MA RELEASE**
0.926 mi.
4889 ft. **Site 5 of 9 in cluster J**

Relative: **Lower**
Actual: **157 ft.**

SHWS:
Name: MERIT SERVICE STATION
Address: 207 WORCESTER ST
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0004523
Source Type: TANK
Release Town: NATICK
Notification Date: 07/15/1993
Category: 120 DY
Associated ID: 3-0004523
Current Status: TMPS
Status Date: 04/17/2015

MERIT SERVICE STATION (Continued) **S132532862**

Phase: PHASE IV
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

LUST:

Facility:
Name: MERIT SERVICE STATION
Address: 207 WORCESTER ST
City,State,Zip: NATICK, MA 017600000
Current Status: **Temporary Solution**
Release Tracking Number/Current Status: 3-0004523 / TMPS
Status Date: 04/17/2015
Source Type: UST
Release Town: NATICK
Notification Date: 07/15/1993
Category: 120 DY
Associated ID: 3-0004523
Phase: PHASE IV
Response Action Outcome: -
Oil Or Haz Material: Not reported

Source: TANK
Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:
Chemical: UNKNOWN
Quantity: Not reported

Actions:
Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 1/15/1998
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: LSPFA
Action Date: 1/29/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 1/29/1996
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 1/29/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 1/7/2016

MERIT SERVICE STATION (Continued) **S132532862**

Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 10/16/1998
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 10/16/1998
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 10/16/1998
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/18/2019
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/18/2019
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/19/2015
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/19/2015
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/19/2017
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/19/2017
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCTRAN
Action Date: 10/2/2014
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/21/2016
Response Action Outcome: Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/21/2016
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/23/2018
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/23/2018
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 10/29/2014
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 10/7/2014
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/18/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/19/2019
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 12/22/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/22/2017
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/22/2021
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/29/2023
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received

MERIT SERVICE STATION (Continued) **S132532862**

Action Date: 12/30/2014
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1B Classification
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: LSP of Record Change via Minor Permit Mod
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 2/12/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 2/12/2014
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 2/13/2014
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/4/2014
Response Action Outcome: Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	4/10/2018
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	4/10/2018
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	4/11/2016
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	4/11/2016
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	4/15/2020
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	4/15/2020
Response Action Outcome:	Not reported
Action Type:	Phase 4
Action Status:	RMRINI
Action Date:	4/17/2015
Response Action Outcome:	Not reported
Action Type:	Phase 4
Action Status:	Status or Interim Report Received
Action Date:	4/17/2015
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	TSFRCD
Action Date:	4/17/2015
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	4/17/2019
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	4/17/2019
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT

MERIT SERVICE STATION (Continued) **S132532862**

Action Date: 4/21/2017
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 4/21/2017
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 4/26/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Submittal Retracted
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 6/30/2014
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 6/30/2014
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 7/13/2015
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 7/15/1993
Response Action Outcome: Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Action Type:	Tier Classification
Action Status:	RTN Linked to TCLASS Via IRA Completion Statement
Action Date:	7/18/2014
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Written Plan Received
Action Date:	7/19/2021
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Effective Date
Action Date:	7/25/2012
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	7/28/1995
Response Action Outcome:	Not reported
Action Type:	Phase 3
Action Status:	Revised Statement or Transmittal Received
Action Date:	7/30/2020
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Oral Approval of Plan or Action
Action Date:	8/29/1999
Response Action Outcome:	Not reported
Action Type:	RLFA
Action Status:	FLDRUN
Action Date:	9/16/1997
Response Action Outcome:	Not reported
Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	9/20/1995
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Completion Statement Received
Action Date:	9/21/2021
Response Action Outcome:	Not reported
Action Type:	BWS03
Action Status:	APPROV
Action Date:	Not reported
Response Action Outcome:	Not reported
Action Type:	BWS10
Action Status:	APPROV
Action Date:	Not reported
Response Action Outcome:	Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Release:

Name:	MERIT SERVICE STATION
Address:	207 WORCESTER ST
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0004523 / TMPS
Primary ID:	3-0004523
Official City:	NATICK
Notification:	07/15/1993
Category:	120 DY
Status Date:	04/17/2015
Phase:	PHASE IV
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Phase 2
Action Status:	Scope of Work Received
Action Date:	1/15/1998
Response Action Outcome:	Not reported
Action Type:	TREGS
Action Status:	LSPFA
Action Date:	1/29/1996
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	1/29/1996
Response Action Outcome:	Not reported
Action Type:	Phase 1
Action Status:	Completion Statement Received
Action Date:	1/29/1996
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	1/7/2016
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	10/16/1998
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	10/16/1998
Response Action Outcome:	Not reported
Action Type:	Phase 2
Action Status:	Completion Statement Received
Action Date:	10/16/1998
Response Action Outcome:	Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/18/2019
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/18/2019
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/19/2015
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/19/2015
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/19/2017
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/19/2017
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCTRAN
Action Date: 10/2/2014
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/21/2016
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/21/2016
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 10/23/2018
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 10/23/2018
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Written Plan Received

MERIT SERVICE STATION (Continued) **S132532862**

Action Date: 10/29/2014
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 10/7/2014
Response Action Outcome: Not reported

Action Type: BOL
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/18/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/19/2019
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 12/22/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/22/2017
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/22/2021
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/29/2023
Response Action Outcome: Not reported

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/30/2014
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1B Classification
Action Date: 12/31/2013
Response Action Outcome: Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Action Type:	Phase 3
Action Status:	Notice of Delay in Meeting RA Deadline Received
Action Date:	12/31/2013
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Notice of Delay in Meeting RA Deadline Received
Action Date:	12/31/2013
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Revised Statement or Transmittal Received
Action Date:	12/31/2013
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	LSP of Record Change via Minor Permit Mod
Action Date:	12/31/2013
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Effective Date
Action Date:	2/12/2014
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Extension Received
Action Date:	2/12/2014
Response Action Outcome:	Not reported
Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	2/13/2014
Response Action Outcome:	Not reported
Action Type:	Phase 2
Action Status:	Scope of Work Received
Action Date:	3/4/2014
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	4/10/2018
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received
Action Date:	4/10/2018
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RMRINT
Action Date:	4/11/2016
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Inspection and Monitoring Report Received

MERIT SERVICE STATION (Continued) **S132532862**

Action Date: 4/11/2016
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 4/15/2020
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 4/15/2020
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: RMRINI
Action Date: 4/17/2015
Response Action Outcome: Not reported

Action Type: Phase 4
Action Status: Status or Interim Report Received
Action Date: 4/17/2015
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: TSFRCD
Action Date: 4/17/2015
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 4/17/2019
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 4/17/2019
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RMRINT
Action Date: 4/21/2017
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 4/21/2017
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 4/26/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 6/29/2012
Response Action Outcome: Not reported

MERIT SERVICE STATION (Continued) **S132532862**

Action Type:	Tier Classification
Action Status:	RTN Linked to TCLASS Via Tier Classification Submittal
Action Date:	6/29/2012
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Revised Statement or Transmittal Received
Action Date:	6/29/2012
Response Action Outcome:	Not reported
Action Type:	Phase 1
Action Status:	Completion Statement Received
Action Date:	6/29/2012
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Submittal Retracted
Action Date:	6/29/2012
Response Action Outcome:	Not reported
Action Type:	Phase 3
Action Status:	Completion Statement Received
Action Date:	6/30/2014
Response Action Outcome:	Not reported
Action Type:	Phase 2
Action Status:	Revised Statement or Transmittal Received
Action Date:	6/30/2014
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Level I - Technical Screen Audit
Action Date:	7/13/2015
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Valid Transition Site
Action Date:	7/15/1993
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	RTN Linked to TCLASS Via IRA Completion Statement
Action Date:	7/18/2014
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Written Plan Received
Action Date:	7/19/2021
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Effective Date
Action Date:	7/25/2012
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.

MERIT SERVICE STATION (Continued) **S132532862**

Action Date: 7/28/1995
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Revised Statement or Transmittal Received
Action Date: 7/30/2020
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 8/29/1999
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 9/16/1997
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 9/20/1995
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 9/21/2021
Response Action Outcome: Not reported

Action Type: BWS03
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: Not reported

Action Type: BWS10
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: Not reported

Chemicals:
Chemical: UNKNOWN
Quantity: Not reported
Source: TANK
Source: UST

J53 **NO LOCATION AID** **MA SHWS** **S132534838**
WNW **207 WORCESTER RD** **MA LUST** **N/A**
1/2-1 **NATICK, MA 01760** **MA RELEASE**
0.926 mi.
4889 ft. **Site 6 of 9 in cluster J**

Relative:
Lower

Actual:
157 ft.

SHWS:
Name: NO LOCATION AID
Address: 207 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0015414
Source Type: PIPE
Release Town: NATICK

NO LOCATION AID (Continued) **S132534838**

Notification Date: 08/13/1997
Category: 72 HR
Associated ID: Not reported
Current Status: RAO
Status Date: 01/30/1998
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

LUST:

Facility:
Name: NO LOCATION AID
Address: 207 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Current Status: **Response Action Outcome**
Release Tracking Number/Current Status: 3-0015414 / RAO
Status Date: 01/30/1998
Source Type: UST
Release Town: NATICK
Notification Date: 08/13/1997
Category: 72 HR
Associated ID: Not reported
Phase: Not reported
Response Action Outcome: -
Oil Or Haz Material: Not reported

Location Type: COMMERCIAL
Source: UST
Source: PIPE

Click here to access the MA DEP site for this facility:

Chemicals:
Chemical: DIESEL FUEL
Quantity: Not reported
Chemical: DIESEL
Quantity: Not reported

Actions:
Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 1/15/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 1/17/1995
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 1/22/1998
Response Action Outcome: Not reported

NO LOCATION AID (Continued) **S132534838**

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 1/29/1998
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 1/30/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 10/16/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 11/4/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 12/26/1995
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 2/2/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 3/17/1995
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 4/26/1995
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 4/30/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 5/24/1995
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 5/31/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan

NO LOCATION AID (Continued) **S132534838**

Action Date: 6/5/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 7/13/1995
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 8/13/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 8/13/1997
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 8/27/1997
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 8/27/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 8/29/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/5/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 9/25/1997
Response Action Outcome: Not reported

Release:
Name: NO LOCATION AID
Address: 207 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0015414 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 08/13/1997
Category: 72 HR
Status Date: 01/30/1998
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

NO LOCATION AID (Continued) **S132534838**

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Modified Revised or Updated Plan Received
Action Date:	1/15/1998
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	IRA Assessment Only
Action Date:	1/17/1995
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	1/22/1998
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	1/29/1998
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	1/30/1998
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	10/16/1998
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	11/4/1997
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Modified Revised or Updated Plan Received
Action Date:	12/26/1995
Response Action Outcome:	Not reported
Action Type:	Response Action Outcome - RAO
Action Status:	Fee Received - FMCRA Use Only
Action Date:	2/2/1998
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	3/17/1995
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Approval of Plan
Action Date:	4/26/1995
Response Action Outcome:	Not reported

NO LOCATION AID (Continued) **S132534838**

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 4/30/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 5/24/1995
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 5/31/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 6/5/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 7/13/1995
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 8/13/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 8/13/1997
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 8/27/1997
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 8/27/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 8/29/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/5/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received

NO LOCATION AID (Continued) **S132534838**

Action Date: 9/25/1997
Response Action Outcome: Not reported

Chemicals:
Chemical: DIESEL FUEL
Quantity: Not reported
Chemical: DIESEL
Quantity: Not reported
Location Type: COMMERCIAL
Source: UST
Source: PIPE

J54 **RTE 9W @ HESS STA #21515** **MA SHWS** **S132539201**
WNW **207 WORCESTER RD** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.926 mi.
4889 ft. **Site 7 of 9 in cluster J**

Relative:
Lower

Actual:
157 ft.

SHWS:
Name: RTE 9W @ HESS STA #21515
Address: 207 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0026404
Source Type: LINE
Release Town: NATICK
Notification Date: 11/20/2006
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 02/24/2012
Phase: Not reported
Response Action Outcome: A2
Oil Or Haz Material: Not reported

Release:
Name: RTE 9W @ HESS STA #21515
Address: 207 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0026404 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 11/20/2006
Category: TWO HR
Status Date: 02/24/2012
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 1/1/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

RTE 9W @ HESS STA #21515 (Continued) **S132539201**

reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 1/25/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 1/29/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 10/2/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 10/3/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 10/9/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 10/9/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 10/9/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/20/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: FLDISS
Action Date: 11/20/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action

RTE 9W @ HESS STA #21515 (Continued) **S132539201**

Action Status: Oral Approval of Plan or Action
Action Date: 11/20/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/21/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 11/23/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 11/23/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/23/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 11/23/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/19/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 2/24/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 3/27/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 3/27/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

RTE 9W @ HESS STA #21515 (Continued) **S132539201**

reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 4/4/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 4/8/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 5/17/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 8/3/2009
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Phase 4
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 8/4/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 9/28/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: BWS03
Action Status: APPROV
Action Date: Not reported
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: GASOLINE
Quantity: 50 gallons
Location Type: COMMERCIAL
Location Type: ROADWAY
Source: LINE

55
ESE
1/2-1
0.927 mi.
4896 ft.

RESIDENTIAL PROPERTY
4-8 SERVICE DRIVE
WELLESLEY, MA 02482

MA SHWS **S112288332**
MA RELEASE **N/A**

Relative:
Lower

Actual:
132 ft.

SHWS:

Name:	RESIDENTIAL PROPERTY
Address:	4-8 SERVICE DRIVE
City,State,Zip:	WELLESLEY, MA 024820000
Facility ID:	3-0031161
Source Type:	Not reported
Release Town:	WELLESLEY
Notification Date:	10/16/2012
Category:	120 DY
Associated ID:	Not reported
Current Status:	RAO
Status Date:	10/16/2013
Phase:	Not reported
Response Action Outcome:	B1
Oil Or Haz Material:	Hazardous Material

Release:

Name:	RESIDENTIAL PROPERTY
Address:	4-8 SERVICE DRIVE
City,State,Zip:	WELLESLEY, MA 024820000
Release Tracking Number/Current Status:	3-0031161 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	10/16/2012
Category:	120 DY
Status Date:	10/16/2013
Phase:	Not reported
Response Action Outcome:	B1 - Remedial actions have not been conducted because a level of No Significant Risk exists.
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	10/16/2012
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	10/16/2012
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	10/16/2012
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

RESIDENTIAL PROPERTY (Continued) **S112288332**

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 10/16/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 10/17/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 11/6/2012
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit
Action Date: 4/7/2014
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 8/6/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Chemicals:
Chemical: LEAD
Quantity: 640 milligrams per kilogram

56
East
1/2-1
0.936 mi.
4941 ft.

GULF STATION FMR **MA SHWS S105199426**
75 CENTRAL ST **MA RELEASE N/A**
WELLESLEY, MA 02181

Relative:
Lower

Actual:
138 ft.

SHWS:
Name: GULF STATION FMR
Address: 75 CENTRAL ST
City,State,Zip: WELLESLEY, MA 02181
Facility ID: 3-0001794
Source Type: Not reported
Release Town: WELLESLEY
Notification Date: 01/15/1989
Category: NONE
Associated ID: Not reported
Current Status: RAO
Status Date: 12/18/1995
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

GULF STATION FMR (Continued) **S105199426**

Release:

Name:	GULF STATION FMR
Address:	75 CENTRAL ST
City,State,Zip:	WELLESLEY, MA 02181
Release Tracking Number/Current Status:	3-0001794 / RAO
Primary ID:	Not reported
Official City:	WELLESLEY
Notification:	01/15/1989
Category:	NONE
Status Date:	12/18/1995
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Valid Transition Site
Action Date:	1/15/1989
Response Action Outcome:	Not reported

Action Type:	TREGS
Action Status:	RAOEQ
Action Date:	12/18/1995
Response Action Outcome:	Not reported

Chemicals:

Chemical:	UNKNOWN
Quantity:	Not reported

K57 **NO LOCATION AID** **MA SHWS** **S105810959**
WNW **206 218 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.939 mi.
4956 ft. **Site 1 of 3 in cluster K**

Relative:
Lower

Actual:
161 ft.

SHWS:

Name:	NO LOCATION AID
Address:	206 218 WORCESTER ST
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0014159
Source Type:	Not reported
Release Town:	NATICK
Notification Date:	08/14/1996
Category:	120 DY
Associated ID:	3-0012479
Current Status:	RTNCLOSED
Status Date:	07/19/2003
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Release:

Name:	NO LOCATION AID
Address:	206 218 WORCESTER ST

NO LOCATION AID (Continued) **S105810959**

City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0014159 / RTNCLOSED
Primary ID: 3-0012479
Official City: NATICK
Notification: 08/14/1996
Category: 120 DY
Status Date: 07/19/2003
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 1/31/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 11/14/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/21/1997
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/11/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement
Action Date: 4/17/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 5/5/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 5/5/2003

NO LOCATION AID (Continued) **S105810959**

Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 7/18/1997
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 7/18/1997
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 7/19/2003
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 7/19/2003
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 8/14/1996
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 8/14/1996
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 9/18/1996
Response Action Outcome: Not reported

Chemicals:
Chemical: TETRACHLOROETHENE
Quantity: 43 micrograms per liter

J58 **SPEEDWAY #2507** **MA SHWS U003132384**
WNW **207 WORCESTER RD** **MA UST N/A**
1/2-1 **NATICK, MA 01760** **MA RELEASE**
0.949 mi.
5012 ft. **Site 8 of 9 in cluster J**

Relative:
Lower

Actual:
152 ft.

SHWS:
Name: SPEEDWAY 2507 (FORMER HESS 21515)
Address: 207 WORCESTER STREET
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0032656
Source Type: UNKNOWN
Release Town: NATICK
Notification Date: 12/31/2014
Category: 120 DY
Associated ID: Not reported

SPEEDWAY #2507 (Continued) **U003132384**

Current Status:	TMPS
Status Date:	12/28/2020
Phase:	Not reported
Response Action Outcome:	TF
Oil Or Haz Material:	Not reported

UST:

Facility ID:	10608
Name:	SPEEDWAY #2507
Address:	207 WORCESTER RD
Address 2:	Not reported
City,State,Zip:	NATICK, MA 01760
Owner ID:	1025368
Owner:	Speedway LLC
Owner Address:	500 Speedway Drive
Owner Address 2:	Not reported
Owner City,State,Zip:	Enon, OH 45323
Telephone:	5086551679
Description:	Retail Motor Vehicle Fuel Dispensing
Contact Name:	Glenn D'Antuono
Contact Address:	500 Speedway Drive
Contact Address 2:	Attn: Environmental Compliance
Contact City,State,Zip:	Enon, OH 45323
Contact Email:	Glenn.D'Antuono@7-11.com
Update:	2015-12-08 00:00:00
Update By:	Mark Bolivar
Facility Status:	OPEN
Longitude:	-71.40225
Latitude:	42.29869

URL:

UST:

Facility ID:	10608
Tank ID:	4
Capacity:	10000.00000
Substance:	Diesel
Tank Construct:	Single-walled metal tank (cathodic protection required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Single-walled metal (Corrosion protection required)
Pipe Type:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	01/01/1983
Number of Compartment:	Not reported
Pipe Install Date:	Not reported
Pipe Leak Install Date:	Not reported
Submersible Sump:	N
Submersible Sump Install Date:	Not reported
Turbine Sump:	N
Turbine Sump Sensor:	N
Intermediate Sump:	N
Intermediate Sump Sensor:	N
Spill Bucket Installed Date:	Not reported
Spill Bucket Sensor:	N
Tank Status:	Tank Removed
Status Date:	09/08/1997

SPEEDWAY #2507 (Continued) **U003132384**

Overfill Protect Install:	Not reported
Overfill Protect Type:	Not reported
Automatic Line Leak Detect:	Not reported
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Manual Tank Gauging (1,000G or more capacity tank)
Pipe Leak Detection:	Annual Automatic Line Leak Detection Test
Facility ID:	10608
Tank ID:	3
Capacity:	8000.00000
Substance:	Gasoline
Tank Construct:	Single-walled metal tank (cathodic protection required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Single-walled metal (Corrosion protection required)
Pipe Type:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	02/01/1980
Number of Compartment:	Not reported
Pipe Install Date:	Not reported
Pipe Leak Install Date:	Not reported
Submersible Sump:	N
Submersible Sump Install Date:	Not reported
Turbine Sump:	N
Turbine Sump Sensor:	N
Intermediate Sump:	N
Intermediate Sump Sensor:	N
Spill Bucket Installed Date:	Not reported
Spill Bucket Sensor:	N
Tank Status:	Tank Removed
Status Date:	09/08/1997
Overfill Protect Install:	Not reported
Overfill Protect Type:	Not reported
Automatic Line Leak Detect:	Not reported
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Manual Tank Gauging (1,000G or more capacity tank)
Pipe Leak Detection:	Annual Automatic Line Leak Detection Test
Facility ID:	10608
Tank ID:	1
Capacity:	8000.00000
Substance:	Gasoline
Tank Construct:	Single-walled metal tank (cathodic protection required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Single-walled metal (Corrosion protection required)
Pipe Type:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	02/01/1980
Number of Compartment:	Not reported
Pipe Install Date:	Not reported
Pipe Leak Install Date:	Not reported
Submersible Sump:	N
Submersible Sump Install Date:	Not reported
Turbine Sump:	N

SPEEDWAY #2507 (Continued) **U003132384**

Turbine Sump Sensor:	N
Intermediate Sump:	N
Intermediate Sump Sensor:	N
Spill Bucket Installed Date:	Not reported
Spill Bucket Sensor:	N
Tank Status:	Tank Removed
Status Date:	09/08/1997
Overfill Protect Install:	Not reported
Overfill Protect Type:	Not reported
Automatic Line Leak Detect:	Not reported
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Manual Tank Gauging (1,000G or more capacity tank)
Pipe Leak Detection:	Annual Automatic Line Leak Detection Test
Facility ID:	10608
Tank ID:	9
Capacity:	10000.00000
Substance:	Gasoline
Tank Construct:	Double-walled non-corrodible (including "composite") material (cathodic protection not required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Double-walled non-corrodible material (No corrosion protection required)
Pipe Type:	Pressurized piping system with electronic automatic line leak detection
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	09/25/1997
Number of Compartment:	Not reported
Pipe Install Date:	09/25/1997
Pipe Leak Install Date:	08/22/2024
Submersible Sump:	Y
Submersible Sump Install Date:	09/25/1997
Turbine Sump:	Y
Turbine Sump Sensor:	Y
Intermediate Sump:	Y
Intermediate Sump Sensor:	Y
Spill Bucket Installed Date:	07/20/2021
Spill Bucket Sensor:	Y
Tank Status:	In Use
Status Date:	Not reported
Overfill Protect Install:	07/20/2021
Overfill Protect Type:	Automatic shut-off valve
Automatic Line Leak Detect:	08/22/2024
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Continuous Interstitial Monitoring
Pipe Leak Detection:	Continuous Interstitial Space Monitoring
Facility ID:	10608
Tank ID:	5
Capacity:	4000.00000
Substance:	Kerosene
Tank Construct:	Single-walled metal tank (cathodic protection required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Single-walled metal (Corrosion protection required)

SPEEDWAY #2507 (Continued) **U003132384**

Pipe Type:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	02/01/1980
Number of Compartment:	Not reported
Pipe Install Date:	Not reported
Pipe Leak Install Date:	Not reported
Submersible Sump:	N
Submersible Sump Install Date:	Not reported
Turbine Sump:	N
Turbine Sump Sensor:	N
Intermediate Sump:	N
Intermediate Sump Sensor:	N
Spill Bucket Installed Date:	Not reported
Spill Bucket Sensor:	N
Tank Status:	Tank Removed
Status Date:	09/08/1997
Overfill Protect Install:	Not reported
Overfill Protect Type:	Not reported
Automatic Line Leak Detect:	Not reported
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Manual Tank Gauging (1,000G or more capacity tank)
Pipe Leak Detection:	Annual Automatic Line Leak Detection Test
Facility ID:	10608
Tank ID:	8
Capacity:	10000.00000
Substance:	Gasoline
Tank Construct:	Double-walled non-corrodible (including "composite") material (cathodic protection not required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Double-walled non-corrodible material (No corrosion protection required)
Pipe Type:	European suction system
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	09/25/1997
Number of Compartment:	Not reported
Pipe Install Date:	09/25/1997
Pipe Leak Install Date:	08/22/2024
Submersible Sump:	N
Submersible Sump Install Date:	Not reported
Turbine Sump:	Y
Turbine Sump Sensor:	Y
Intermediate Sump:	Y
Intermediate Sump Sensor:	Y
Spill Bucket Installed Date:	07/20/2021
Spill Bucket Sensor:	Y
Tank Status:	In Use
Status Date:	Not reported
Overfill Protect Install:	07/20/2021
Overfill Protect Type:	Automatic shut-off valve
Automatic Line Leak Detect:	Not reported
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Continuous Interstitial Monitoring

SPEEDWAY #2507 (Continued) **U003132384**

Pipe Leak Detection:	Continuous Interstitial Space Monitoring
Facility ID:	10608
Tank ID:	7
Capacity:	10000.00000
Substance:	Gasoline
Tank Construct:	Double-walled non-corrodible (including "composite") material (cathodic protection not required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Double-walled non-corrodible material (No corrosion protection required)
Pipe Type:	Pressurized piping system with electronic automatic line leak detection
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	04/25/1997
Number of Compartment:	Not reported
Pipe Install Date:	04/25/1997
Pipe Leak Install Date:	08/22/2024
Submersible Sump:	Y
Submersible Sump Install Date:	04/25/1997
Turbine Sump:	Y
Turbine Sump Sensor:	Y
Intermediate Sump:	Y
Intermediate Sump Sensor:	Y
Spill Bucket Installed Date:	07/20/2021
Spill Bucket Sensor:	Y
Tank Status:	In Use
Status Date:	Not reported
Overfill Protect Install:	07/20/2021
Overfill Protect Type:	Automatic shut-off valve
Automatic Line Leak Detect:	08/22/2024
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Continuous Interstitial Monitoring
Pipe Leak Detection:	Continuous Interstitial Space Monitoring
Facility ID:	10608
Tank ID:	10
Capacity:	10000.00000
Substance:	Diesel
Tank Construct:	Double-walled non-corrodible (including "composite") material (cathodic protection not required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Double-walled non-corrodible material (No corrosion protection required)
Pipe Type:	Pressurized piping system with electronic automatic line leak detection
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	09/25/1997
Number of Compartment:	Not reported
Pipe Install Date:	09/25/1997
Pipe Leak Install Date:	08/22/2024
Submersible Sump:	Y
Submersible Sump Install Date:	09/25/1997
Turbine Sump:	Y

SPEEDWAY #2507 (Continued) **U003132384**

Turbine Sump Sensor:	Y
Intermediate Sump:	Y
Intermediate Sump Sensor:	Y
Spill Bucket Installed Date:	09/25/1997
Spill Bucket Sensor:	N
Tank Status:	In Use
Status Date:	Not reported
Overfill Protect Install:	09/25/1997
Overfill Protect Type:	Automatic shut-off valve
Automatic Line Leak Detect:	08/22/2024
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Continuous Interstitial Monitoring
Pipe Leak Detection:	Continuous Interstitial Space Monitoring
Facility ID:	10608
Tank ID:	11
Capacity:	6000.00000
Substance:	Kerosene
Tank Construct:	Double-walled non-corrodible (including "composite") material (cathodic protection not required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Double-walled non-corrodible material (No corrosion protection required)
Pipe Type:	Pressurized piping system with electronic automatic line leak detection
Latitude:	42.29869
Longitude:	-71.40225
Date Installed:	11/01/1997
Number of Compartment:	Not reported
Pipe Install Date:	11/01/1997
Pipe Leak Install Date:	08/22/2024
Submersible Sump:	Y
Submersible Sump Install Date:	11/01/1997
Turbine Sump:	Y
Turbine Sump Sensor:	Y
Intermediate Sump:	Y
Intermediate Sump Sensor:	Y
Spill Bucket Installed Date:	11/01/1997
Spill Bucket Sensor:	N
Tank Status:	In Use
Status Date:	10/08/2018
Overfill Protect Install:	11/01/1997
Overfill Protect Type:	Automatic shut-off valve
Automatic Line Leak Detect:	08/22/2024
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Continuous Interstitial Monitoring
Pipe Leak Detection:	Continuous Interstitial Space Monitoring
Facility ID:	10608
Tank ID:	2
Capacity:	8000.00000
Substance:	Gasoline
Tank Construct:	Single-walled metal tank (cathodic protection required)
Tank Usage:	Motor Vehicle
Pipe Construct:	Single-walled metal (Corrosion protection required)

SPEEDWAY #2507 (Continued) **U003132384**

Pipe Type:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Date Installed:	02/01/1980
Number of Compartment:	Not reported
Pipe Install Date:	Not reported
Pipe Leak Install Date:	Not reported
Submersible Sump:	N
Submersible Sump Install Date:	Not reported
Turbine Sump:	N
Turbine Sump Sensor:	N
Intermediate Sump:	N
Intermediate Sump Sensor:	N
Spill Bucket Installed Date:	Not reported
Spill Bucket Sensor:	N
Tank Status:	Tank Removed
Status Date:	09/08/1997
Overfill Protect Install:	Not reported
Overfill Protect Type:	Not reported
Automatic Line Leak Detect:	Not reported
Tank Corrosion Type:	Not reported
Leak Corrosion Type:	Not reported
Tank Leak Detection:	Manual Tank Gauging (1,000G or more capacity tank)
Pipe Leak Detection:	Annual Automatic Line Leak Detection Test

Release:

Name:	SPEEDWAY 2507 (FORMER HESS 21515)
Address:	207 WORCESTER STREET
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0032656 / TMPS
Primary ID:	Not reported
Official City:	NATICK
Notification:	12/31/2014
Category:	120 DY
Status Date:	12/28/2020
Phase:	Not reported
Response Action Outcome:	TF - TF
Oil / Haz Material Type:	Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	1/16/2015
Response Action Outcome:	TF
Action Type:	Tier Classification
Action Status:	Legal Notice Published
Action Date:	1/19/2016
Response Action Outcome:	TF
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	ALSENT
Action Date:	10/5/2015

SPEEDWAY #2507 (Continued) **U003132384**

Response Action Outcome: TF

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 11/12/2018
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/22/2021
Response Action Outcome: TF

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/23/2019
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: TSFRCD
Action Date: 12/28/2020
Response Action Outcome: TF

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/28/2020
Response Action Outcome: TF

Action Type: Phase 4
Action Status: Written Plan Received
Action Date: 12/28/2020
Response Action Outcome: TF

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 12/29/2015
Response Action Outcome: TF

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/29/2015
Response Action Outcome: TF

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 12/29/2015
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 12/29/2023
Response Action Outcome: TF

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 12/29/2023
Response Action Outcome: TF

SPEEDWAY #2507 (Continued) **U003132384**

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 12/31/2014
Response Action Outcome: TF

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 12/31/2014
Response Action Outcome: TF

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 12/31/2014
Response Action Outcome: TF

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 12/5/2018
Response Action Outcome: TF

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 3/13/2020
Response Action Outcome: TF

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 6/21/2019
Response Action Outcome: TF

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 6/26/2019
Response Action Outcome: TF

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 6/26/2020
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/29/2021
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 6/7/2024
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received
Action Date: 8/11/2023
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Inspection and Monitoring Report Received

SPEEDWAY #2507 (Continued) **U003132384**

Action Date: 8/12/2022
Response Action Outcome: TF

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 9/30/2020
Response Action Outcome: TF

Chemicals:
Chemical: TOTAL PCBS
Quantity: 33.5 milligrams per kilogram
Source: UNKNOWN

J59 **HESS STATION NO. 21515** **MA SHWS** **S114004830**
WNW **207 WORCESTER STREET** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA** **MA ENF**
0.949 mi.
5012 ft. **Site 9 of 9 in cluster J**

Relative: Lower

Actual: 152 ft.

SHWS:
Name: HESS STATION NO. 21515
Address: 207 WORCESTER STREET
City,State,Zip: NATICK, MA
Facility ID: 3-0031773
Source Type: UNKNOWN
Release Town: NATICK
Notification Date: 09/20/2013
Category: 72 HR
Associated ID: 3-0004523
Current Status: RTNCLOSED
Status Date: 07/18/2014
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

Release:
Name: HESS STATION NO. 21515
Address: 207 WORCESTER STREET
City,State,Zip: NATICK, MA
Release Tracking Number/Current Status: 3-0031773 / RTNCLOSED
Primary ID: 3-0004523
Official City: NATICK
Notification: 09/20/2013
Category: 72 HR
Status Date: 07/18/2014
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 1/29/1996
Response Action Outcome: Not reported

HESS STATION NO. 21515 (Continued) **S114004830**

Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	1/6/2014
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	1/7/2016
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCTRAN
Action Date:	10/2/2014
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	10/7/2013
Response Action Outcome:	Not reported
Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	11/26/2013
Response Action Outcome:	Not reported
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	11/26/2013
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Written Plan Received
Action Date:	11/26/2013
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Level I - Technical Screen Audit
Action Date:	11/27/2013
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	12/19/2019
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	12/22/2017
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT
Action Date:	12/22/2021
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	TCEXT

HESS STATION NO. 21515 (Continued) **S114004830**

Action Date: 12/29/2023
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1B Classification
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: LSP of Record Change via Minor Permit Mod
Action Date: 12/31/2013
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 2/12/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 2/12/2014
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit
Action Date: 6/19/2015
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 6/29/2012
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 7/15/2014
Response Action Outcome: Not reported

HESS STATION NO. 21515 (Continued) **S114004830**

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 7/18/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement
Action Date: 7/18/2014
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 7/18/2014
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 7/25/2012
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 7/9/2014
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 9/20/2013
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 9/20/2013
Response Action Outcome: Not reported

Chemicals:
Chemical: GASOLINE
Quantity: 1.68 inches
Location Type: COMMERCIAL
Source: UNKNOWN

ENFORCEMENT:
Name: HESS CORPORATION
Address: 207 WORCESTER STREET
City,State,Zip: NATICK, MA
Region: NERO
DEP Region: NERO
DEP Program: 3r
DEP Bureau: BWSC
Program: BWSC
Program Id: 3-0031773
High Or Low Level Enforcement: LLE
FMF #: 0
Town Where Violation Occurred: NATICK
Date Executed: 07/15/2014
ENF #: NON-NE-14-3R066

HESS STATION NO. 21515 (Continued) **S114004830**

Document Type:	NON
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	YES
EJ Community (Y/N):	YES
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Commercially Owned

K60 **NO LOCATION AID** **MA SHWS** **S132538256**
WNW **226 WORCESTER RD** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.950 mi.
5017 ft. **Site 2 of 3 in cluster K**

Relative:
Lower

Actual:
161 ft.

SHWS:

Name:	NO LOCATION AID
Address:	226 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Facility ID:	3-0023995
Source Type:	Not reported
Release Town:	NATICK
Notification Date:	06/23/2004
Category:	120 DY
Associated ID:	Not reported
Current Status:	RAO
Status Date:	06/23/2005
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Release:

Name:	NO LOCATION AID
Address:	226 WORCESTER RD
City,State,Zip:	NATICK, MA 017600000
Release Tracking Number/Current Status:	3-0023995 / RAO
Primary ID:	Not reported
Official City:	NATICK
Notification:	06/23/2004
Category:	120 DY
Status Date:	06/23/2005
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Abatement Measure
Action Status:	Completion Statement Received

NO LOCATION AID (Continued) **S132538256**

Action Date: 11/15/2007
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 2/24/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 4/30/2004
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 6/23/2004
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 6/23/2004
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 6/23/2005
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 6/28/2005
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 7/14/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 7/17/2007
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 8/25/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/30/2004
Response Action Outcome: Not reported

Chemicals:
Chemical: LEAD
Quantity: 320 milligrams per kilogram
Chemical: MTBE

NO LOCATION AID (Continued) **S132538256**

Quantity: 0.944 milligrams per kilogram
Chemical: AROMATIC HYDROCARBONS C11 THROUGH C22
Quantity: 599 milligrams per kilogram

K61 **TEXACO STATION** **MA SHWS** **S132534032**
WNW **226 WORCESTER RD** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.950 mi.
5017 ft. **Site 3 of 3 in cluster K**

Relative:
Lower

Actual:
161 ft.

SHWS:
Name: TEXACO STATION
Address: 226 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0013240
Source Type: UNKNOWN
Release Town: NATICK
Notification Date: 12/08/1995
Category: 72 HR
Associated ID: 3-0012479
Current Status: RTNCLOSED
Status Date: 07/19/2003
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

Release:
Name: TEXACO STATION
Address: 226 WORCESTER RD
City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0013240 / RTNCLOSED
Primary ID: 3-0012479
Official City: NATICK
Notification: 12/08/1995
Category: 72 HR
Status Date: 07/19/2003
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 1/17/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Extension
Action Date: 1/31/2001
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 12/8/1995
Response Action Outcome: Not reported

TEXACO STATION (Continued) **S132534032**

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 12/8/1995
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 12/8/1995
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 2/15/1996
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 2/15/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 2/5/1996
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 2/5/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 4/11/1996
Response Action Outcome: Not reported

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 4/11/1996
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/12/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 4/13/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received

TEXACO STATION (Continued) **S132534032**

Action Date: 4/17/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via IRA Completion Statement
Action Date: 4/17/1996
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 4/17/1996
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 5/5/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1C Classification
Action Date: 5/5/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 7/18/1997
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Linked to a Tier Classified Site
Action Date: 7/19/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 7/19/2003
Response Action Outcome: Not reported

Chemicals:
Chemical: NAPL
Quantity: 2.6 inches
Location Type: COMMERCIAL
Source: UNKNOWN

L62 **NO LOCATION AID** **MA SHWS** **S132533517**
SW **151 EAST CENTRAL ST** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.980 mi.
5174 ft. **Site 1 of 3 in cluster L**

Relative: **Higher**
Actual: **193 ft.**

SHWS:
Name: NO LOCATION AID
Address: 151 EAST CENTRAL ST
City,State,Zip: NATICK, MA 01760
Facility ID: 3-0011755
Source Type: FUELTANK
Release Town: NATICK

NO LOCATION AID (Continued) **S132533517**

Notification Date: 10/20/1994
Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 12/20/1994
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Not reported

Release:
Name: NO LOCATION AID
Address: 151 EAST CENTRAL ST
City,State,Zip: NATICK, MA 01760
Release Tracking Number/Current Status: 3-0011755 / RAO
Primary ID: Not reported
Official City: NATICK
Notification: 10/20/1994
Category: TWO HR
Status Date: 12/20/1994
Phase: Not reported
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 10/20/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 10/20/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 10/20/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 10/20/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/25/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

NO LOCATION AID (Continued) **S132533517**

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 12/20/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 12/20/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: DIESEL FUEL
Quantity: 50 gallons
Location Type: ROADWAY
Source: FUELTANK

L63 **JMH WEST AUTOMOTIVE REPAIR** **MA SHWS S132542101**
SW **151 EAST CENTRAL STREET** **MA LUST N/A**
1/2-1 **NATICK, MA 01760** **MA RELEASE**
0.980 mi.
5174 ft. **Site 2 of 3 in cluster L**

Relative: Higher
Actual: 193 ft.

SHWS:
Name: JMH WEST AUTOMOTIVE REPAIR
Address: 151 EAST CENTRAL STREET
City,State,Zip: NATICK, MA 017600000
Facility ID: 3-0033930
Source Type: UNKNOWN
Release Town: NATICK
Notification Date: 11/14/2016
Category: 120 DY
Associated ID: Not reported
Current Status: PSNC
Status Date: 09/23/2019
Phase: Not reported
Response Action Outcome: PN
Oil Or Haz Material: Hazardous Material

LUST:

Facility:
Name: JMH WEST AUTOMOTIVE REPAIR
Address: 151 EAST CENTRAL STREET
City,State,Zip: NATICK, MA 017600000
Current Status: **Permanent Solution with No Conditions**
Release Tracking Number/Current Status: 3-0033930 / PSNC
Status Date: 09/23/2019
Source Type: UST
Release Town: NATICK
Notification Date: 11/14/2016
Category: 120 DY
Associated ID: Not reported
Phase: Not reported
Response Action Outcome: PN - PN
Oil Or Haz Material: Hazardous Material

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Source: UNKNOWN
Source: USTOTHER
Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:
Chemical: LEAD
Quantity: 0.04 milligrams per liter

Actions:
Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/14/2016
Response Action Outcome: PN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/14/2016
Response Action Outcome: PN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/14/2016
Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/14/2017
Response Action Outcome: PN

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 11/14/2017
Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 11/14/2017
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/1/2016
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 12/12/2017
Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 12/7/2017
Response Action Outcome: PN

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRWPR
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRINT
Action Date: 3/19/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/19/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/30/2018
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 9/20/2018
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRINT
Action Date: 9/20/2018
Response Action Outcome: PN

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: PSNRCD
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 9/8/2017
Response Action Outcome: PN

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Facility:

Name:	JMH WEST AUTOMOTIVE REPAIR
Address:	151 EAST CENTRAL STREET
City,State,Zip:	NATICK, MA 017600000
Current Status:	**Permanent Solution with No Conditions**
Release Tracking Number/Current Status:	3-0033930 / PSNC
Status Date:	09/23/2019
Source Type:	USTOTHER
Release Town:	NATICK
Notification Date:	11/14/2016
Category:	120 DY
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	PN - PN
Oil Or Haz Material:	Hazardous Material
Source:	UNKNOWN
Source:	USTOTHER
Source:	UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	LEAD
Quantity:	0.04 milligrams per liter

Actions:

Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	11/14/2016
Response Action Outcome:	PN
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	11/14/2016
Response Action Outcome:	PN
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	11/14/2016
Response Action Outcome:	PN
Action Type:	Tier Classification
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	11/14/2017
Response Action Outcome:	PN
Action Type:	Phase 1
Action Status:	Completion Statement Received
Action Date:	11/14/2017
Response Action Outcome:	PN
Action Type:	Tier Classification
Action Status:	Tier 2 Classification
Action Date:	11/14/2017

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/1/2016
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 12/12/2017
Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRWPR
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRINT
Action Date: 3/19/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/19/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/30/2018
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 9/20/2018
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRINT
Action Date: 9/20/2018
Response Action Outcome: PN

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/23/2019
Response Action Outcome: PN

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: PSNRCD
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 9/8/2017
Response Action Outcome: PN

Release:
Name: JMH WEST AUTOMOTIVE REPAIR
Address: 151 EAST CENTRAL STREET
City,State,Zip: NATICK, MA 017600000
Release Tracking Number/Current Status: 3-0033930 / PSNC
Primary ID: Not reported
Official City: NATICK
Notification: 11/14/2016
Category: 120 DY
Status Date: 09/23/2019
Phase: Not reported
Response Action Outcome: PN - PN
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:
Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/14/2016
Response Action Outcome: PN

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 11/14/2016
Response Action Outcome: PN

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/14/2016
Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 11/14/2017
Response Action Outcome: PN

Action Type: Phase 1
Action Status: Completion Statement Received
Action Date: 11/14/2017

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 11/14/2017
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/1/2016
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit
Action Date: 12/12/2017
Response Action Outcome: PN

Action Type: Tier Classification
Action Status: Legal Notice Published
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRWPR
Action Date: 12/7/2017
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRINT
Action Date: 3/19/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/19/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 3/30/2018
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 9/20/2018
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: RMRINT
Action Date: 9/20/2018
Response Action Outcome: PN

JMH WEST AUTOMOTIVE REPAIR (Continued) **S132542101**

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: PSNRCD
Action Date: 9/23/2019
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 9/8/2017
Response Action Outcome: PN

Chemicals:
Chemical: LEAD
Quantity: 0.04 milligrams per liter
Source: UNKNOWN
Source: USTOTHER
Source: UST

L64 **FRAZZEE AUTOMOTIVE** **MA SHWS** **S132532537**
SW **151 EAST CENTRAL ST** **MA LUST** **N/A**
1/2-1 **NATICK, MA 01760** **MA RELEASE**
0.980 mi.
5174 ft. **Site 3 of 3 in cluster L**

Relative: Higher
Actual: 193 ft.

SHWS:
Name: FRAZZEE AUTOMOTIVE
Address: 151 EAST CENTRAL ST
City,State,Zip: NATICK, MA 01760
Facility ID: 3-0003445
Source Type: LEACHFIELD
Release Town: NATICK
Notification Date: 01/15/1991
Category: NONE
Associated ID: Not reported
Current Status: WSCPRM
Status Date: 01/26/1995
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Oil

LUST:

Facility:
Name: FRAZZEE AUTOMOTIVE
Address: 151 EAST CENTRAL ST
City,State,Zip: NATICK, MA 01760
Current Status: **WSCPRM**
Release Tracking Number/Current Status: 3-0003445 / WSCPRM

FRAZZEE AUTOMOTIVE (Continued) **S132532537**

Status Date:	01/26/1995
Source Type:	UST
Release Town:	NATICK
Notification Date:	01/15/1991
Category:	NONE
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	-
Oil Or Haz Material:	Oil
Location Type:	GASSTATION
Source:	UST
Source:	LEACHFIELD

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	VOCS
Quantity:	Not reported

Actions:

Action Type:	Release Disposition
Action Status:	Valid Transition Site
Action Date:	1/15/1991
Response Action Outcome:	Not reported
Action Type:	TREGS
Action Status:	WAVSIG
Action Date:	1/15/1991
Response Action Outcome:	Not reported
Action Type:	TREGS
Action Status:	WAVACC
Action Date:	1/22/1991
Response Action Outcome:	Not reported
Action Type:	TREGS
Action Status:	WCSPRM
Action Date:	1/26/1995
Response Action Outcome:	Not reported
Action Type:	TREGS
Action Status:	WAVREC
Action Date:	11/14/1990
Response Action Outcome:	Not reported

Release:

Name:	FRAZZEE AUTOMOTIVE
Address:	151 EAST CENTRAL ST
City,State,Zip:	NATICK, MA 01760
Release Tracking Number/Current Status:	3-0003445 / WSCPRM
Primary ID:	Not reported
Official City:	NATICK
Notification:	01/15/1991

FRAZZEE AUTOMOTIVE (Continued) **S132532537**

Category: NONE
Status Date: 01/26/1995
Phase: Not reported
Response Action Outcome: -
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 1/15/1991
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVSIG
Action Date: 1/15/1991
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVACC
Action Date: 1/22/1991
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WCSPRM
Action Date: 1/26/1995
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVREC
Action Date: 11/14/1990
Response Action Outcome: Not reported

Chemicals:
Chemical: VOCS
Quantity: Not reported
Location Type: GASSTATION
Source: UST
Source: LEACHFIELD

65
NNE
1/2-1
0.983 mi.
5192 ft.

PILGRIM RD AT LINWOOD RD
PILGRIM RD
WELLESLEY, MA 02482

MA SHWS **S106863310**
MA RELEASE **N/A**

Relative:
Higher

Actual:
187 ft.

SHWS:
Name: PILGRIM RD AT LINWOOD RD
Address: PILGRIM RD
City,State,Zip: WELLESLEY, MA 024820000
Facility ID: 3-0024388
Source Type: TRANSFORM
Release Town: WELLESLEY
Notification Date: 11/04/2004
Category: TWO HR
Associated ID: Not reported

PILGRIM RD AT LINWOOD RD (Continued) **S106863310**

Current Status: RAO
Status Date: 12/22/2004
Phase: Not reported
Response Action Outcome: A1
Oil Or Haz Material: Oil

Release:
Name: PILGRIM RD AT LINWOOD RD
Address: PILGRIM RD
City,State,Zip: WELLESLEY, MA 024820000
Release Tracking Number/Current Status: 3-0024388 / RAO
Primary ID: Not reported
Official City: WELLESLEY
Notification: 11/04/2004
Category: TWO HR
Status Date: 12/22/2004
Phase: Not reported
Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/4/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/4/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 11/4/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 12/22/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 12/22/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

PILGRIM RD AT LINWOOD RD (Continued) **S106863310**

Action Date:	3/11/2005
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:

Chemical:	DIELECTRIC OIL
Quantity:	15 gallons
Chemical:	MINERAL OIL
Quantity:	20 gallons
Location Type:	MUNICIPAL
Source:	TRANSFORM

Count: 24 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NATICK	S126024658	REAR OF GASOLINE STATION	207, 233 & 251 WORCESTER STREE	01760	MA SHWS, MA RELEASE
NATICK	S105522204	NO LOCATION AID	157 CENTRAL ST	01760	MA SHWS, MA RELEASE
NATICK	S127336059	NATICK SERVICE PLAZA EASTBOUND	I-90 EB SERVICE PLAZA	01760	MA SHWS, MA RELEASE
NATICK	S106775835	NATICK SERVICE PLAZA 8E	MASSACHUSETTS TPKE E MM 117 6	01760	MA SHWS, MA RELEASE
NATICK	S106953952	NATICK SERVICE PLAZA 8E MM 117.6	MASSACHUSETTS TPKE E	01760	MA SHWS, MA RELEASE
NATICK	S105596553	NORTH ACCESS DRIVEWAY	STRATHMORE RD NEAR 9	01760	MA SHWS, MA RELEASE, MA ENF
NATICK	S109489733	REAR OF 123 OAK ST LOTS 5, 6, 7 &	WELLESLEY ROAD EXT	01760	MA SHWS, MA RELEASE
NATICK	S102507419	REAR OF 123 OAK ST	WELLESLEY ROAD EXT	01760	MA SHWS, MA RELEASE
NATICK	S118947386	WILLOW AND MECHANIC STREETS	17-19 WILLOW & 4-6 MECHANIC ST	01760	MA SHWS, MA LUST, MA RELEASE
NATICK	S126024502	PROPERTY	WORCESTER & NORTH MAIN STREETS	01760	MA SHWS, MA LUST, MA RELEASE
WELLESLEY	S118337340	PARK MANOR WEST	BABSON COLLEGE DRIVE		MA SHWS, MA RELEASE
WELLESLEY	S116358044	NO LOCATION AID	CENTRAL STREET, ROUTE 135	02482	MA SHWS, MA RELEASE
WELLESLEY	S132537256	SPRAGUE SCHOOL	79 OAK ST	02481	MA SHWS, MA RELEASE
WELLESLEY	S132537835	SPRAGUE SCHOOL ATHLETIC FIELDS	79 OAK ST	02481	MA SHWS, MA INST CONTROL, MA RELEASE
WELLESLEY	S115031764	MORSES POND	TURNER RD END OF		MA RGA HWS
WELLESLEY	S108640863	MORSES POND WATER TREATMENT PLANT	100 TURNER RD	02481	MA AST
WELLESLEY	S132541300	NO LOCATION AID	29 WASHINGTON STREET		MA SHWS, MA INST CONTROL, MA RELEASE
WELLESLEY	S132541395	WELLESLEY OFFICE PARK	29 WASHINGTON STREET	02482	MA SHWS, MA RELEASE
WELLESLEY	S132541721	WELLESLEY OFFICE	29 WASHINGTON STREET	02482	MA SHWS, MA RELEASE
WELLESLEY	S132121968	ROADWAY IN FRONT OF 272	WASHINGTON STREET	02481	MA SHWS, MA RELEASE
WELLESLEY	S132539591	GULF STA	461 WORCESTER ST		MA LUST, MA RELEASE
WELLESLEY	S132537611	RTE 9 W	461 WORCESTER ST		MA SHWS, MA LUST, MA RELEASE
WELLESLEY	S132531947	GULF STATION	461 WORCESTER ST		MA LUST, MA RELEASE
WELLESLEY	S132540326	CUMBERLAND FARMS	461 WORCESTER RD		MA SHWS, MA RELEASE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 12/18/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 2

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/20/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/03/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 13

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/03/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/04/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/04/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/04/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/04/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 03/11/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 83

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 07/29/2025
Next Scheduled EDR Contact: 11/17/2025
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/19/2025
Date Data Arrived at EDR: 05/20/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/20/2025
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/19/2025
Date Data Arrived at EDR: 05/20/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/20/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/10/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 4

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/12/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

SHWS: Site Transition List

Contains information on releases of oil and hazardous materials that have been reported to DEP.

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 23

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Solid Waste Facility Database/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 06/28/2024
Date Data Arrived at EDR: 06/28/2024
Date Made Active in Reports: 09/24/2024
Number of Days to Update: 88

Source: Department of Environmental Protection
Telephone: 617-292-5989
Last EDR Contact: 07/24/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Annually

LF PROFILES: Landfill Profiles Listing

This spreadsheet describes landfills that have actively accepted waste or have closed under MassDEP Solid Waste Regulations first adopted in 1971 (310 CMR 16.00 and 310 CMR 19.00). The list does not include landfills that closed before 1971 (and which never had a MassDEP permit or approval), or for which agency data is incomplete.

Date of Government Version: 07/01/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 12/14/2015
Number of Days to Update: 48

Source: Department of Environmental Protection
Telephone: 617-292-5868
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Varies

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank Listing

Sites within the Leaking Underground Storage Tank Listing that have a UST listed as its source.

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 23

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Sites
Sites within the Releases Database that have a AST listed as its source.

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 23
Source: Department of Environmental Protection
Telephone: 617-292-5500
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 01/07/2025
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/07/2025
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 04/08/2025
Date Data Arrived at EDR: 04/23/2025
Date Made Active in Reports: 04/24/2025
Number of Days to Update: 1
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/24/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

UST: Summary Listing of all the Tanks Registered in the State of Massachusetts
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 02/26/2025
Date Data Arrived at EDR: 05/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 84
Source: Department of Fire Services, Office of the Public Safety
Telephone: 617-556-1035
Last EDR Contact: 07/29/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Quarterly

AST 2: Aboveground Storage Tanks
Aboveground storage tanks

Date of Government Version: 04/03/2025
Date Data Arrived at EDR: 04/03/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 82
Source: Department of Fire Services
Telephone: 978-567-3181
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

AST: Aboveground Storage Tank Database
Registered Aboveground Storage Tanks.

Date of Government Version: 03/15/2025
Date Data Arrived at EDR: 04/08/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 77
Source: Department of Public Safety
Telephone: 617-556-1035
Last EDR Contact: 07/03/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: No Update Planned

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 01/07/2025
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 01/16/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 81

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Sites With Activity and Use Limitation

Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 23

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/10/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS 2: Potential Brownfields Listing

A listing of potential brownfields site locations in the state.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 10/16/2023
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: 617-556-1007
Last EDR Contact: 07/24/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Varies

BROWNFIELDS: Completed Brownfields Covenants Listing

Under Massachusetts law, M.G.L. c. 21E is the statute that governs the cleanup of releases of oil and/or hazardous material to the environment. The Brownfields Act of 1998 amended M.G.L. c. 21E by establishing significant liability relief and financial incentives to spur the redevelopment of brownfields, while ensuring that the Commonwealth's environmental standards are met. Most brownfields are redeveloped with the benefit of liability protections that operate automatically under M.G.L. c. 21E.

Date of Government Version: 12/31/2024
Date Data Arrived at EDR: 01/22/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 75

Source: Office of the Attorney General
Telephone: 617-963-2423
Last EDR Contact: 07/21/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/10/2025
Next Scheduled EDR Contact: 09/22/2025
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/15/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/08/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/17/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/31/2024
Date Data Arrived at EDR: 02/20/2025
Date Made Active in Reports: 04/29/2025
Number of Days to Update: 68
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 06/02/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/31/2024
Date Data Arrived at EDR: 02/20/2025
Date Made Active in Reports: 04/29/2025
Number of Days to Update: 68
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 06/02/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Quarterly

Local Land Records

LIENS: Liens Information Listing
A listing of environmental liens.

Date of Government Version: 03/07/2018
Date Data Arrived at EDR: 03/09/2018
Date Made Active in Reports: 06/21/2018
Number of Days to Update: 104
Source: Department of Environmental Protection
Telephone: 617-292-5628
Last EDR Contact: 05/15/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/11/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 4

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/12/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

MA SPILLS: Historical Spill List

The Spills Database was the release notification tracking system for spills that occurred prior to October 1, 1993. This information should be considered to be primarily of historical interest since all of the listed spills have either been cleaned up or assigned new tracking numbers and moved to the Reportable Releases or Sites Transition List databases.

Date of Government Version: 09/30/1993
Date Data Arrived at EDR: 12/03/2003
Date Made Active in Reports: 12/31/2003
Number of Days to Update: 28

Source: Department of Environmental Protection
Telephone: 617-292-5720
Last EDR Contact: 12/03/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

RELEASE: Reportable Releases

Contains information on all releases of oil and hazardous materials that have been reported to DEP

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 23

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/11/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/08/2013
Number of Days to Update: 36

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 03/10/1998
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/05/2013
Number of Days to Update: 61

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 06/04/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 07/23/2025
Date Data Arrived at EDR: 07/23/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 6

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/23/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/07/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 06/25/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/08/2025
Next Scheduled EDR Contact: 08/18/2025
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/03/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/03/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/24/2025
Next Scheduled EDR Contact: 11/10/2025
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/01/2025
Next Scheduled EDR Contact: 08/11/2025
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/12/2025
Next Scheduled EDR Contact: 09/22/2025
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/11/2025
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 7

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/15/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 04/14/2025
Date Data Arrived at EDR: 04/15/2025
Date Made Active in Reports: 07/08/2025
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/14/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/25/2025
Date Data Arrived at EDR: 05/01/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 09/08/2025
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/05/2025
Date Data Arrived at EDR: 04/11/2025
Date Made Active in Reports: 07/08/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/09/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 28

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 08/11/2025
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 100

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/02/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 05/07/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 06/03/2025
Number of Days to Update: 27

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 07/08/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/22/2025
Next Scheduled EDR Contact: 09/08/2025
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/22/2025
Next Scheduled EDR Contact: 09/08/2025
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/01/2025
Next Scheduled EDR Contact: 08/11/2025
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/17/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 03/31/2025
Date Data Arrived at EDR: 04/22/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 86
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/17/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2025
Date Data Arrived at EDR: 05/02/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 76

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/24/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/07/2025
Number of Days to Update: 16

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/03/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 06/25/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/28/2025
Next Scheduled EDR Contact: 11/10/2025
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 05/15/2025
Date Data Arrived at EDR: 05/15/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 75

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/15/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2025
Date Data Arrived at EDR: 05/20/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 70

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/20/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 04/01/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 83

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/02/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 50

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/20/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/22/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 05/28/2025
Date Data Arrived at EDR: 05/28/2025
Date Made Active in Reports: 06/03/2025
Number of Days to Update: 6

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 05/28/2025
Next Scheduled EDR Contact: 09/15/2025
Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/22/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/22/2025
Date Data Arrived at EDR: 05/05/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 16

Source: EPA
Telephone: (617) 918-1111
Last EDR Contact: 05/05/2025
Next Scheduled EDR Contact: 09/08/2025
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 02/14/2025
Date Data Arrived at EDR: 03/11/2025
Date Made Active in Reports: 06/03/2025
Number of Days to Update: 84

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/02/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/14/2025
Next Scheduled EDR Contact: 09/01/2025
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/23/2025
Date Data Arrived at EDR: 03/27/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/25/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/07/2025
Date Data Arrived at EDR: 05/13/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 77

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/13/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 03/31/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/05/2025
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 03/31/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/05/2025
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 03/07/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/05/2025
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 03/31/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/05/2025
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 03/23/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/05/2025
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 07/16/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 03/03/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 03/24/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/15/2024
Date Data Arrived at EDR: 03/06/2025
Date Made Active in Reports: 06/03/2025
Number of Days to Update: 89

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 06/05/2025
Next Scheduled EDR Contact: 09/15/2025
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 03/24/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 03/24/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 03/24/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 05/21/2025
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 03/24/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 04/29/2025
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 06/26/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: No Update Planned

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 04/13/2025
Date Data Arrived at EDR: 04/15/2025
Date Made Active in Reports: 07/08/2025
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 07/10/2025
Next Scheduled EDR Contact: 10/27/2025
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 05/08/2025
Next Scheduled EDR Contact: 08/18/2025
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 05/08/2025
Next Scheduled EDR Contact: 08/18/2025
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System

EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/14/2025
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 06/04/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Varies

PFAS: PFAS Contaminated Sites Listing

Detection of Per- and Polyfluoroalkyl Substances (PFAS) in drinking water.

Date of Government Version: 03/24/2025
Date Data Arrived at EDR: 03/25/2025
Date Made Active in Reports: 06/13/2025
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 617-292-6770
Last EDR Contact: 06/17/2025
Next Scheduled EDR Contact: 10/06/2025
Data Release Frequency: Varies

AIRS: Permitted Facilities Listing

A listing of Air Quality permit applications.

Date of Government Version: 04/07/2025
Date Data Arrived at EDR: 04/08/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 617-292-5789
Last EDR Contact: 07/20/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 01/31/2025
Date Data Arrived at EDR: 02/26/2025
Date Made Active in Reports: 03/13/2025
Number of Days to Update: 15

Source: Department of Environmental Protection
Telephone: 617-292-5982
Last EDR Contact: 05/21/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Varies

DRYCLEANERS: Regulated Drycleaning Facilities

A listing of Department of Environmental Protection regulated drycleaning facilities that use perchloroethylene under the Environmental Results Program.

Date of Government Version: 04/25/2025
Date Data Arrived at EDR: 05/01/2025
Date Made Active in Reports: 07/25/2025
Number of Days to Update: 85

Source: Department of Environmental Protection
Telephone: 617-292-5633
Last EDR Contact: 07/15/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

ENFORCEMENT: Enforcement Action Cases

A listing of enforcement action cases tracked by Department of Environmental Protection programs, including Solid Waste and Hazardous Waste.

Date of Government Version: 04/03/2025
Date Data Arrived at EDR: 04/08/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 617-292-5979
Last EDR Contact: 07/15/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing

Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/01/2010
Date Data Arrived at EDR: 12/23/2010
Date Made Active in Reports: 02/03/2011
Number of Days to Update: 42

Source: Department of Environmental Protection
Telephone: 617-292-5970
Last EDR Contact: 05/28/2025
Next Scheduled EDR Contact: 09/15/2025
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tanks. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/26/2025
Date Data Arrived at EDR: 05/01/2025
Date Made Active in Reports: 07/24/2025
Number of Days to Update: 84

Source: Office of State Fire Marshal
Telephone: 978-567-3100
Last EDR Contact: 07/29/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Varies

FIN ASSURANCE 3: Financial Assurance Information listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 03/27/2025
Date Data Arrived at EDR: 03/27/2025
Date Made Active in Reports: 06/13/2025
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 617-292-5970
Last EDR Contact: 07/08/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Varies

GWDP: Ground Water Discharge Permits

The Ground Water Discharge Permits datalayer (formerly known as Groundwater Discharge Points) is a statewide point dataset containing approximate locations of permitted discharges to groundwater.

Date of Government Version: 01/10/2025
Date Data Arrived at EDR: 01/22/2025
Date Made Active in Reports: 04/07/2025
Number of Days to Update: 75

Source: MassGIS
Telephone: 617-556-1150
Last EDR Contact: 07/17/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Varies

HW GEN: List of Massachusetts Hazardous Waste Generators

Permanent generator identification numbers for all Massachusetts generators of hazardous waste and waste oil that have registered with or notified MassDEP of their hazardous waste activities.

Date of Government Version: 03/07/2025
Date Data Arrived at EDR: 03/18/2025
Date Made Active in Reports: 06/06/2025
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 617-292-5500
Last EDR Contact: 06/16/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Semi-Annually

MERCURY: Mercury Product Recyling Drop-Off Locations Listing

A listing of locations, collecting and recycling for mercury-added products. Mercury is toxic to the human nervous system, as well as fish and animals. Mercury can enter the body either through skin absorption or through inhalation of mercury vapors. At room temperature, small beads of mercury will vaporize.

Date of Government Version: 04/02/2025
Date Data Arrived at EDR: 05/13/2025
Date Made Active in Reports: 07/25/2025
Number of Days to Update: 73

Source: Department of Environmental Protection
Telephone: 617-292-5632
Last EDR Contact: 05/13/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Varies

NPDES: NPDES Permit Listing
Listing of treatment plants in Massachusetts that hold permits to discharge to groundwater.

Date of Government Version: 05/05/2025
Date Data Arrived at EDR: 05/06/2025
Date Made Active in Reports: 07/30/2025
Number of Days to Update: 85
Source: Department of Environmental Protection
Telephone: 508-767-2781
Last EDR Contact: 05/06/2025
Next Scheduled EDR Contact: 08/18/2025
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing
A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 08/07/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 91
Source: Massachusetts Emergency Management Agency
Telephone: 508-820-2019
Last EDR Contact: 07/29/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Annually

TSD: TSD Facility
List of Licensed Hazardous Waste Treatment, Storage Disposal Facilities (TSDFs) in Massachusetts.

Date of Government Version: 03/07/2025
Date Data Arrived at EDR: 03/18/2025
Date Made Active in Reports: 06/06/2025
Number of Days to Update: 80
Source: Department of Environmental Protection
Telephone: 617-292-5580
Last EDR Contact: 06/16/2025
Next Scheduled EDR Contact: 09/29/2025
Data Release Frequency: Varies

UIC: Underground Injection Control Listing
A list of UIC registration data and their locations

Date of Government Version: 05/05/2025
Date Data Arrived at EDR: 05/06/2025
Date Made Active in Reports: 05/13/2025
Number of Days to Update: 7
Source: Department of Environmental Protection
Telephone: 617-566-1172
Last EDR Contact: 05/06/2025
Next Scheduled EDR Contact: 08/18/2025
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/04/2025
Date Data Arrived at EDR: 05/06/2025
Date Made Active in Reports: 07/21/2025
Number of Days to Update: 76

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/06/2025
Next Scheduled EDR Contact: 08/18/2025
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/23/2025
Next Scheduled EDR Contact: 10/13/2025
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/17/2025
Next Scheduled EDR Contact: 11/03/2025
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/01/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/07/2025
Next Scheduled EDR Contact: 08/25/2025
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/09/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 07/02/2025
Next Scheduled EDR Contact: 10/20/2025
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 05/28/2025
Next Scheduled EDR Contact: 09/15/2025
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MassDEP
Telephone: 617-292-5907

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MORSES POND
99 TURNER ROAD
WELLESLEY, MA 02482

TARGET PROPERTY COORDINATES

Latitude (North):	42.296475 - 42° 17' 47.31''
Longitude (West):	71.316875 - 71° 19' 0.75''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	309004.9
UTM Y (Meters):	4685080.0
Elevation:	162 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	20024146 NATICK, MA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

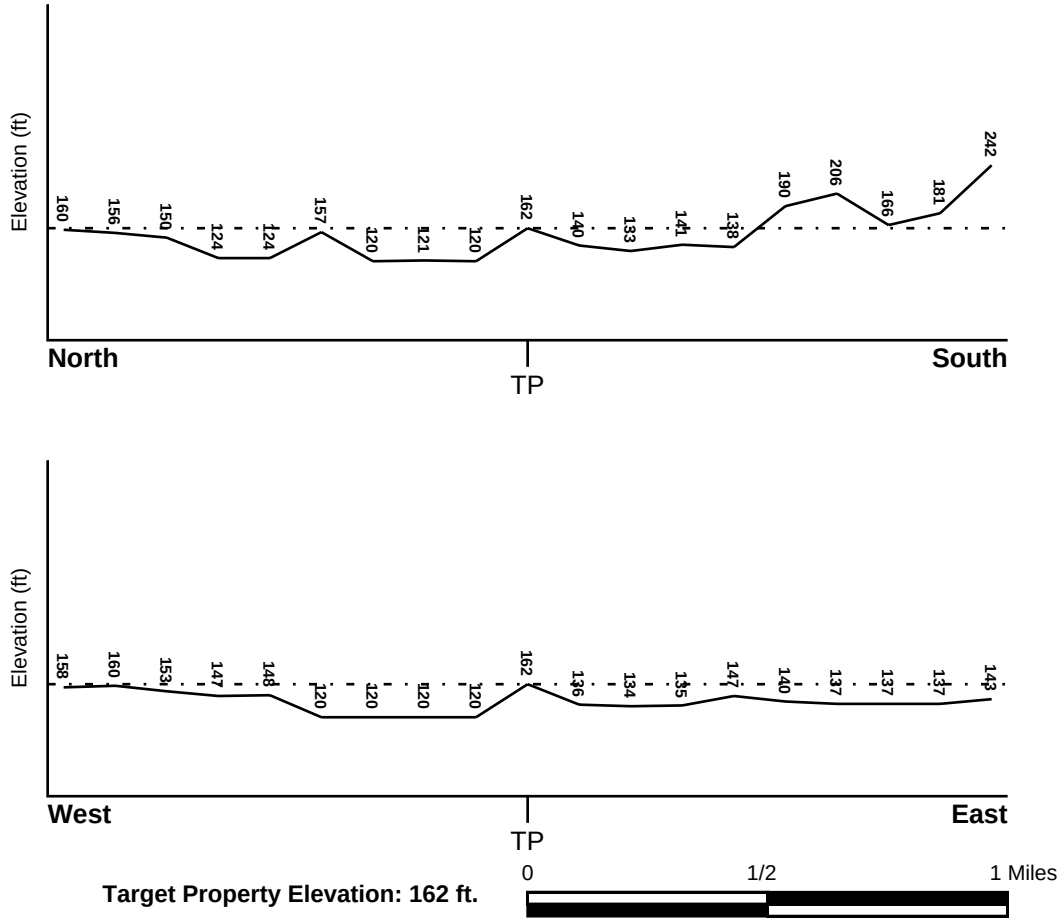
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 162 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
25017C0537E	FEMA FIRM Flood data
Additional Panels in search area:	**FEMA Source Type**
25021C0016E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NATICK	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
17	1/2 - 1 Mile NNW	S
22	1/2 - 1 Mile NW	SSW
27	1/2 - 1 Mile NW	SW-W
1G	1/2 - 1 Mile NNW	S
2G	1/2 - 1 Mile NW	SSW
3G	1/2 - 1 Mile NW	SW-W

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Silurian
Code:	Se *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposit

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 8064784.2s

SITE NAME:	Morses Pond	CLIENT:	Weston and Sampson Engineers
ADDRESS:	99 Turner Road Wellesley MA 02482	CONTACT:	Melissa Davis
		INQUIRY #:	8064784.2s
LAT/LONG:	42.296475 / 71.316875	DATE:	July 31, 2025 1:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Water

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 2

Soil Component Name: Udorthents

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: 141.14 Min: 0.42	Max: Min:
2	5 inches	59 inches	variable	Not reported	Not reported	Max: 141.14 Min: 0.42	Max: Min:

Soil Map ID: 3

Soil Component Name: Hinckley

Soil Surface Texture: sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
2	9 inches	14 inches	gravelly loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
3	14 inches	59 inches	sr to very gravelly loamy fine sand to cobbly coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6

Soil Map ID: 4

Soil Component Name: Hinckley

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
2	9 inches	14 inches	gravelly loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
3	14 inches	59 inches	sr to very gravelly loamy fine sand to cobbly coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6

Soil Map ID: 5

Soil Component Name: Urban land

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 6

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	22 inches	gravelly loamy sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches	sr to sand to very gravelly coarse sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 7

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	22 inches	gravelly loamy sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches	sr to sand to very gravelly coarse sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 8

Soil Component Name: Pits

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 9

Soil Component Name: Hinckley

Soil Surface Texture: sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
2	9 inches	14 inches	gravelly loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
3	14 inches	59 inches	sr to very gravelly loamy fine sand to cobbly coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6

Soil Map ID: 10

Soil Component Name: Swansea

Soil Surface Texture: mucky peat

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	24 inches	mucky peat	Not reported	Not reported	Max: 705 Min: 141.14	Max: Min:

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	24 inches	33 inches	muck	Not reported	Not reported	Max: 705 Min: 141.14	Max: Min:
3	33 inches	59 inches	sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: Min:

Soil Map ID: 11

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	22 inches	gravelly loamy sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches	sr to sand to very gravelly coarse sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A5	USGS40000471652	0 - 1/8 Mile NNE
A6	USGS40000471653	0 - 1/8 Mile NNE
8	USGS40000471573	1/8 - 1/4 Mile SSW
9	USGS40000471621	1/8 - 1/4 Mile West
B10	USGS40000471619	1/4 - 1/2 Mile West
12	USGS40000471593	1/4 - 1/2 Mile ESE
B13	USGS40000471629	1/4 - 1/2 Mile West
14	USGS40000471622	1/4 - 1/2 Mile West
15	USGS40000471786	1/2 - 1 Mile NNW
16	USGS40000471642	1/2 - 1 Mile West
18	USGS40000471780	1/2 - 1 Mile NW
C19	USGS40000471566	1/2 - 1 Mile ESE
C21	USGS40000471592	1/2 - 1 Mile ESE
24	USGS40000471844	1/2 - 1 Mile North
25	USGS40000471377	1/2 - 1 Mile SSE
26	USGS40000471614	1/2 - 1 Mile East
28	USGS40000471852	1/2 - 1 Mile NNW
29	USGS40000471651	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

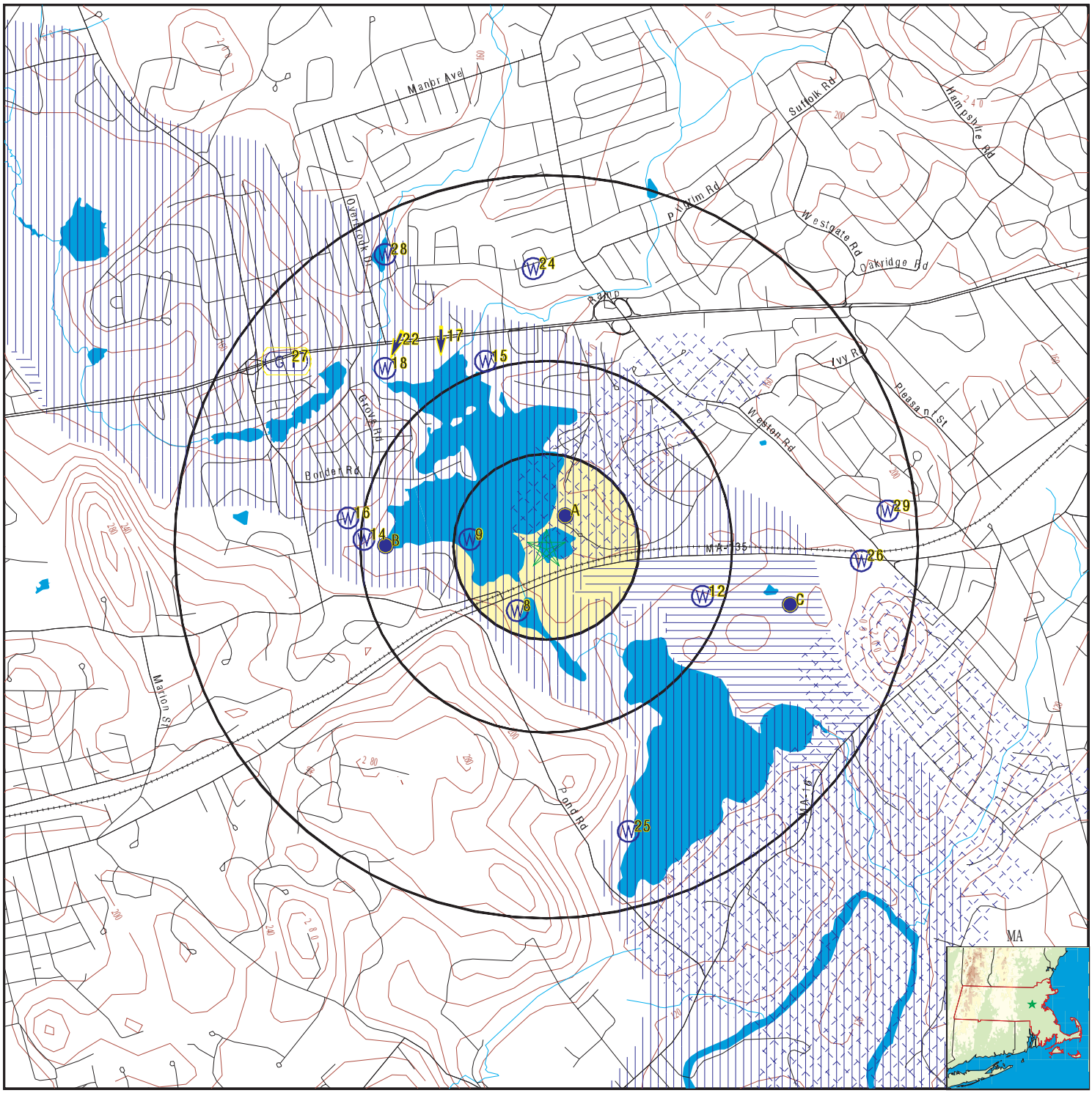
MAP ID	WELL ID	LOCATION FROM TP
A3	MA3317000	0 - 1/8 Mile NE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	MA1100000002939	0 - 1/8 Mile NNE
A2	MA1100000003117	0 - 1/8 Mile NE
A4	MA1100000002997	0 - 1/8 Mile NNE
A7	MA1100000002998	0 - 1/8 Mile NNE
B11	MA1100000001892	1/4 - 1/2 Mile West
C20	MA1100000000565	1/2 - 1 Mile ESE
C23	MA1100000000298	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 8064784.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Potentially Productive Aquifers
- Not Potentially Productive Aquifers
- DEP Approved Zone IIs
- EPA Designated Sole Src. Aq.

SITE NAME:	Morses Pond	CLIENT:	Weston and Sampson Engineers
ADDRESS:	99 Turner Road Wellesley MA 02482	CONTACT:	Melissa Davis
		INQUIRY #:	8064784.2s
LAT/LONG:	42.296475 / 71.316875	DATE:	July 31, 2025 1:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
NNE
0 - 1/8 Mile
Lower

MA WELLS **MA1100000002939**

WELLS:

PWS Source ID:	3317000-12G
Site Name:	MORSES POND GP WELL #3
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	153

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	WELLESLEY WATER DIVISION
Source Name:	MORSES POND GP WELL #3
Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	MORSES POND GP WELL #3
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF
Zone II Approved By:	NSA
Zone II Submitted:	01-OCT-91
Zone II Approved:	18-MAY-93
Zone II Status:	Current
Source Pumping Rate (gpm):	1390

A2
NE
0 - 1/8 Mile
Lower

MA WELLS **MA1100000003117**

WELLS:

PWS Source ID:	3317000-13G
Site Name:	MORSES POND GP WELL #4
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	153

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	WELLESLEY WATER DIVISION
Source Name:	MORSES POND GP WELL #4
Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	MORSES POND GP WELL #4
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF

Zone II Approved By:	NSA
Zone II Submitted:	01-OCT-91
Zone II Approved:	18-MAY-93
Zone II Status:	Current
Source Pumping Rate (gpm):	1390

A3
NE
0 - 1/8 Mile
Lower

FRDS PWS **MA3317000**

Epa region:	01	State:	MA
Pwsid:	MA3317000	Pwsname:	WELLESLEY WATER DIVISION
Cityserved:	Not Reported	Stateserved:	MA
Zipserved:	Not Reported	Fipscounty:	25021
Status:	Active	Retpopsrvd:	29860
Pwssvcconn:	8346	Psource longname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	WILLIAM J SHAUGHNESSY	Contactorgname:	WELLESLEY WATER DIVISION
Contactphone:	7812357600	Contactaddress1:	20 MUNICIPAL WAY
Contactaddress2:	Not Reported	Contactcity:	WELLESLEY
Contactstate:	MA	Contactzip:	02481
Pwsactivitycode:	A		

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	corrosion control
Trtprocess:	ph adjustment	Factypecode:	TP

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	other
Trtprocess:	fluoridation	Factypecode:	TP

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	iron removal
Trtprocess:	not reported	Factypecode:	TP

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	iron removal
Trtprocess:	filtration, greensand	Factypecode:	TP

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	manganese removal
Trtprocess:	filtration, greensand	Factypecode:	TP

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	hypochlorination, pre	Factypecode:	TP

Pwsid:	MA3317000	Facid:	18
Facname:	ROSEMARY/LONGFELLOW WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	not reported	Factypecode:	TP

Pwsid:	MA3317000	Facid:	20

Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	iron removal	Trtprocess:	filtration, greensand
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	20
Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	manganese removal	Trtprocess:	filtration, greensand
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	20
Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	other	Trtprocess:	fluoridation
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	20
Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	hypochlorination, post
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	20
Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	corrosion control	Trtprocess:	ph adjustment
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	20
Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	hypochlorination, pre
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	20
Facname:	WELLESLEY AVENUE/TF COUGHLIN WTP		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	not reported
Factypecode:	TP		
Pwsid:	MA3317000	Facid:	21
Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	corrosion control
Trtprocess:	inhibitor, orthophosphate	Factypecode:	TP
Pwsid:	MA3317000	Facid:	21
Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	corrosion control
Trtprocess:	ph adjustment, post	Factypecode:	TP
Pwsid:	MA3317000	Facid:	21
Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	other
Trtprocess:	fluoridation	Factypecode:	TP
Pwsid:	MA3317000	Facid:	21
Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
Pwsid:	MA3317000	Facid:	21

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	iron removal
Trtprocess:	filtration, greensand	Factypecode:	TP
Pwsid:	MA3317000	Facid:	21
Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	manganese removal
Trtprocess:	filtration, greensand	Factypecode:	TP
Pwsid:	MA3317000	Facid:	21
Facname:	MORSES POND WTP	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	not reported	Factypecode:	TP
PWS ID:	MA3317000	PWS name:	WELLESLEY WATER DEPT.
Address:	Not Reported	Care of:	455 WORCESTER STREET
City:	WELLESLEY	State:	MA
Zip:	021810000	Owner:	WELLESLEY WATER DEPT.
Source code:	Purchases surface water	Population:	25000
PWS ID:	MA3317000	PWS type:	Mailing
PWS name:	WELLESLEY WATER DEPT	PWS address:	PO BOX 81364
PWS address:	455 WORCESTER ST	PWS city:	WELLESLEY
PWS state:	MA	PWS zip:	021810000
PWS name:	WELLESLEY WATER DEPT.	PWS type code:	C
Retail population served:	27052	Contact:	JOSEPH B DUGGAN
Contact address:	455 WORCESTER ST	Contact address:	WELLESLEY
Contact city:	MA	Contact state:	02
Contact zip:	7812357600	Contact telephone:	Not Reported
County:	NORFOLK	Source:	Purchases surface water
Treatment Objective:	CORROSION CONTROL	Process:	INHIBITOR, HEXAMETAPHOSPHATE
Population:	25000		
County:	NORFOLK	Source:	Purchases surface water
Treatment Objective:	DISINFECTION	Process:	HYPOCHLORINATION, POST
Population:	25000		
County:	NORFOLK	Source:	Purchases surface water
Treatment Objective:	IRON REMOVAL	Process:	SEQUESTRATION
Population:	25000		
County:	NORFOLK	Source:	Purchases surface water
Treatment Objective:	INORGANICS REMOVAL	Process:	SEQUESTRATION
Population:	25000		
County:	NORFOLK	Source:	Purchases surface water
Treatment Objective:	Z	Process:	FLUORIDATION
Population:	25000		
PWS ID:	MA3317000	Activity status:	Active
Date system activated:	9003	Date system deactivated:	Not Reported
Retail population:	00025000	System name:	WELLESLEY WATER DEPT
System address:	455 WORCESTER STREET	System address:	WELLESLEY HILLS
System city:	WELLESLEY	System state:	MA
System zip:	021810000		
Population served:	10,001 - 50,000 Persons	Treatment:	Treated
Latitude:	421811	Longitude:	0711504
Latitude:	421850	Longitude:	0711513

Latitude:	421856	Longitude:	0711504
Latitude:	421750	Longitude:	0711857
Latitude:	421809	Longitude:	0711511

State:	MA	Latitude degrees:	42
Latitude minutes:	17	Latitude seconds:	50.0000
Longitude degrees:	71	Longitude minutes:	18
Longitude seconds:	57.0000		

State:	MA	Latitude degrees:	42
Latitude minutes:	18	Latitude seconds:	9.0000
Longitude degrees:	71	Longitude minutes:	15
Longitude seconds:	11.0000		

State:	MA	Latitude degrees:	42
Latitude minutes:	18	Latitude seconds:	11.0000
Longitude degrees:	71	Longitude minutes:	15
Longitude seconds:	4.0000		

State:	MA	Latitude degrees:	42
Latitude minutes:	18	Latitude seconds:	50.0000
Longitude degrees:	71	Longitude minutes:	15
Longitude seconds:	13.0000		

State:	MA	Latitude degrees:	42
Latitude minutes:	18	Latitude seconds:	56.0000
Longitude degrees:	71	Longitude minutes:	15
Longitude seconds:	4.0000		

Violation id:	01V0001	Orig code:	S
State:	MA	Violation Year:	2000
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2000
Cmp edt:	12/31/2000		

Violation id:	02V0001	Orig code:	S
State:	MA	Violation Year:	2002
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	08/01/2002
Cmp edt:	08/31/2002		

Violation id:	1	Orig code:	S
State:	MA	Violation Year:	2008
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	05/01/2008
Cmp edt:	05/31/2008		

Violation id:	99V0001	Orig code:	S
State:	MA	Violation Year:	1997
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	58		

Violation name:	OCCT/SOWT Treatment Installation/Demonstration		
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1997
Cmp edt:	Not Reported		

Violation ID:	01V0001	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	01/26/2001
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		

Violation ID:	01V0001	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	01/26/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	01V0001	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	01/26/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	02V0001	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/12/2002
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		

Violation ID:	1	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	06/24/2008
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		

Violation ID:	99V0001	Orig Code:	S
Enforcemnt FY:	2000	Enforcement Action:	05/15/2000
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

PWS name:	WELLESLEY WATER DEPT.	Population served:	27052
PWS type code:	C	Violation ID:	01V0001
Contaminant:	Coliform (Tcr)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	12/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	1/26/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	0		

PWS name:	WELLESLEY WATER DEPT.	Population served:	27052
PWS type code:	C	Violation ID:	02V0001
Contaminant:	Coliform (Tcr)		
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	8/1/2002 0:00:00	Compliance end date:	8/31/2002 0:00:00
Enforcement date:	9/12/2002 0:00:00	Enforcement action:	State Formal NOV Issued
Violation measurement:	0		

PWS name:	WELLESLEY WATER DEPT.	Population served:	27052
PWS type code:	C	Violation ID:	1
Contaminant:	Coliform (Tcr)	Violation type:	Monitoring, Routine Major (TCR)
Compliance start date:	5/1/2008 0:00:00	Compliance end date:	5/31/2008 0:00:00
Enforcement date:	6/24/2008 0:00:00	Enforcement action:	State Formal NOV Issued
Violation measurement:	Not Reported		

PWS name:	WELLESLEY WATER DEPT.	Population served:	27052
PWS type code:	C	Violation ID:	99V0001
Contaminant:	Lead & Copper Rule	Violation type:	OCCT Installation/Demonstration
Compliance start date:	1/1/1997 0:00:00	Compliance end date:	5/15/2000 0:00:00
Enforcement date:	12/24/1997 0:00:00	Enforcement action:	State AO (w/o Penalty) Issued
Violation measurement:	0		

PWS name:	WELLESLEY WATER DEPT.	Population served:	27052
PWS type code:	C	Violation ID:	99V0001
Contaminant:	Lead & Copper Rule	Violation type:	OCCT Installation/Demonstration
Compliance start date:	1/1/1997 0:00:00	Compliance end date:	5/15/2000 0:00:00
Enforcement date:	5/15/2000 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	0		

A4
NNE
0 - 1/8 Mile
Lower

MA WELLS **MA1100000002997**

WELLS:

PWS Source ID:	3317000-10G
Site Name:	MORSES POND WELL GP #1
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	153

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	WELLESLEY WATER DIVISION
Source Name:	MORSES POND WELL GP #1
Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	MORSES POND WELL GP #1
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF
Zone II Approved By:	NSA
Zone II Submitted:	01-OCT-91
Zone II Approved:	18-MAY-93
Zone II Status:	Current
Source Pumping Rate (gpm):	1390

A5
NNE
0 - 1/8 Mile
Lower

FED USGS **USGS40000471652**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 4	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1937
Well Depth:	55	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A6
NNE **FED USGS** **USGS40000471653**
0 - 1/8 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 5	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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A7
NNE **MA WELLS** **MA1100000002998**
0 - 1/8 Mile
Lower

WELLS:

PWS Source ID:	3317000-11G
Site Name:	MORSES POND GP WELL #2
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	153

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	WELLESLEY WATER DIVISION
Source Name:	MORSES POND GP WELL #2
Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	MORSES POND GP WELL #2
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF
Zone II Approved By:	NSA
Zone II Submitted:	01-OCT-91
Zone II Approved:	18-MAY-93
Zone II Status:	Current
Source Pumping Rate (gpm):	1390

8
SSW **FED USGS** **USGS40000471573**
1/8 - 1/4 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 31	Type:	Well

Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1966
Well Depth:	28	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

9
West **FED USGS** **USGS40000471621**
1/8 - 1/4 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 40	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1966
Well Depth:	70	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

B10
West **FED USGS** **USGS40000471619**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-NCW 11	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1956
Well Depth:	45	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

B11
West **MA WELLS** **MA1100000001892**
1/4 - 1/2 Mile
Lower

WELLS:

PWS Source ID:	3198000-03G
Site Name:	MORSES POND WELL
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	534

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	NATICK WATER DEPARTMENT
Source Name:	MORSES POND WELL

Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	MORSES POND WELL
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF
Zone II Approved By:	SWAP
Zone II Submitted:	06-DEC-00
Zone II Approved:	20-SEP-01
Zone II Status:	Current
Source Pumping Rate (gpm):	600

12
ESE **FED USGS** **USGS40000471593**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 17	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1904
Well Depth:	75	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

B13
West **FED USGS** **USGS40000471629**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-NCW 13	Type:	Well
Description:	Not Reported	HUC:	01070005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1956
Well Depth:	44	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

14
West **FED USGS** **USGS40000471622**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-NCW 14	Type:	Well

Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1956
Well Depth:	33	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

15
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000471786**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 14	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1961
Well Depth:	48	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

16
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000471642**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-NCW 15	Type:	Well
Description:	Not Reported	HUC:	01070005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1957
Well Depth:	63	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

17
NNW
1/2 - 1 Mile
Lower

Site ID:	3-0001358
Groundwater Flow:	S
Water Table Depth:	Shallowest: 2 ft. Deepest: 5 ft.
Date:	08/96

AQUIFLOW **4912**

18
NW
1/2 - 1 Mile
Lower

FED USGS **USGS40000471780**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 16	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported

Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1961
Well Depth:	85	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

C19
ESE **FED USGS** **USGS40000471566**
1/2 - 1 Mile
Lower

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 19	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1933
Well Depth:	62	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

C20
ESE **MA WELLS** **MA1100000000565**
1/2 - 1 Mile
Lower

WELLS:

PWS Source ID:	3317001-01G
Site Name:	BOTANY WELL 1
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	557

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	WELLESLEY COLLEGE
Source Name:	BOTANY WELL 1
Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	BOTANY WELL 1
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF
Zone II Approved By:	SWAP
Zone II Submitted:	23-MAR-01
Zone II Approved:	04-OCT-01
Zone II Status:	Current
Source Pumping Rate (gpm):	440

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C21
ESE
1/2 - 1 Mile
Lower | **FED USGS** | **USGS40000471592**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 18	Type:	Well
Description:	Not Reported	HUC:	01070005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1933
Well Depth:	60	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

22
NW
1/2 - 1 Mile
Lower

		AQUIFLOW	**4913**
Site ID:	3-0002336		
Groundwater Flow:	SSW		
Water Table Depth:	Shallowest: 3.76 ft. Deepest: 6.02 ft.		
Date:	05/31/90		

C23
ESE
1/2 - 1 Mile
Lower | **MA WELLS** | **MA1100000000298**

WELLS:

PWS Source ID:	3317001-02G
Site Name:	BOTANY WELL 2
PWS Type:	Community Groundwater Well
DEP Region:	3
Zone II #:	557

DWP Water Quality Testing System (WQTS) Information:

Water Supplier Name:	WELLESLEY COLLEGE
Source Name:	BOTANY WELL 2
Water Supplier Status:	Active
Source Status:	Active
Source Classification:	Community surface and groundwater sources
Source Availability:	ACTIVE

DWP Zone II Information:

Well Name:	BOTANY WELL 2
Major Drainage Basin:	CHARLES
Aquifer Type:	UNCNF
Zone II Approved By:	SWAP
Zone II Submitted:	23-MAR-01
Zone II Approved:	04-OCT-01
Zone II Status:	Current
Source Pumping Rate (gpm):	440

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

24
North
1/2 - 1 Mile
Lower

FED USGS **USGS40000471844**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 23	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Bedrock
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	193	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

25
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS40000471377**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 30	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1966
Well Depth:	40	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

26
East
1/2 - 1 Mile
Lower

FED USGS **USGS40000471614**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-SWW 57	Type:	Well
Description:	Not Reported	HUC:	01080204
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19670621
Well Depth:	157	Well Depth Units:	ft
Well Hole Depth:	157	Well Hole Depth Units:	ft

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
27 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Water Table Depth: Date:	3-0000657 SW-W Shallowest: 16.62 ft. Deepest: 20.71 ft. Not Reported	**AQUIFLOW**	**4697**

28
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000471852**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-WMW 15	Type:	Well
Description:	Not Reported	HUC:	01090001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1961
Well Depth:	27	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

29
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000471651**

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-F1W 4	Type:	Well
Description:	Not Reported	HUC:	01070005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1940	Well Depth:	12.2
Well Depth Units:	ft	Well Hole Depth:	12.2
Well Hole Depth Units:	ft		

			Database	EDR ID Number
1G **NNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Water Table Depth: Date:	3-0001358 S Shallowest: 2 ft. Deepest: 5 ft. 08/96	**AQUIFLOW**	**4912**
2G **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Water Table Depth: Date:	3-0002336 SSW Shallowest: 3.76 ft. Deepest: 6.02 ft. 05/31/90	**AQUIFLOW**	**4913**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
3G **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Water Table Depth: Date:	3-0000657 SW-W Shallowest: 16.62 ft. Deepest: 20.71 ft. Not Reported	**AQUIFLOW**	**4697**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MA Radon

Radon Test Results

County	% of sites>4 pCi/L	Median
NORFOLK	21	1.9

Federal EPA Radon Zone for NORFOLK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for NORFOLK COUNTY, MA

Number of sites tested: 146

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.522 pCi/L	89%	11%	0%
Living Area - 2nd Floor	0.500 pCi/L	100%	0%	0%
Basement	2.907 pCi/L	82%	18%	1%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MassDEP
Telephone: 617-292-5907

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Massachusetts Geographic Information System (MassGIS) Datalayers
Source: Executive Office of Environmental Affairs
Telephone:

Public Water Supply Database

Telephone:
The Public Water Supply datalayer contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00.

Areas of Critical Environmental Concern

Telephone:
The Areas of Critical Environmental Concern (ACEC) datalayer shows the location of areas that have been designated ACECs by the Secretary of Environmental Affairs. ACEC designation requires greater environmental review of certain kinds of proposed development under state jurisdiction within the ACEC boundaries. The ACEC Program is administered by the Department of Environmental Management (DEM) on behalf of the Secretary of Environmental Affairs. The Massachusetts Coastal Zone Management (MCZM) Office managed the original Coastal ACEC Program from 1978 to 1993, and continues to play a key role in monitoring coastal ACECs. Procedures for ACEC designation and the general policies governing the effects of designation are contained in the ACEC regulations (301 CMR 12.00). The ACEC datalayer has been compiled by MCZM and DEM and includes both coastal and inland areas.

EPA Designated Sole Source Aquifers

Telephone:
The Sole Source Aquifer datalayer was compiled by the Department of Environmental Protection (DEP) Division of Water Supply (DWS). Seven Sole Source Aquifers have been designated by the US Environmental Protection Agency (EPA) for Massachusetts. A Sole Source Aquifer (SSA) is an aquifer designated by US EPA as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should that aquifer become contaminated. The aquifers were defined by an EPA hydrogeologist.

Aquifers

Telephone:
MassGIS produced an aquifer datalayer composed of 20 individual panels, generally based on the boundaries of the major drainage basins. Areas of high and medium yield were mapped. This datalayer includes polygon attribute coding to help in the identification of areas in which cleanup of hazardous waste sites must meet drinking water standards, as defined in the Massachusetts Contingency Plan (MCP) (310 CMR 40.00000).

Non-Potential Drinking Water Source Areas

Telephone:
Non-Potential Drinking Water Source Areas (NPDWSA) are regulatory in nature representing one of many considerations used in determining the standards to which ground water must be cleaned in the event of a release of oil or hazardous material. NPDWSAs are not based on existing water quality and do not indicate poor ambient conditions.

DEP Approved Zone IIs

Telephone:
The Department of Environmental Protection (DEP) approved Zone IIs datalayer was compiled by the DEP Division of Water Supply (DWS). The database contains 281 approved Zone IIs statewide. As stated in 310 CMR 22.02, a Zone II is 'that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation.) It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone IIs shall extend up gradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary).' These data are used in association with the Public Water Supplies datalayer. The following describes certain unique features of this association.\n - Any proposed new well which will pump at least 100,000 gallons per day must have a Zone II delineation completed and approved by DEP prior to the well coming on line. \n- Additionally, a new source may not be on-line yet, but other, older wells may fall within its Zone II boundary.\n - Further, existing wells must have a Zone II delineated as a condition of receiving a water withdrawal permit under the Water Management Act.

OTHER STATE DATABASE INFORMATION

RADON

State Database: MA Radon
Source: Department of Health
Telephone: 413-586-7525
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Morses Pond
99 Turner Road
Wellesley, MA 02482

Inquiry Number: 8064784.2s
July 31, 2025

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	295
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-13
Physical Setting Source Map Findings	A-15
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

99 TURNER ROAD
WELLESLEY, MA 02482

COORDINATES

Latitude (North):	42.2964750 - 42° 17' 47.31''
Longitude (West):	71.3168750 - 71° 19' 0.75''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	309004.9
UTM Y (Meters):	4685080.0
Elevation:	162 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20230707
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
99 TURNER ROAD
WELLESLEY, MA 02482

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MORSES POND CULVERT	99 TURNER RD	RCRA NonGen / NLR, ICIS, FINDS, ECHO		TP
A2	MORSES POND CULVERT	OFF OF STATE HIGHWAY	SEMS-ARCHIVE, PRP, NY MANIFEST	Higher	1 ft.
B3	MORSES POND OUTLET C	RTE 135	MA SHWS, MA RELEASE, MA ENF	Lower	70, 0.013, SW
B4	MBTA RAIL BRIDGE REP	1 BACON ST	MA HW GEN	Lower	204, 0.039, SW
B5	MBTA RAIL BRIDGE REP	1 BACON ST	RCRA-SQG	Lower	204, 0.039, SW
6	MORSES POND	TURNER RD END OF	MA SHWS, MA RELEASE	Lower	261, 0.049, NE
7	NO LOCATION AID	300 CENTRAL ST	MA SHWS, MA RELEASE	Lower	809, 0.153, East
8	WELLESLEY COLLEGE MA	RTE 135 WASHINGTON S	MA SHWS, MA RELEASE	Higher	1057, 0.200, SW
9	NO LOCATION AID	18 KENDALL RD	MA SHWS, MA LAST, MA RELEASE	Lower	1517, 0.287, NNE
10	PAINTSHOP POND	CENTRAL ST RTE 135	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	2272, 0.430, ESE
11	FORMER ST JAMES THE	900 WORCESTER STREET	MA SHWS, MA RELEASE, MA ASBESTOS, MA TIER 2	Lower	2499, 0.473, North
12	293 WESTON ROAD, WEL	293 WESTON ROAD	MA LAST, MA RELEASE, MA ASBESTOS, MA HW GEN	Lower	2622, 0.497, NNE
C13	376-378-380 CENTRE S	874-878 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2642, 0.500, North
C14	WESTON RD	870 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2655, 0.503, NNE
C15	SUNOCO STATION FMR	870 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2655, 0.503, NNE
C16	SUNOCO STATION	870 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2655, 0.503, NNE
C17	NO LOCATION AID	870 WORCESTER RD	MA SHWS, MA RELEASE	Lower	2687, 0.509, NNE
18	FORMER LEE VOLVO	962 WORCESTER ST	MA SHWS, MA LUST, MA INST CONTROL, MA RELEASE	Lower	2801, 0.530, NNW
19	LILJA SCHOOL	OAK AND BACON STS	MA SHWS, MA RELEASE	Higher	2828, 0.536, WSW
20	FMR RUSSELLS TEXACO	873 WORCESTER ST	MA SHWS, MA RELEASE	Lower	2855, 0.541, NNE
21	NATICK DPW	25 OAK ST	MA SHWS, MA RELEASE	Lower	2923, 0.554, West
D22	NO LOCATION AID	984 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3140, 0.595, NW
23	NO LOCATION AID	965 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3143, 0.595, NNW
D24	984 990 AND 990R WOR	984 990 990R WORCEST	MA SHWS, MA LUST, MA RELEASE	Lower	3152, 0.597, NW
D25	NO LOCATION AID	986 WORCESTER ST	MA SHWS, MA RELEASE, MA HW GEN	Lower	3164, 0.599, NW
D26	OVERBROOK DRIVE	987 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3304, 0.626, NW
D27	SHELL SERVICE STATIO	987 WORCESTER ST	MA SHWS, MA LUST, MA RELEASE	Lower	3304, 0.626, NW
E28	ROUTE 9 WEST	1005 WORCESTER ROAD	MA SHWS, MA LUST, MA RELEASE	Lower	3390, 0.642, NW
E29	999 WORCESTER STREET	999 WORCESTER STREET	MA SHWS, MA RELEASE	Lower	3449, 0.653, NW
E30	MOBIL STATION 01-PG2	1005 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3465, 0.656, NW
E31	PROPERTY	1 WORCESTER ST	MA SHWS, MA RELEASE	Lower	3496, 0.662, NW
F32	NO LOCATION AID	72 BACON ST	MA SHWS, MA RELEASE	Higher	3523, 0.667, WSW
F33	NO LOCATION AID	72 BACON ST	MA SHWS, MA RELEASE	Higher	3523, 0.667, WSW
G34	NORTH 40 PROPERTY	156 WESTON ROAD	MA SHWS, MA RELEASE	Lower	3678, 0.697, East
G35	NORTH 40	156 WESTON ROAD	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	3678, 0.697, East
G36	WELLESLEY COLLEGE CO	156 WESTON ROAD	MA SHWS, MA RELEASE	Lower	3678, 0.697, East
37	WELLESLEY COLLEGE	CENTRAL ST (RTE 135)	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	3803, 0.720, ESE
38	NO LOCATION AID	104 WORCESTER ROAD	MA SHWS, MA RELEASE	Lower	3916, 0.742, NW
39	WHITTIER RD	111 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4225, 0.800, NW

MAPPED SITES SUMMARY

Target Property Address:
99 TURNER ROAD
WELLESLEY, MA 02482

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
H40	KEOHANE SPORTS CENTE	106 CENTRAL STREET	MA SHWS, MA RELEASE	Lower	4415, 0.836, East
H41	WELLESLEY COLLEGE AL	106 CENTRAL ST	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	4415, 0.836, East
H42	WELLESLEY COLLEGE	106 CENTRAL ST	MA SHWS, MA INST CONTROL, MA RELEASE	Lower	4415, 0.836, East
H43	WELLESLEY COLLEGE GA	106 CENTRAL ST	MA SHWS, MA RELEASE	Lower	4415, 0.836, East
H44	WELLESLEY COLLEGE FO	106 CENTRAL ST	EDR MGP	Lower	4415, 0.836, East
I45	PAD MOUNT TRANSFORME	172 WORCESTER STREET	MA SHWS, MA RELEASE	Higher	4421, 0.837, WNW
I46	NO LOCATION AID	172 WORCESTER RD	MA SHWS, MA RELEASE, MA HW GEN	Lower	4563, 0.864, WNW
47	BEHIND BEL CANTO RES	92 CENTRAL ST	MA SHWS, MA LUST, MA RELEASE, MA ASBESTOS	Lower	4714, 0.893, East
J48	FMR SHELL	193 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4797, 0.909, WNW
J49	SHELL SERVICE STATIO	193 WORCESTER ST	MA SHWS, MA RELEASE	Lower	4797, 0.909, WNW
J50	NO LOCATION AID	206 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4831, 0.915, WNW
J51	HESS GAS STATION	207 WORCESTER ST	MA SHWS, MA RELEASE	Lower	4889, 0.926, WNW
J52	MERIT SERVICE STATIO	207 WORCESTER ST	MA SHWS, MA LUST, MA RELEASE	Lower	4889, 0.926, WNW
J53	NO LOCATION AID	207 WORCESTER RD	MA SHWS, MA LUST, MA RELEASE	Lower	4889, 0.926, WNW
J54	RTE 9W @ HESS STA #2	207 WORCESTER RD	MA SHWS, MA RELEASE	Lower	4889, 0.926, WNW
55	RESIDENTIAL PROPERTY	4-8 SERVICE DRIVE	MA SHWS, MA RELEASE	Lower	4896, 0.927, ESE
56	GULF STATION FMR	75 CENTRAL ST	MA SHWS, MA RELEASE	Lower	4941, 0.936, East
K57	NO LOCATION AID	206 218 WORCESTER ST	MA SHWS, MA RELEASE	Lower	4956, 0.939, WNW
J58	SPEEDWAY #2507	207 WORCESTER RD	MA SHWS, MA UST, MA RELEASE	Lower	5012, 0.949, WNW
J59	HESS STATION NO. 215	207 WORCESTER STREET	MA SHWS, MA RELEASE, MA ENF	Lower	5012, 0.949, WNW
K60	NO LOCATION AID	226 WORCESTER RD	MA SHWS, MA RELEASE	Lower	5017, 0.950, WNW
K61	TEXACO STATION	226 WORCESTER RD	MA SHWS, MA RELEASE	Lower	5017, 0.950, WNW
L62	NO LOCATION AID	151 EAST CENTRAL ST	MA SHWS, MA RELEASE	Higher	5174, 0.980, SW
L63	JMH WEST AUTOMOTIVE	151 EAST CENTRAL STR	MA SHWS, MA LUST, MA RELEASE	Higher	5174, 0.980, SW
L64	FRAZZEE AUTOMOTIVE	151 EAST CENTRAL ST	MA SHWS, MA LUST, MA RELEASE	Higher	5174, 0.980, SW
65	PILGRIM RD AT LINWOO	PILGRIM RD	MA SHWS, MA RELEASE	Higher	5192, 0.983, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MORSES POND CULVERT 99 TURNER RD WELLESLEY, MA 02482	RCRA NonGen / NLR EPA ID:: MAR000502724 ICIS FRS ID:: 110012241029 FINDS Registry ID:: 110012241029 ECHO Registry ID: 110012241029	MAR000502724

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 06/26/2025 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MORSES POND CULVERT Site ID: 0103085 EPA Id: MAN000103085	***OFF OF STATE HIGHWAY***	***0 - 1/8 (0.000 mi.)***	***A2***	***8***

Lists of Federal RCRA generators

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 06/02/2025 has revealed that

there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MBTA RAIL BRIDGE REP EPA ID:: MAR000594572	1 BACON ST	SW 0 - 1/8 (0.039 mi.)	B5	9

Lists of state- and tribal hazardous waste facilities

MA SHWS: A review of the MA SHWS list, as provided by EDR, and dated 06/30/2025 has revealed that there are 59 MA SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WELLESLEY COLLEGE MA Current Status: RAO Release Tracking Number: 3-0013455	***RTE 135 WASHINGTON S***	***SW 1/8 - 1/4 (0.200 mi.)***	***8***	***10***
LILJA SCHOOL Current Status: REMOPS Release Tracking Number: 3-0004232	***OAK AND BACON STS***	***WSW 1/2 - 1 (0.536 mi.)***	***19***	***13***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0015880	***72 BACON ST***	***WSW 1/2 - 1 (0.667 mi.)***	***F32***	***18***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0015577	***72 BACON ST***	***WSW 1/2 - 1 (0.667 mi.)***	***F33***	***18***
PAD MOUNT TRANSFORME Current Status: PSNC Release Tracking Number: 3-0037161	***172 WORCESTER STREET***	***WNW 1/2 - 1 (0.837 mi.)***	***I45***	***22***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0011755	***151 EAST CENTRAL ST***	***SW 1/2 - 1 (0.980 mi.)***	***L62***	***28***
JMH WEST AUTOMOTIVE Current Status: PSNC Release Tracking Number: 3-0033930	***151 EAST CENTRAL STR***	***SW 1/2 - 1 (0.980 mi.)***	***L63***	***28***
FRAZZEE AUTOMOTIVE Current Status: WSCPRM Release Tracking Number: 3-0003445	***151 EAST CENTRAL ST***	***SW 1/2 - 1 (0.980 mi.)***	***L64***	***28***
PILGRIM RD AT LINWOO Current Status: RAO Release Tracking Number: 3-0024388	***PILGRIM RD***	***NNE 1/2 - 1 (0.983 mi.)***	***65***	***29***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MORSES POND OUTLET C Current Status: TMPS Release Tracking Number: 3-0011653	***RTE 135***	***SW 0 - 1/8 (0.013 mi.)***	***B3***	***8***
MORSES POND Current Status: RAO Release Tracking Number: 3-0020393	***TURNER RD END OF***	***NE 0 - 1/8 (0.049 mi.)***	***6***	***9***
NO LOCATION AID	***300 CENTRAL ST***	***E 1/8 - 1/4 (0.153 mi.)***	***7***	***9***

Current Status: RAO Release Tracking Number: 3-0021420				
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0023928	***18 KENDALL RD***	***NNE 1/4 - 1/2 (0.287 mi.)***	***9***	***10***
PAINTSHOP POND Current Status: TIERI Release Tracking Number: 3-0000462	***CENTRAL ST RTE 135***	***ESE 1/4 - 1/2 (0.430 mi.)***	***10***	***10***
FORMER ST JAMES THE Current Status: PSNC Release Tracking Number: 3-0032556	***900 WORCESTER STREET***	***N 1/4 - 1/2 (0.473 mi.)***	***11***	***11***
376-378-380 CENTRE S Current Status: DPS Release Tracking Number: 3-0024811	***874-878 WORCESTER ST***	***N 1/2 - 1 (0.500 mi.)***	***C13***	***11***
WESTON RD Current Status: RTNCLOSED Release Tracking Number: 3-0020072	***870 WORCESTER ST***	***NNE 1/2 - 1 (0.503 mi.)***	***C14***	***12***
SUNOCO STATION FMR Current Status: RTNCLOSED Release Tracking Number: 3-0028251	***870 WORCESTER ST***	***NNE 1/2 - 1 (0.503 mi.)***	***C15***	***12***
SUNOCO STATION Current Status: RAO Release Tracking Number: 3-0010169	***870 WORCESTER ST***	***NNE 1/2 - 1 (0.503 mi.)***	***C16***	***12***
NO LOCATION AID Current Status: RTNCLOSED Release Tracking Number: 3-0021473	***870 WORCESTER RD***	***NNE 1/2 - 1 (0.509 mi.)***	***C17***	***13***
FORMER LEE VOLVO Current Status: TMPS Release Tracking Number: 3-0031472	***962 WORCESTER ST***	***NNW 1/2 - 1 (0.530 mi.)***	***18***	***13***
FMR RUSSELLS TEXACO Current Status: RAO Release Tracking Number: 3-0004571	***873 WORCESTER ST***	***NNE 1/2 - 1 (0.541 mi.)***	***20***	***14***
NATICK DPW Current Status: RAO Release Tracking Number: 3-0017210	***25 OAK ST***	***W 1/2 - 1 (0.554 mi.)***	***21***	***14***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0028632	***984 WORCESTER ST***	***NW 1/2 - 1 (0.595 mi.)***	***D22***	***14***
NO LOCATION AID Current Status: RTNCLOSED Release Tracking Number: 3-0018213	***965 WORCESTER ST***	***NNW 1/2 - 1 (0.595 mi.)***	***23***	***15***
984 990 AND 990R WOR Current Status: RAO Release Tracking Number: 3-0028167	***984 990 990R WORCEST***	***NW 1/2 - 1 (0.597 mi.)***	***D24***	***15***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0020491	***986 WORCESTER ST***	***NW 1/2 - 1 (0.599 mi.)***	***D25***	***15***
OVERBROOK DRIVE Current Status: RAO	***987 WORCESTER ST***	***NW 1/2 - 1 (0.626 mi.)***	***D26***	***16***

Release Tracking Number: 3-0015224				
SHELL SERVICE STATIO	***987 WORCESTER ST***	***NW 1/2 - 1 (0.626 mi.)***	***D27***	***16***
Current Status: RAO Release Tracking Number: 3-0002336				
ROUTE 9 WEST	***1005 WORCESTER ROAD***	***NW 1/2 - 1 (0.642 mi.)***	***E28***	***16***
Current Status: REMOPS Release Tracking Number: 3-0032821				
999 WORCESTER STREET	***999 WORCESTER STREET***	***NW 1/2 - 1 (0.653 mi.)***	***E29***	***17***
Current Status: DPS Release Tracking Number: 3-0035056				
MOBIL STATION 01-PG2	***1005 WORCESTER ST***	***NW 1/2 - 1 (0.656 mi.)***	***E30***	***17***
Current Status: RAO Release Tracking Number: 3-0001058				
PROPERTY	***1 WORCESTER ST***	***NW 1/2 - 1 (0.662 mi.)***	***E31***	***17***
Current Status: RAO Release Tracking Number: 3-0002658				
NORTH 40 PROPERTY	***156 WESTON ROAD***	***E 1/2 - 1 (0.697 mi.)***	***G34***	***18***
Current Status: PSNC Release Tracking Number: 3-0032582				
NORTH 40	***156 WESTON ROAD***	***E 1/2 - 1 (0.697 mi.)***	***G35***	***19***
Current Status: PSC Release Tracking Number: 3-0032580				
WELLESLEY COLLEGE CO	***156 WESTON ROAD***	***E 1/2 - 1 (0.697 mi.)***	***G36***	***19***
Current Status: RAO Release Tracking Number: 3-0031682				
WELLESLEY COLLEGE	***CENTRAL ST (RTE 135)***	***ESE 1/2 - 1 (0.720 mi.)***	***37***	***19***
Current Status: PSC Release Tracking Number: 3-0002581				
NO LOCATION AID	***104 WORCESTER ROAD***	***NW 1/2 - 1 (0.742 mi.)***	***38***	***20***
Current Status: RAO Release Tracking Number: 3-0031861				
WHITTIER RD	***111 WORCESTER RD***	***NW 1/2 - 1 (0.800 mi.)***	***39***	***20***
Current Status: RTNCLOSED Release Tracking Number: 3-0019321				
KEOHANE SPORTS CENTE	***106 CENTRAL STREET***	***E 1/2 - 1 (0.836 mi.)***	***H40***	***20***
Current Status: URAM Release Tracking Number: 3-0038523				
WELLESLEY COLLEGE AL	***106 CENTRAL ST***	***E 1/2 - 1 (0.836 mi.)***	***H41***	***21***
Current Status: RAO Release Tracking Number: 3-0013767				
WELLESLEY COLLEGE	***106 CENTRAL ST***	***E 1/2 - 1 (0.836 mi.)***	***H42***	***21***
Current Status: PSC Release Tracking Number: 3-0016983				
WELLESLEY COLLEGE GA	***106 CENTRAL ST***	***E 1/2 - 1 (0.836 mi.)***	***H43***	***21***
Current Status: RTNCLOSED Release Tracking Number: 3-0022331				
NO LOCATION AID	***172 WORCESTER RD***	***WNW 1/2 - 1 (0.864 mi.)***	***I46***	***22***
Current Status: RAO Release Tracking Number: 3-0021351				
BEHIND BEL CANTO RES	***92 CENTRAL ST***	***E 1/2 - 1 (0.893 mi.)***	***47***	***22***

Current Status: RAO Release Tracking Number: 3-0010219				
FMR SHELL Current Status: RAO Release Tracking Number: 3-0012757	***193 WORCESTER RD***	***WNW 1/2 - 1 (0.909 mi.)***	***J48***	***23***
SHELL SERVICE STATIO Current Status: RAO Release Tracking Number: 3-0002307	***193 WORCESTER ST***	***WNW 1/2 - 1 (0.909 mi.)***	***J49***	***23***
NO LOCATION AID Current Status: RTNCLOSED Release Tracking Number: 3-0012880	***206 WORCESTER RD***	***WNW 1/2 - 1 (0.915 mi.)***	***J50***	***24***
HESS GAS STATION Current Status: RAO Release Tracking Number: 3-0024706	***207 WORCESTER ST***	***WNW 1/2 - 1 (0.926 mi.)***	***J51***	***24***
MERIT SERVICE STATIO Current Status: TMPS Release Tracking Number: 3-0004523	***207 WORCESTER ST***	***WNW 1/2 - 1 (0.926 mi.)***	***J52***	***24***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0015414	***207 WORCESTER RD***	***WNW 1/2 - 1 (0.926 mi.)***	***J53***	***25***
RTE 9W @ HESS STA #2 Current Status: RAO Release Tracking Number: 3-0026404	***207 WORCESTER RD***	***WNW 1/2 - 1 (0.926 mi.)***	***J54***	***25***
RESIDENTIAL PROPERTY Current Status: RAO Release Tracking Number: 3-0031161	***4-8 SERVICE DRIVE***	***ESE 1/2 - 1 (0.927 mi.)***	***55***	***25***
GULF STATION FMR Current Status: RAO Release Tracking Number: 3-0001794	***75 CENTRAL ST***	***E 1/2 - 1 (0.936 mi.)***	***56***	***26***
NO LOCATION AID Current Status: RTNCLOSED Release Tracking Number: 3-0014159	***206 218 WORCESTER ST***	***WNW 1/2 - 1 (0.939 mi.)***	***K57***	***26***
SPEEDWAY #2507 Current Status: TMPS Release Tracking Number: 3-0032656	***207 WORCESTER RD***	***WNW 1/2 - 1 (0.949 mi.)***	***J58***	***26***
HESS STATION NO. 215 Current Status: RTNCLOSED Release Tracking Number: 3-0031773	***207 WORCESTER STREET***	***WNW 1/2 - 1 (0.949 mi.)***	***J59***	***27***
NO LOCATION AID Current Status: RAO Release Tracking Number: 3-0023995	***226 WORCESTER RD***	***WNW 1/2 - 1 (0.950 mi.)***	***K60***	***27***
TEXACO STATION Current Status: RTNCLOSED Release Tracking Number: 3-0013240	***226 WORCESTER RD***	***WNW 1/2 - 1 (0.950 mi.)***	***K61***	***27***

EXECUTIVE SUMMARY

Lists of state and tribal leaking storage tanks

MA LAST: A review of the MA LAST list, as provided by EDR, and dated 06/30/2025 has revealed that there are 2 MA LAST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NO LOCATION AID	***18 KENDALL RD***	***NNE 1/4 - 1/2 (0.287 mi.)***	***9***	***10***
Release Tracking Number / Current Status: 3-0023928 / RAO				
293 WESTON ROAD, WEL	***293 WESTON ROAD***	***NNE 1/4 - 1/2 (0.497 mi.)***	***12***	***11***
Release Tracking Number / Current Status: 3-0050297 / UNCLSS				

State and tribal institutional control / engineering control registries

MA INST CONTROL: A review of the MA INST CONTROL list, as provided by EDR, and dated 06/30/2025 has revealed that there is 1 MA INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PAINTSHOP POND	***CENTRAL ST RTE 135***	***ESE 1/4 - 1/2 (0.430 mi.)***	***10***	***10***
Release Tracking Number: 3-0000462				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

MA HW GEN: A review of the MA HW GEN list, as provided by EDR, and dated 03/07/2025 has revealed that there is 1 MA HW GEN site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MBTA RAIL BRIDGE REP	1 BACON ST	SW 0 - 1/8 (0.039 mi.)	B4	9
State Generator Status: SQG-MA				
EPA Id: MAR000594572				

NY MANIFEST: A review of the NY MANIFEST list, as provided by EDR, and dated 12/31/2019 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MORSES POND CULVERT	***OFF OF STATE HIGHWAY***	***0 - 1/8 (0.000 mi.)***	***A2***	***8***
EPA ID: MAN000103085				

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WELLESLEY COLLEGE FO	106 CENTRAL ST	E 1/2 - 1 (0.836 mi.)	H44	22

Count: 24 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NATICK	S126024658	REAR OF GASOLINE STATION	207, 233 & 251 WORCESTER STREE	01760	MA SHWS, MA RELEASE
NATICK	S105522204	NO LOCATION AID	157 CENTRAL ST	01760	MA SHWS, MA RELEASE
NATICK	S127336059	NATICK SERVICE PLAZA EASTBOUND	I-90 EB SERVICE PLAZA	01760	MA SHWS, MA RELEASE
NATICK	S106775835	NATICK SERVICE PLAZA 8E	MASSACHUSETTS TPKE E MM 117 6	01760	MA SHWS, MA RELEASE
NATICK	S106953952	NATICK SERVICE PLAZA 8E MM 117.6	MASSACHUSETTS TPKE E	01760	MA SHWS, MA RELEASE
NATICK	S105596553	NORTH ACCESS DRIVEWAY	STRATHMORE RD NEAR 9	01760	MA SHWS, MA RELEASE, MA ENF
NATICK	S109489733	REAR OF 123 OAK ST LOTS 5, 6, 7 &	WELLESLEY ROAD EXT	01760	MA SHWS, MA RELEASE
NATICK	S102507419	REAR OF 123 OAK ST	WELLESLEY ROAD EXT	01760	MA SHWS, MA RELEASE
NATICK	S118947386	WILLOW AND MECHANIC STREETS	17-19 WILLOW & 4-6 MECHANIC ST	01760	MA SHWS, MA LUST, MA RELEASE
NATICK	S126024502	PROPERTY	WORCESTER & NORTH MAIN STREETS	01760	MA SHWS, MA LUST, MA RELEASE
WELLESLEY	S118337340	PARK MANOR WEST	BABSON COLLEGE DRIVE		MA SHWS, MA RELEASE
WELLESLEY	S116358044	NO LOCATION AID	CENTRAL STREET, ROUTE 135	02482	MA SHWS, MA RELEASE
WELLESLEY	S132537256	SPRAGUE SCHOOL	79 OAK ST	02481	MA SHWS, MA RELEASE
WELLESLEY	S132537835	SPRAGUE SCHOOL ATHLETIC FIELDS	79 OAK ST	02481	MA SHWS, MA INST CONTROL, MA RELEASE
WELLESLEY	S115031764	MORSES POND	TURNER RD END OF		MA RGA HWS
WELLESLEY	S108640863	MORSES POND WATER TREATMENT PLANT	100 TURNER RD	02481	MA AST
WELLESLEY	S132541300	NO LOCATION AID	29 WASHINGTON STREET		MA SHWS, MA INST CONTROL, MA RELEASE
WELLESLEY	S132541395	WELLESLEY OFFICE PARK	29 WASHINGTON STREET	02482	MA SHWS, MA RELEASE
WELLESLEY	S132541721	WELLESLEY OFFICE	29 WASHINGTON STREET	02482	MA SHWS, MA RELEASE
WELLESLEY	S132121968	ROADWAY IN FRONT OF 272	WASHINGTON STREET	02481	MA SHWS, MA RELEASE
WELLESLEY	S132539591	GULF STA	461 WORCESTER ST		MA LUST, MA RELEASE
WELLESLEY	S132537611	RTE 9 W	461 WORCESTER ST		MA SHWS, MA LUST, MA RELEASE
WELLESLEY	S132531947	GULF STATION	461 WORCESTER ST		MA LUST, MA RELEASE
WELLESLEY	S132540326	CUMBERLAND FARMS	461 WORCESTER RD		MA SHWS, MA RELEASE

OVERVIEW MAP - 8064784.2S

0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Morses Pond ADDRESS: 99 Turner Road Wellesley MA 02482 LAT/LONG: 42.296475 / 71.316875	CLIENT: Weston and Sampson Engineers CONTACT: Melissa Davis INQUIRY #: 8064784.2s DATE: July 31, 2025 1:39 pm

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DETAIL MAP - 8064784.2S

0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Morses Pond ADDRESS: 99 Turner Road Wellesley MA 02482 LAT/LONG: 42.296475 / 71.316875	CLIENT: Weston and Sampson Engineers CONTACT: Melissa Davis INQUIRY #: 8064784.2s DATE: July 31, 2025 1:41 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		1	0	0	NR	NR	1
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	0	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
MA SHWS	1.000		2	2	3	52	NR	59
Lists of state and tribal landfills and solid waste disposal facilities								
MA SWF/LF	0.500		0	0	0	NR	NR	0
Lists of state and tribal leaking storage tanks								
MA LAST	0.500		0	0	2	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MA LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
MA UST	0.250		0	0	NR	NR	NR	0
MA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
MA INST CONTROL	0.500		0	0	1	NR	NR	1
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
MA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
MA LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
MA RELEASE	TP		NR	NR	NR	NR	NR	0
MA SPILLS	TP		NR	NR	NR	NR	NR	0
MA SPILLS 90	TP		NR	NR	NR	NR	NR	0
MA SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	0	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP	1	NR	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST FINDER	0.250		0	0	NR	NR	NR	0
E MANIFEST	0.250		0	0	NR	NR	NR	0
MA PFAS	0.250		0	0	NR	NR	NR	0
MA AIRS	TP		NR	NR	NR	NR	NR	0
MA ASBESTOS	TP		NR	NR	NR	NR	NR	0
MA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MA ENF	TP		NR	NR	NR	NR	NR	0
MA Financial Assurance	TP		NR	NR	NR	NR	NR	0
MA GWDP	TP		NR	NR	NR	NR	NR	0
MA HW GEN	0.250		1	0	NR	NR	NR	1
NY MANIFEST	0.250		1	0	NR	NR	NR	1
MA MERCURY	0.500		0	0	0	NR	NR	0
MA NPDES	TP		NR	NR	NR	NR	NR	0
MA TIER 2	TP		NR	NR	NR	NR	NR	0
MA TSD	0.500		0	0	0	NR	NR	0
MA UIC	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	1	NR	1
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
MA RGA HWS	TP		NR	NR	NR	NR	NR	0
MA RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		4	6	2	6	53	0	71

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property

MORSES POND CULVERT SITE
99 TURNER RD
WELLESLEY, MA 02482

RCRA NonGen / NLR **1004718665**
ICIS **MAR000502724**
FINDS
ECHO

Actual:
162 ft.

Click here for full text details

RCRA NonGen / NLR
EPA Id MAR000502724

ICIS
FRS ID: 110012241029

FINDS
Registry ID: 110012241029

ECHO
Registry ID 110012241029

A2

< 1/8
1 ft.

MORSES POND CULVERT
OFF OF STATE HIGHWAY 135
WELLESLEY, MA 02181

SEMS-ARCHIVE **1003072928**
PRP **MAN000103085**
NY MANIFEST

Relative:
Higher

Click here for full text details

SEMS-ARCHIVE
Site ID 0103085
EPA Id MAN000103085

NY MANIFEST
EPA ID MAN000103085

B3
SW
< 1/8
0.013 mi.
70 ft.

MORSES POND OUTLET CULVERT 1 BACON ST
RTE 135
WELLESLEY, MA 02181

MA SHWS **S103811523**
MA RELEASE **N/A**
MA ENF

Relative:
Lower

Click here for full text details

MA SHWS
Current Status TMPS
Release Tracking Number 3-0011653

MA RELEASE
Release Tracking Number / Current Status 3-0011653 / TMPS

Click here to access the MA DEP site for this facility

MA ENF
Program Id 3-0011653

B4
SW
< 1/8
0.039 mi.
204 ft.

Relative:
Lower

MBTA RAIL BRIDGE REPLC W13 011 893MP1607
1 BACON ST
WELLESLEY, MA 02482

MA HW GEN **S127573889**
N/A

Click here for full text details

MA HW GEN
State Generator Status SQG-MA
EPA Id MAR000594572

B5
SW
< 1/8
0.039 mi.
204 ft.

Relative:
Lower

MBTA RAIL BRIDGE REPLC W13 011 893MP1607
1 BACON ST
WELLESLEY, MA 02482

RCRA-SQG **1026831823**
MAR000594572

Click here for full text details

RCRA-SQG
EPA Id MAR000594572

6
NE
< 1/8
0.049 mi.
261 ft.

Relative:
Lower

MORSES POND
TURNER RD END OF
WELLESLEY, MA 02481

MA SHWS **S104941941**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0020393

MA RELEASE
Release Tracking Number / Current Status 3-0020393 / RAO

Click here to access the MA DEP site for this facility

7
East
1/8-1/4
0.153 mi.
809 ft.

Relative:
Lower

NO LOCATION AID
300 CENTRAL ST
WELLESLEY, MA

MA SHWS **S132537244**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0021420

MA RELEASE
Release Tracking Number / Current Status 3-0021420 / RAO

Click here to access the MA DEP site for this facility

8
SW
1/8-1/4
0.200 mi.
1057 ft.

Relative:
Higher

WELLESLEY COLLEGE MAIN ENTRANCE
RTE 135 WASHINGTON ST
WELLESLEY, MA 02181

MA SHWS **S103811662**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0013455

MA RELEASE
Release Tracking Number / Current Status 3-0013455 / RAO

Click here to access the MA DEP site for this facility

9
NNE
1/4-1/2
0.287 mi.
1517 ft.

Relative:
Lower

NO LOCATION AID
18 KENDALL RD
WELLESLEY, MA 02482

MA SHWS **S106775741**
MA LAST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0023928

MA LAST
Release Tracking Number / Current Status 3-0023928 / RAO

MA RELEASE
Release Tracking Number / Current Status 3-0023928 / RAO

Click here to access the MA DEP site for this facility

10
ESE
1/4-1/2
0.430 mi.
2272 ft.

Relative:
Lower

PAINTSHOP POND
CENTRAL ST RTE 135
WELLESLEY, MA

MA SHWS **S100829944**
MA INST CONTROL **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status TIERI
Release Tracking Number 3-0000462

MA INST CONTROL
Release Tracking Number 3-0000462

MA RELEASE
Release Tracking Number / Current Status 3-0000462 / TIERI

Click here to access the MA DEP site for this facility

11
North
1/4-1/2
0.473 mi.
2499 ft.

Relative:
Lower

FORMER ST JAMES THE GREAT CHURCH
900 WORCESTER STREET
WELLESLEY, MA 02482

MA SHWS **S117405673**
MA RELEASE **N/A**
MA ASBESTOS
MA TIER 2

Click here for full text details

MA SHWS
Current Status PSNC
Release Tracking Number 3-0032556

MA RELEASE
Release Tracking Number / Current Status 3-0032556 / PSNC

Click here to access the MA DEP site for this facility

MA TIER 2
Facility Id FATR2020000000050338
Facility Id 11569

12
NNE
1/4-1/2
0.497 mi.
2622 ft.

Relative:
Lower

293 WESTON ROAD, WELLESLEY
293 WESTON ROAD
WELLESLEY, MA 02482

MA LAST **S119955509**
MA RELEASE **N/A**
MA ASBESTOS
MA HW GEN

Click here for full text details

MA LAST
Release Tracking Number / Current Status 3-0050297 / UNCLSS

MA RELEASE
Release Tracking Number / Current Status 3-0050297 / UNCLSS

Click here to access the MA DEP site for this facility

MA HW GEN
State Generator Status SQG-MA
EPA Id MAR000640573

C13
North
1/2-1
0.500 mi.
2642 ft.

Relative:
Lower

376-378-380 CENTRE STREET REALTY TRUST
874-878 WORCESTER ST
WELLESLEY, MA

MA SHWS **S106953968**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status DPS
Release Tracking Number 3-0024811

MA RELEASE
Release Tracking Number / Current Status 3-0024811 / DPS

376-378-380 CENTRE STREET REALTY TRUST (Continued) **S106953968**

Click here to access the MA DEP site for this facility

C14
NNE
1/2-1
0.503 mi.
2655 ft.

Relative:
Lower

WESTON RD
870 WORCESTER ST
WELLESLEY, MA

MA SHWS **S132536649**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0020072

MA RELEASE
Release Tracking Number / Current Status 3-0020072 / RTNCLOSED

Click here to access the MA DEP site for this facility

C15
NNE
1/2-1
0.503 mi.
2655 ft.

Relative:
Lower

SUNOCO STATION FMR
870 WORCESTER ST
WELLESLEY, MA 02181

MA SHWS **S132539969**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0028251

MA RELEASE
Release Tracking Number / Current Status 3-0028251 / RTNCLOSED

Click here to access the MA DEP site for this facility

C16
NNE
1/2-1
0.503 mi.
2655 ft.

Relative:
Lower

SUNOCO STATION
870 WORCESTER ST
WELLESLEY, MA 02181

MA SHWS **S132533038**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0010169

MA RELEASE
Release Tracking Number / Current Status 3-0010169 / RAO

Click here to access the MA DEP site for this facility

C17
NNE
1/2-1
0.509 mi.
2687 ft.

Relative:
Lower

NO LOCATION AID
870 WORCESTER RD
WELLESLEY, MA

MA SHWS **S132537265**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0021473

MA RELEASE
Release Tracking Number / Current Status 3-0021473 / RTNCLOSED

Click here to access the MA DEP site for this facility

18
NNW
1/2-1
0.530 mi.
2801 ft.

Relative:
Lower

FORMER LEE VOLVO
962 WORCESTER ST
WELLESLEY, MA 02482

MA SHWS **S132541177**
MA LUST **N/A**
MA INST CONTROL
MA RELEASE

Click here for full text details

MA SHWS
Current Status TMPS
Release Tracking Number 3-0031472

MA LUST
Release Tracking Number / Current Status 3-0031472 / TMPS

Click here to access the MA DEP site for this facility

MA INST CONTROL
Release Tracking Number 3-0031472

MA RELEASE
Release Tracking Number / Current Status 3-0031472 / TMPS

Click here to access the MA DEP site for this facility

19
WSW
1/2-1
0.536 mi.
2828 ft.

Relative:
Higher

LILJA SCHOOL
OAK AND BACON STS
NATICK, MA 01760

MA SHWS **1004517659**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status REMOPS
Release Tracking Number 3-0004232

MA RELEASE
Release Tracking Number / Current Status 3-0004232 / REMOPS

LILJA SCHOOL (Continued) **1004517659**

Click here to access the MA DEP site for this facility

20
NNE
1/2-1
0.541 mi.
2855 ft.

Relative:
Lower

FMR RUSSELLS TEXACO SERVICE STATION **MA SHWS** **S113411665**
873 WORCESTER ST **MA RELEASE** **N/A**
WELLESLEY, MA 02181

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0004571

MA RELEASE
Release Tracking Number / Current Status 3-0004571 / RAO

Click here to access the MA DEP site for this facility

21
West
1/2-1
0.554 mi.
2923 ft.

Relative:
Lower

NATICK DPW **MA SHWS** **S103383839**
25 OAK ST **MA RELEASE** **N/A**
NATICK, MA 01760

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0017210

MA RELEASE
Release Tracking Number / Current Status 3-0017210 / RAO

Click here to access the MA DEP site for this facility

D22
NW
1/2-1
0.595 mi.
3140 ft.

Relative:
Lower

NO LOCATION AID **MA SHWS** **S132540122**
984 WORCESTER ST **MA RELEASE** **N/A**
WELLESLEY, MA 02482

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0028632

MA RELEASE
Release Tracking Number / Current Status 3-0028632 / RAO

Click here to access the MA DEP site for this facility

23
NNW
1/2-1
0.595 mi.
3143 ft.

Relative:
Lower

NO LOCATION AID
965 WORCESTER ST
WELLESLEY, MA 02481

MA SHWS **S132535834**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0018213

MA RELEASE
Release Tracking Number / Current Status 3-0018213 / RTNCLOSED

Click here to access the MA DEP site for this facility

D24
NW
1/2-1
0.597 mi.
3152 ft.

Relative:
Lower

984 990 AND 990R WORCESTER ST
984 990 990R WORCESTER ST
WELLESLEY, MA 02482

MA SHWS **S109489268**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0028167

MA LUST
Release Tracking Number / Current Status 3-0028167 / RAO

Click here to access the MA DEP site for this facility

MA RELEASE
Release Tracking Number / Current Status 3-0028167 / RAO

Click here to access the MA DEP site for this facility

D25
NW
1/2-1
0.599 mi.
3164 ft.

Relative:
Lower

NO LOCATION AID
986 WORCESTER ST
WELLESLEY, MA 02481

MA SHWS **S104942008**
MA RELEASE **N/A**
MA HW GEN

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0020491

MA RELEASE
Release Tracking Number / Current Status 3-0020491 / RAO

Click here to access the MA DEP site for this facility

MA HW GEN

NO LOCATION AID (Continued) **S104942008**

EPA Id MAD019692748

D26
NW
1/2-1
0.626 mi.
3304 ft.

Relative:
Lower

OVERBROOK DRIVE
987 WORCESTER ST
WELLESLEY, MA 02181

MA SHWS **S132534760**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0015224

MA RELEASE
Release Tracking Number / Current Status 3-0015224 / RAO

Click here to access the MA DEP site for this facility

D27
NW
1/2-1
0.626 mi.
3304 ft.

Relative:
Lower

SHELL SERVICE STATION
987 WORCESTER ST
WELLESLEY, MA 02482

MA SHWS **S132532233**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0002336

MA LUST
Release Tracking Number / Current Status 3-0002336 / RAO

Click here to access the MA DEP site for this facility

MA RELEASE
Release Tracking Number / Current Status 3-0002336 / RAO

Click here to access the MA DEP site for this facility

E28
NW
1/2-1
0.642 mi.
3390 ft.

Relative:
Lower

ROUTE 9 WEST
1005 WORCESTER ROAD
WELLESLEY, MA 02482

MA SHWS **S132541670**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status REMOPS
Release Tracking Number 3-0032821

MA LUST

ROUTE 9 WEST (Continued) **S132541670**

Release Tracking Number / Current Status 3-0032821 / REMOPS

Click here to access the MA DEP site for this facility

MA RELEASE

Release Tracking Number / Current Status 3-0032821 / REMOPS

Click here to access the MA DEP site for this facility

E29
NW
1/2-1
0.653 mi.
3449 ft.

Relative:
Lower

999 WORCESTER STREET **MA SHWS** **S123244298**
999 WORCESTER STREET **MA RELEASE** **N/A**
WELLESLEY, MA 02457

Click here for full text details

MA SHWS

Current Status DPS
Release Tracking Number 3-0035056

MA RELEASE

Release Tracking Number / Current Status 3-0035056 / DPS

Click here to access the MA DEP site for this facility

E30
NW
1/2-1
0.656 mi.
3465 ft.

Relative:
Lower

MOBIL STATION 01-PG2 **MA SHWS** **S132531877**
1005 WORCESTER ST **MA RELEASE** **N/A**
WELLESLEY, MA 02482

Click here for full text details

MA SHWS

Current Status RAO
Release Tracking Number 3-0001058

MA RELEASE

Release Tracking Number / Current Status 3-0001058 / RAO

Click here to access the MA DEP site for this facility

E31
NW
1/2-1
0.662 mi.
3496 ft.

Relative:
Lower

PROPERTY **MA SHWS** **S100829253**
1 WORCESTER ST **MA RELEASE** **N/A**
NATICK, MA 01760

Click here for full text details

MA SHWS

Current Status RAO
Release Tracking Number 3-0002658

MA RELEASE

PROPERTY (Continued) **S100829253**

Release Tracking Number / Current Status 3-0002658 / RAO

Click here to access the MA DEP site for this facility

F32
WSW
1/2-1
0.667 mi.
3523 ft.

Relative:
Higher

NO LOCATION AID **MA SHWS** **S132535018**
72 BACON ST **MA RELEASE** **N/A**
NATICK, MA 01760

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0015880

MA RELEASE
Release Tracking Number / Current Status 3-0015880 / RAO

Click here to access the MA DEP site for this facility

F33
WSW
1/2-1
0.667 mi.
3523 ft.

Relative:
Higher

NO LOCATION AID **MA SHWS** **S132534902**
72 BACON ST **MA RELEASE** **N/A**
NATICK, MA 01760

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0015577

MA RELEASE
Release Tracking Number / Current Status 3-0015577 / RAO

Click here to access the MA DEP site for this facility

G34
East
1/2-1
0.697 mi.
3678 ft.

Relative:
Lower

NORTH 40 PROPERTY **MA SHWS** **S132541575**
156 WESTON ROAD **MA RELEASE** **N/A**
WELLESLEY, MA 02482

Click here for full text details

MA SHWS
Current Status PSNC
Release Tracking Number 3-0032582

MA RELEASE
Release Tracking Number / Current Status 3-0032582 / PSNC

Click here to access the MA DEP site for this facility

G35
East
1/2-1
0.697 mi.
3678 ft.

Relative:
Lower

NORTH 40
156 WESTON ROAD
WELLESLEY, MA 02482

MA SHWS **S132541574**
MA INST CONTROL **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status PSC
Release Tracking Number 3-0032580

MA INST CONTROL
Release Tracking Number 3-0032580

MA RELEASE
Release Tracking Number / Current Status 3-0032580 / PSC

Click here to access the MA DEP site for this facility

G36
East
1/2-1
0.697 mi.
3678 ft.

Relative:
Lower

WELLESLEY COLLEGE COMMUNITY GARDEN
156 WESTON ROAD
WELLESLEY, MA 02481

MA SHWS **S132541253**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0031682

MA RELEASE
Release Tracking Number / Current Status 3-0031682 / RAO

Click here to access the MA DEP site for this facility

37
ESE
1/2-1
0.720 mi.
3803 ft.

Relative:
Lower

WELLESLEY COLLEGE
CENTRAL ST (RTE 135)
WELLESLEY, MA 02481

MA SHWS **S100829946**
MA INST CONTROL **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status PSC
Release Tracking Number 3-0002581

MA INST CONTROL
Release Tracking Number 3-0002581

MA RELEASE
Release Tracking Number / Current Status 3-0002581 / PSC

Click here to access the MA DEP site for this facility

38
NW
1/2-1
0.742 mi.
3916 ft.

Relative:
Lower

NO LOCATION AID
104 WORCESTER ROAD
NATICK, MA 01760

MA SHWS **S132541307**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0031861

MA RELEASE
Release Tracking Number / Current Status 3-0031861 / RAO

Click here to access the MA DEP site for this facility

39
NW
1/2-1
0.800 mi.
4225 ft.

Relative:
Lower

WHITTIER RD
111 WORCESTER RD
NATICK, MA 01760

MA SHWS **S121826532**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0019321

MA RELEASE
Release Tracking Number / Current Status 3-0019321 / RTNCLOSED

Click here to access the MA DEP site for this facility

H40
East
1/2-1
0.836 mi.
4415 ft.

Relative:
Lower

KEOHANE SPORTS CENTER/WELLESLEY COLLEGE
106 CENTRAL STREET
WELLESLEY, MA 02482

MA SHWS **S132543567**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status URAM
Release Tracking Number 3-0038523

MA RELEASE
Release Tracking Number / Current Status 3-0038523 / URAM

Click here to access the MA DEP site for this facility

H41
East
1/2-1
0.836 mi.
4415 ft.

Relative:
Lower

WELLESLEY COLLEGE ALUMNAE HALL
106 CENTRAL ST
WELLESLEY, MA 02181

MA SHWS **S132534225**
MA INST CONTROL **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0013767

MA INST CONTROL
Release Tracking Number 3-0013767

MA RELEASE
Release Tracking Number / Current Status 3-0013767 / RAO

Click here to access the MA DEP site for this facility

H42
East
1/2-1
0.836 mi.
4415 ft.

Relative:
Lower

WELLESLEY COLLEGE
106 CENTRAL ST
WELLESLEY, MA 02181

MA SHWS **S132535322**
MA INST CONTROL **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status PSC
Release Tracking Number 3-0016983

MA INST CONTROL
Release Tracking Number 3-0016983

MA RELEASE
Release Tracking Number / Current Status 3-0016983 / PSC

Click here to access the MA DEP site for this facility

H43
East
1/2-1
0.836 mi.
4415 ft.

Relative:
Lower

WELLESLEY COLLEGE GAS PLANT SITE
106 CENTRAL ST
WELLESLEY, MA

MA SHWS **S132537622**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0022331

MA RELEASE
Release Tracking Number / Current Status 3-0022331 / RTNCLOSED

Click here to access the MA DEP site for this facility

H44
East
1/2-1
0.836 mi.
4415 ft.

Relative:
Lower

WELLESLEY COLLEGE FORMER MGP
106 CENTRAL ST
WELLESLEY, MA

EDR MGP

1012008466
N/A

Click here for full text details

I45
WNW
1/2-1
0.837 mi.
4421 ft.

Relative:
Higher

PAD MOUNT TRANSFORMER AT SCRUB-A-DUB
172 WORCESTER STREET
NATICK, MA 02090

MA SHWS
MA RELEASE

S128182806
N/A

Click here for full text details

MA SHWS
Current Status PSNC
Release Tracking Number 3-0037161

MA RELEASE
Release Tracking Number / Current Status 3-0037161 / PSNC

Click here to access the MA DEP site for this facility

I46
WNW
1/2-1
0.864 mi.
4563 ft.

Relative:
Lower

NO LOCATION AID
172 WORCESTER RD
NATICK, MA 01760

MA SHWS
MA RELEASE
MA HW GEN

S105200221
N/A

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0021351

MA RELEASE
Release Tracking Number / Current Status 3-0021351 / RAO

Click here to access the MA DEP site for this facility

MA HW GEN
State Generator Status VQG-MA
EPA Id MAR000538884

47
East
1/2-1
0.893 mi.
4714 ft.

Relative:
Lower

BEHIND BEL CANTO RESTAURANT
92 CENTRAL ST
WELLESLEY, MA 02181

MA SHWS
MA LUST
MA RELEASE
MA ASBESTOS

S102084984
N/A

Click here for full text details

MA SHWS
Current Status RAO

BEHIND BEL CANTO RESTAURANT (Continued) **S102084984**

Release Tracking Number 3-0010219

MA LUST
Release Tracking Number / Current Status 3-0010219 / RAO

Click here to access the MA DEP site for this facility

MA RELEASE
Release Tracking Number / Current Status 3-0010219 / RAO

Click here to access the MA DEP site for this facility

J48 **FMR SHELL** **MA SHWS** **S132533853**
WNW **193 WORCESTER RD** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.909 mi.
4797 ft.

Relative:
Lower

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0012757

MA RELEASE
Release Tracking Number / Current Status 3-0012757 / RAO

Click here to access the MA DEP site for this facility

J49 **SHELL SERVICE STATION** **MA SHWS** **S132532220**
WNW **193 WORCESTER ST** **MA RELEASE** **N/A**
1/2-1 **NATICK, MA 01760**
0.909 mi.
4797 ft.

Relative:
Lower

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0002307

MA RELEASE
Release Tracking Number / Current Status 3-0002307 / RAO

Click here to access the MA DEP site for this facility

J50
WNW
1/2-1
0.915 mi.
4831 ft.

Relative:
Lower

NO LOCATION AID
206 WORCESTER RD
NATICK, MA 01760

MA SHWS **S102086974**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0012880

MA RELEASE
Release Tracking Number / Current Status 3-0012880 / RTNCLOSED

Click here to access the MA DEP site for this facility

J51
WNW
1/2-1
0.926 mi.
4889 ft.

Relative:
Lower

HESS GAS STATION
207 WORCESTER ST
NATICK, MA 01760

MA SHWS **S132538522**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0024706

MA RELEASE
Release Tracking Number / Current Status 3-0024706 / RAO

Click here to access the MA DEP site for this facility

J52
WNW
1/2-1
0.926 mi.
4889 ft.

Relative:
Lower

MERIT SERVICE STATION
207 WORCESTER ST
NATICK, MA 01760

MA SHWS **S132532862**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status TMPS
Release Tracking Number 3-0004523

MA LUST
Release Tracking Number / Current Status 3-0004523 / TMPS

Click here to access the MA DEP site for this facility

MA RELEASE
Release Tracking Number / Current Status 3-0004523 / TMPS

Click here to access the MA DEP site for this facility

J53
WNW
1/2-1
0.926 mi.
4889 ft.

Relative:
Lower

NO LOCATION AID
207 WORCESTER RD
NATICK, MA 01760

MA SHWS **S132534838**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0015414

MA LUST
Release Tracking Number / Current Status 3-0015414 / RAO

Click here to access the MA DEP site for this facility

MA RELEASE
Release Tracking Number / Current Status 3-0015414 / RAO

Click here to access the MA DEP site for this facility

J54
WNW
1/2-1
0.926 mi.
4889 ft.

Relative:
Lower

RTE 9W @ HESS STA #21515
207 WORCESTER RD
NATICK, MA 01760

MA SHWS **S132539201**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0026404

MA RELEASE
Release Tracking Number / Current Status 3-0026404 / RAO

Click here to access the MA DEP site for this facility

55
ESE
1/2-1
0.927 mi.
4896 ft.

Relative:
Lower

RESIDENTIAL PROPERTY
4-8 SERVICE DRIVE
WELLESLEY, MA 02482

MA SHWS **S112288332**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0031161

MA RELEASE
Release Tracking Number / Current Status 3-0031161 / RAO

Click here to access the MA DEP site for this facility

56
East
1/2-1
0.936 mi.
4941 ft.

Relative:
Lower

GULF STATION FMR
75 CENTRAL ST
WELLESLEY, MA 02181

MA SHWS **S105199426**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0001794

MA RELEASE
Release Tracking Number / Current Status 3-0001794 / RAO

Click here to access the MA DEP site for this facility

K57
WNW
1/2-1
0.939 mi.
4956 ft.

Relative:
Lower

NO LOCATION AID
206 218 WORCESTER ST
NATICK, MA 01760

MA SHWS **S105810959**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0014159

MA RELEASE
Release Tracking Number / Current Status 3-0014159 / RTNCLOSED

Click here to access the MA DEP site for this facility

J58
WNW
1/2-1
0.949 mi.
5012 ft.

Relative:
Lower

SPEEDWAY #2507
207 WORCESTER RD
NATICK, MA 01760

MA SHWS **U003132384**
MA UST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status TMPS
Release Tracking Number 3-0032656

MA UST
Facility Id 10608
Tank Status Tank Removed
Tank Status In Use

MA RELEASE
Release Tracking Number / Current Status 3-0032656 / TMPS

Click here to access the MA DEP site for this facility

J59
WNW
1/2-1
0.949 mi.
5012 ft.

Relative:
Lower

HESS STATION NO. 21515
207 WORCESTER STREET
NATICK, MA

MA SHWS **S114004830**
MA RELEASE **N/A**
MA ENF

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0031773

MA RELEASE
Release Tracking Number / Current Status 3-0031773 / RTNCLOSED

Click here to access the MA DEP site for this facility

MA ENF
Program Id 3-0031773

K60
WNW
1/2-1
0.950 mi.
5017 ft.

Relative:
Lower

NO LOCATION AID
226 WORCESTER RD
NATICK, MA 01760

MA SHWS **S132538256**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0023995

MA RELEASE
Release Tracking Number / Current Status 3-0023995 / RAO

Click here to access the MA DEP site for this facility

K61
WNW
1/2-1
0.950 mi.
5017 ft.

Relative:
Lower

TEXACO STATION
226 WORCESTER RD
NATICK, MA 01760

MA SHWS **S132534032**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RTNCLOSED
Release Tracking Number 3-0013240

MA RELEASE
Release Tracking Number / Current Status 3-0013240 / RTNCLOSED

Click here to access the MA DEP site for this facility

L62
SW
1/2-1
0.980 mi.
5174 ft.

Relative:
Higher

NO LOCATION AID
151 EAST CENTRAL ST
NATICK, MA 01760

MA SHWS **S132533517**
MA RELEASE **N/A**

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0011755

MA RELEASE
Release Tracking Number / Current Status 3-0011755 / RAO

Click here to access the MA DEP site for this facility

L63
SW
1/2-1
0.980 mi.
5174 ft.

Relative:
Higher

JMH WEST AUTOMOTIVE REPAIR
151 EAST CENTRAL STREET
NATICK, MA 01760

MA SHWS **S132542101**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status PSNC
Release Tracking Number 3-0033930

MA LUST
Release Tracking Number / Current Status 3-0033930 / PSNC

Click here to access the MA DEP site for this facility

MA RELEASE
Release Tracking Number / Current Status 3-0033930 / PSNC

Click here to access the MA DEP site for this facility

L64
SW
1/2-1
0.980 mi.
5174 ft.

Relative:
Higher

FRAZZEE AUTOMOTIVE
151 EAST CENTRAL ST
NATICK, MA 01760

MA SHWS **S132532537**
MA LUST **N/A**
MA RELEASE

Click here for full text details

MA SHWS
Current Status WSCPRM
Release Tracking Number 3-0003445

MA LUST
Release Tracking Number / Current Status 3-0003445 / WSCPRM

Click here to access the MA DEP site for this facility

MA RELEASE

FRAZZEE AUTOMOTIVE (Continued) **S132532537**

Release Tracking Number / Current Status 3-0003445 / WSCPRM

Click here to access the MA DEP site for this facility

65
NNE
1/2-1
0.983 mi.
5192 ft.

Relative:
Higher

PILGRIM RD AT LINWOOD RD **MA SHWS** **S106863310**
PILGRIM RD **MA RELEASE** **N/A**
WELLESLEY, MA 02482

Click here for full text details

MA SHWS
Current Status RAO
Release Tracking Number 3-0024388

MA RELEASE
Release Tracking Number / Current Status 3-0024388 / RAO

Click here to access the MA DEP site for this facility

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
MA	AIRS	Permitted Facilities Listing	Department of Environmental Protection	04/07/2025	04/08/2025	06/24/2025
MA	ASBESTOS	Asbestos Notification Listing	Department of Environmental Protection	01/31/2025	02/26/2025	03/13/2025
MA	AST	Aboveground Storage Tank Database	Department of Public Safety	03/15/2025	04/08/2025	06/24/2025
MA	AST 2	Aboveground Storage Tanks	Department of Fire Services	04/03/2025	04/03/2025	06/24/2025
MA	BROWNFIELDS	Completed Brownfields Covenants Listing	Office of the Attorney General	12/31/2024	01/22/2025	04/07/2025
MA	BROWNFIELDS 2	Potential Brownfields Listing	Department of Environmental Protection	07/11/2023	07/27/2023	10/16/2023
MA	DRYCLEANERS	Regulated Drycleaning Facilities	Department of Environmental Protection	04/25/2025	05/01/2025	07/25/2025
MA	ENFORCEMENT	Enforcement Action Cases	Department of Environmental Quality	04/03/2025	04/08/2025	06/24/2025
MA	FIN ASSURANCE 1	Financial Assurance Information Listing	Department of Environmental Protection	12/01/2010	12/23/2010	02/03/2011
MA	FIN ASSURANCE 2	Financial Assurance Information Listing	Office of State Fire Marshal	02/26/2025	05/01/2025	07/24/2025
MA	FIN ASSURANCE 3	Financial Assurance Information listing	Department of Environmental Protection	03/27/2025	03/27/2025	06/13/2025
MA	GWDP	Ground Water Discharge Permits	MassGIS	01/10/2025	01/22/2025	04/07/2025
MA	HW GEN	List of Massachusetts Hazardous Waste Generators	Department of Environmental Protection	03/07/2025	03/18/2025	06/06/2025
MA	INST CONTROL	Sites With Activity and Use Limitation	Department of Environmental Protection	06/30/2025	07/01/2025	07/24/2025
MA	LAST	Leaking Aboveground Storage Tank Sites	Department of Environmental Protection	06/30/2025	07/01/2025	07/24/2025
MA	LF PROFILES	Landfill Profiles Listing	Department of Environmental Protection	07/01/2015	10/27/2015	12/14/2015
MA	LIENS	Liens Information Listing	Department of Environmental Protection	03/07/2018	03/09/2018	06/21/2018
MA	LUST	Leaking Underground Storage Tank Listing	Department of Environmental Protection	06/30/2025	07/01/2025	07/24/2025
MA	MA SPILLS	Historical Spill List	Department of Environmental Protection	09/30/1993	12/03/2003	12/31/2003
MA	MERCURY	Mercury Product Recyling Drop-Off Locations Listing	Department of Environmental Protection	04/02/2025	05/13/2025	07/25/2025
MA	NPDES	NPDES Permit Listing	Department of Environmental Protection	05/05/2025	05/06/2025	07/30/2025
MA	PFAS	PFAS Contaminated Sites Listing	Department of Environmental Protection	03/24/2025	03/25/2025	06/13/2025
MA	RELEASE	Reportable Releases	Department of Environmental Protection	06/30/2025	07/01/2025	07/24/2025
MA	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Environmental Protection		07/01/2013	12/24/2013
MA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Environmental Protection		07/01/2013	12/24/2013
MA	SHWS	Site Transition List	Department of Environmental Protection	06/30/2025	07/01/2025	07/24/2025
MA	SPILLS 80	SPILLS80 data from FirstSearch	FirstSearch	03/10/1998	01/03/2013	03/05/2013
MA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	12/11/2012	01/03/2013	02/08/2013
MA	SWF/LF	Solid Waste Facility Database/Transfer Stations	Department of Environmental Protection	06/28/2024	06/28/2024	09/24/2024
MA	TIER 2	Tier 2 Information Listing	Massachusetts Emergency Management Agency	12/31/2023	08/07/2024	11/06/2024
MA	TSD	TSD Facility	Department of Environmental Protection	03/07/2025	03/18/2025	06/06/2025
MA	UIC	Underground Injection Control Listing	Department of Environmental Protection	05/05/2025	05/06/2025	05/13/2025
MA	UST	Summary Listing of all the Tanks Registered in the State of	Department of Fire Services, Office of the Pu	02/26/2025	05/01/2025	07/24/2025
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	05/28/2025	05/28/2025	06/03/2025
US	AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing	Environmental Protection Agency	03/24/2025	04/02/2025	04/29/2025
US	BIOSOLIDS	ICIS-NPDES Biosolids Facility Data	Environmental Protection Agency	04/13/2025	04/15/2025	07/08/2025
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2023	02/19/2025	03/07/2025
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2023	10/16/2024	01/14/2025
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	03/31/2025	05/02/2025	07/17/2025
US	CORRACTS	Corrective Action Report	EPA	06/02/2025	06/03/2025	06/16/2025
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/06/2021	05/21/2021	08/11/2021
US	DOD	Department of Defense Sites	USGS	06/07/2021	07/13/2021	03/09/2022
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	03/31/2025	04/22/2025	07/17/2025
US	Delisted NPL	National Priority List Deletions	EPA	06/26/2025	07/01/2025	07/17/2025

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	E MANIFEST	Hazardous Waste Electronic Manifest System	Environmental Protection Agency	02/17/2025	02/19/2025	03/14/2025
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	03/23/2025	03/27/2025	06/24/2025
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA Watch List	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/10/2025	06/12/2025	06/16/2025
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/20/2024	12/18/2024	12/20/2024
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	04/08/2025	04/23/2025	04/24/2025
US	FINDS	Facility Index System/Facility Registry System	EPA	04/22/2025	05/05/2025	05/21/2025
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	07/23/2025	07/23/2025	07/29/2025
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	05/07/2025	05/13/2025	07/29/2025
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	03/03/2023	03/03/2023	06/09/2023
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/11/2025	06/12/2025	06/16/2025
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	02/07/2024	11/13/2024	11/19/2024
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	11/18/2024	01/16/2025	04/07/2025
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	11/18/2024	01/16/2025	04/07/2025
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	11/18/2024	01/16/2025	04/07/2025
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	11/18/2024	01/16/2025	04/07/2025
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	11/18/2024	01/16/2025	04/07/2025
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	01/07/2025	01/16/2025	04/07/2025
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	11/18/2024	01/16/2025	04/07/2025
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/07/2025	01/16/2025	04/07/2025
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	11/18/2024	01/16/2025	04/07/2025
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	11/18/2024	01/16/2025	04/07/2025
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	11/08/2024	01/16/2025	04/07/2025
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	11/18/2024	01/16/2025	04/07/2025
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	11/18/2024	01/16/2025	04/07/2025
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	01/07/2025	01/16/2025	04/07/2025
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	11/18/2024	01/16/2025	04/07/2025
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	10/15/2024	01/16/2025	04/07/2025
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	06/26/2025	07/01/2025	07/17/2025
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	06/26/2025	07/01/2025	07/17/2025
US	LUCIS	Land Use Control Information System	Department of the Navy	03/11/2025	04/02/2025	06/24/2025
US	MINES MRDS	Mineral Resources Data System	USGS	06/04/2024	11/22/2024	02/18/2025
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	04/01/2025	04/02/2025	06/24/2025

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	05/07/2025	05/07/2025	06/03/2025
US	NPL	National Priority List	EPA	06/26/2025	07/01/2025	07/17/2025
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2024	10/02/2024	01/10/2025
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	PCS	Permit Compliance System	EPA, Office of Water	12/16/2016	01/06/2017	03/10/2017
US	PCS ENF	Enforcement data	EPA	12/31/2014	02/05/2015	03/06/2015
US	PFAS ATSDR	PFAS Contamination Site Location Listing	Department of Health & Human Services	06/24/2020	03/17/2021	11/08/2022
US	PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	03/24/2025	04/02/2025	05/21/2025
US	PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	03/24/2025	04/02/2025	05/21/2025
US	PFAS FEDERAL SITES	Federal Sites PFAS Information	Environmental Protection Agency	03/31/2025	04/02/2025	05/05/2025
US	PFAS NPDES	Clean Water Act Discharge Monitoring Information	Environmental Protection Agency	03/24/2025	04/02/2025	05/21/2025
US	PFAS NPL	Superfund Sites with PFAS Detections Information	Environmental Protection Agency	03/31/2025	04/02/2025	05/05/2025
US	PFAS PROJECT	NORTHEASTERN UNIVERSITY PFAS PROJECT	Social Science Environmental Health Research	05/15/2024	03/06/2025	06/03/2025
US	PFAS PT 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing	Environmental Protection Agency	03/24/2025	04/02/2025	05/21/2025
US	PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing	Environmental Protection Agency	03/23/2025	04/02/2025	05/05/2025
US	PFAS TRIS	List of PFAS Added to the TRI	Environmental Protection Agency	03/07/2025	04/02/2025	05/05/2025
US	PFAS TSCA	PFAS Manufacture and Imports Information	Environmental Protection Agency	03/31/2025	04/02/2025	05/05/2025
US	PFAS WQP	Ambient Environmental Sampling for PFAS	Environmental Protection Agency	03/03/2025	04/02/2025	05/21/2025
US	PRP	Potentially Responsible Parties	EPA	06/26/2025	07/01/2025	07/29/2025
US	Proposed NPL	Proposed National Priority List Sites	EPA	06/26/2025	07/01/2025	07/17/2025
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RMP	Risk Management Plans	Environmental Protection Agency	04/05/2025	04/11/2025	07/08/2025
US	ROD	Records Of Decision	EPA	04/25/2025	05/01/2025	05/21/2025
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	07/30/2021	02/03/2023	02/10/2023
US	SEMS	Superfund Enterprise Management System	EPA	06/26/2025	07/01/2025	07/17/2025
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	06/26/2025	07/01/2025	07/17/2025
US	SSTS	Section 7 Tracking Systems	EPA	04/14/2025	04/15/2025	07/08/2025
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2023	02/11/2025	02/18/2025
US	TSCA	Toxic Substances Control Act	EPA	12/31/2020	06/14/2022	03/24/2023
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	05/15/2025	05/15/2025	07/29/2025
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	09/09/2024	09/11/2024	12/06/2024
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	12/31/2024	02/20/2025	04/29/2025
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	05/19/2025	05/20/2025	07/29/2025
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	06/02/2025	06/03/2025	06/16/2025
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	12/31/2024	02/20/2025	04/29/2025
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	05/19/2025	05/20/2025	07/29/2025
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	05/01/2025	05/20/2025	07/29/2025

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/02/2024	08/20/2024	10/09/2024
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UST FINDER	UST Finder Database	Environmental Protection Agency	06/08/2023	10/04/2023	01/18/2024
US	UST FINDER RELEASE	UST Finder Releases Database	Environmental Protecton Agency	06/08/2023	10/31/2023	01/18/2024
US	UXO	Unexploded Ordnance Sites	Department of Defense	02/14/2025	03/11/2025	06/03/2025
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	05/04/2025	05/06/2025	07/21/2025
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	12/31/2019	11/30/2023	12/01/2023
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2020	11/30/2021	02/18/2022
VT	VT MANIFEST	Hazardous Waste Manifest Data	Department of Environmental Conservation	10/28/2019	10/29/2019	01/09/2020
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
MA	State Wetlands	Wetland Inventory	MassDEP			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MORSES POND
99 TURNER ROAD
WELLESLEY, MA 02482

TARGET PROPERTY COORDINATES

Latitude (North):	42.296475 - 42° 17' 47.31''
Longitude (West):	71.316875 - 71° 19' 0.75''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	309004.9
UTM Y (Meters):	4685080.0
Elevation:	162 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	20024146 NATICK, MA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

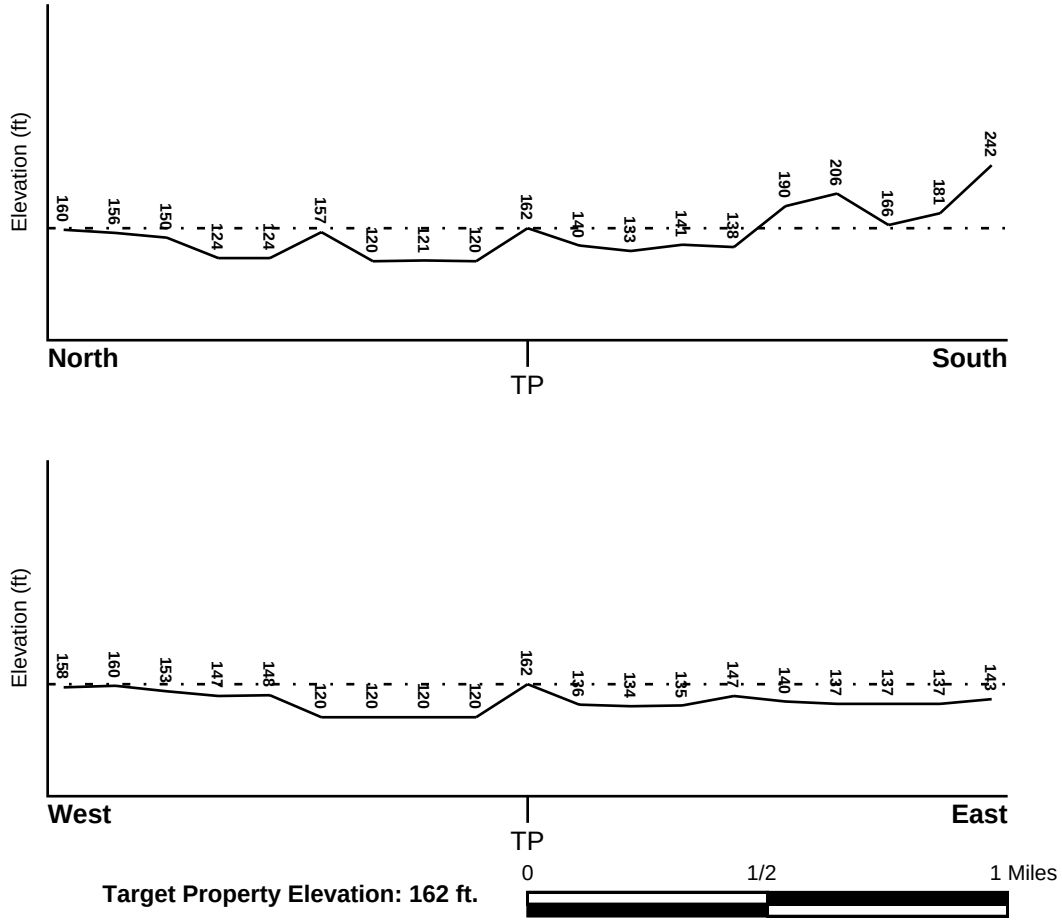
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 162 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
25017C0537E	FEMA FIRM Flood data
Additional Panels in search area:	**FEMA Source Type**
25021C0016E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NATICK	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
17	1/2 - 1 Mile NNW	S
22	1/2 - 1 Mile NW	SSW
27	1/2 - 1 Mile NW	SW-W
1G	1/2 - 1 Mile NNW	S
2G	1/2 - 1 Mile NW	SSW
3G	1/2 - 1 Mile NW	SW-W

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Silurian
Code:	Se *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposit

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 8064784.2s

SITE NAME:	Morses Pond	CLIENT:	Weston and Sampson Engineers
ADDRESS:	99 Turner Road Wellesley MA 02482	CONTACT:	Melissa Davis
		INQUIRY #:	8064784.2s
LAT/LONG:	42.296475 / 71.316875	DATE:	July 31, 2025 1:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Water

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 2

Soil Component Name: Udorthents

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: 141.14 Min: 0.42	Max: Min:
2	5 inches	59 inches	variable	Not reported	Not reported	Max: 141.14 Min: 0.42	Max: Min:

Soil Map ID: 3

Soil Component Name: Hinckley

Soil Surface Texture: sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
2	9 inches	14 inches	gravelly loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
3	14 inches	59 inches	sr to very gravelly loamy fine sand to cobbly coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6

Soil Map ID: 4

Soil Component Name: Hinckley

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
2	9 inches	14 inches	gravelly loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
3	14 inches	59 inches	sr to very gravelly loamy fine sand to cobbly coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6

Soil Map ID: 5

Soil Component Name: Urban land

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 6

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	22 inches	gravelly loamy sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches	sr to sand to very gravelly coarse sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 7

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	22 inches	gravelly loamy sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches	sr to sand to very gravelly coarse sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

Soil Map ID: 8

Soil Component Name: Pits

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 9

Soil Component Name: Hinckley

Soil Surface Texture: sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
2	9 inches	14 inches	gravelly loamy sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6
3	14 inches	59 inches	sr to very gravelly loamy fine sand to cobbly coarse sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: 6 Min: 3.6

Soil Map ID: 10

Soil Component Name: Swansea

Soil Surface Texture: mucky peat

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	24 inches	mucky peat	Not reported	Not reported	Max: 705 Min: 141.14	Max: Min:

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	24 inches	33 inches	muck	Not reported	Not reported	Max: 705 Min: 141.14	Max: Min:
3	33 inches	59 inches	sand	Not reported	Not reported	Max: 705 Min: 141.14	Max: Min:

Soil Map ID: 11

Soil Component Name: Merrimac

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
2	18 inches	22 inches	gravelly loamy sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6
3	22 inches	59 inches	sr to sand to very gravelly coarse sand	Not reported	Not reported	Max: 141.14 Min: 42.34	Max: 6 Min: 3.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A5	USGS40000471652	0 - 1/8 Mile NNE
A6	USGS40000471653	0 - 1/8 Mile NNE
8	USGS40000471573	1/8 - 1/4 Mile SSW
9	USGS40000471621	1/8 - 1/4 Mile West
B10	USGS40000471619	1/4 - 1/2 Mile West
12	USGS40000471593	1/4 - 1/2 Mile ESE
B13	USGS40000471629	1/4 - 1/2 Mile West
14	USGS40000471622	1/4 - 1/2 Mile West
15	USGS40000471786	1/2 - 1 Mile NNW
16	USGS40000471642	1/2 - 1 Mile West
18	USGS40000471780	1/2 - 1 Mile NW
C19	USGS40000471566	1/2 - 1 Mile ESE
C21	USGS40000471592	1/2 - 1 Mile ESE
24	USGS40000471844	1/2 - 1 Mile North
25	USGS40000471377	1/2 - 1 Mile SSE
26	USGS40000471614	1/2 - 1 Mile East
28	USGS40000471852	1/2 - 1 Mile NNW
29	USGS40000471651	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

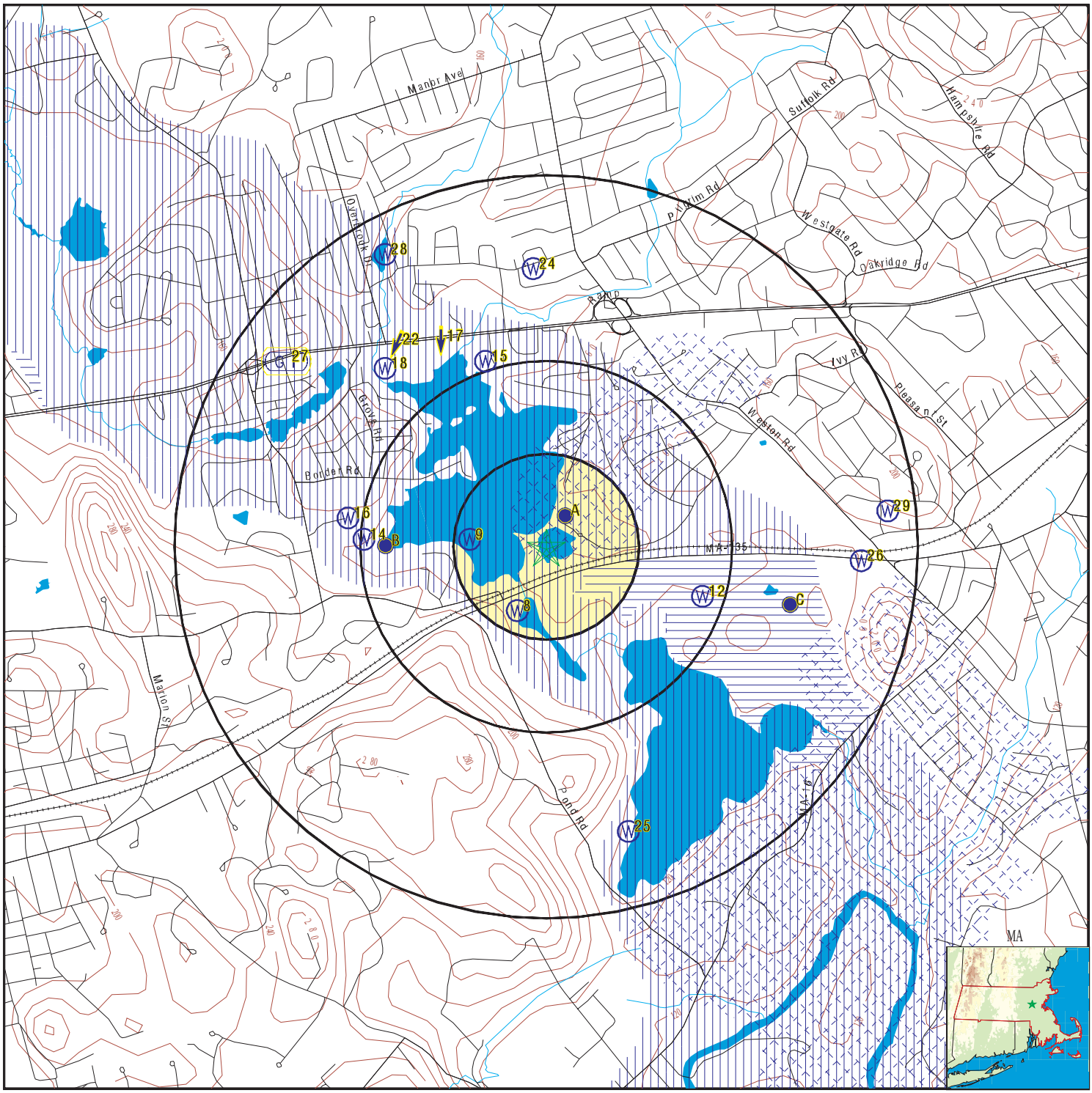
MAP ID	WELL ID	LOCATION FROM TP
A3	MA3317000	0 - 1/8 Mile NE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	MA1100000002939	0 - 1/8 Mile NNE
A2	MA1100000003117	0 - 1/8 Mile NE
A4	MA1100000002997	0 - 1/8 Mile NNE
A7	MA1100000002998	0 - 1/8 Mile NNE
B11	MA1100000001892	1/4 - 1/2 Mile West
C20	MA1100000000565	1/2 - 1 Mile ESE
C23	MA1100000000298	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 8064784.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Potentially Productive Aquifers
- Not Potentially Productive Aquifers
- DEP Approved Zone IIs
- EPA Designated Sole Src. Aq.

SITE NAME:	Morses Pond	CLIENT:	Weston and Sampson Engineers
ADDRESS:	99 Turner Road Wellesley MA 02482	CONTACT:	Melissa Davis
		INQUIRY #:	8064784.2s
LAT/LONG:	42.296475 / 71.316875	DATE:	July 31, 2025 1:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000002939**
A2 **NE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000003117**
A3 **NE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**MA3317000**
A4 **NNE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000002997**
A5 **NNE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471652**
A6 **NNE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471653**
A7 **NNE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000002998**
8 **SSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471573**
9 **West** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471621**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B10 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471619**
B11 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000001892**
12 **ESE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471593**
B13 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471629**
14 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471622**
15 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471786**
16 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471642**
17 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**4912**
18 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471780**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C19 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471566**
C20 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000000565**
C21 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471592**
22 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**4913**
C23 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**MA WELLS**	**MA1100000000298**
24 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471844**
25 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471377**
26 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471614**
27 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**4697**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
28 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000471852**
29 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000471651**
1G **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**4912**
2G **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**4913**
3G **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**4697**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MA Radon

Radon Test Results

County	% of sites>4 pCi/L	Median
NORFOLK	21	1.9

Federal EPA Radon Zone for NORFOLK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for NORFOLK COUNTY, MA

Number of sites tested: 146

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.522 pCi/L	89%	11%	0%
Living Area - 2nd Floor	0.500 pCi/L	100%	0%	0%
Basement	2.907 pCi/L	82%	18%	1%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MassDEP
Telephone: 617-292-5907

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Massachusetts Geographic Information System (MassGIS) Datalayers
Source: Executive Office of Environmental Affairs
Telephone:

Public Water Supply Database

Telephone:
The Public Water Supply datalayer contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00.

Areas of Critical Environmental Concern

Telephone:
The Areas of Critical Environmental Concern (ACEC) datalayer shows the location of areas that have been designated ACECs by the Secretary of Environmental Affairs. ACEC designation requires greater environmental review of certain kinds of proposed development under state jurisdiction within the ACEC boundaries. The ACEC Program is administered by the Department of Environmental Management (DEM) on behalf of the Secretary of Environmental Affairs. The Massachusetts Coastal Zone Management (MCZM) Office managed the original Coastal ACEC Program from 1978 to 1993, and continues to play a key role in monitoring coastal ACECs. Procedures for ACEC designation and the general policies governing the effects of designation are contained in the ACEC regulations (301 CMR 12.00). The ACEC datalayer has been compiled by MCZM and DEM and includes both coastal and inland areas.

EPA Designated Sole Source Aquifers

Telephone:
The Sole Source Aquifer datalayer was compiled by the Department of Environmental Protection (DEP) Division of Water Supply (DWS). Seven Sole Source Aquifers have been designated by the US Environmental Protection Agency (EPA) for Massachusetts. A Sole Source Aquifer (SSA) is an aquifer designated by US EPA as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should that aquifer become contaminated. The aquifers were defined by an EPA hydrogeologist.

Aquifers

Telephone:
MassGIS produced an aquifer datalayer composed of 20 individual panels, generally based on the boundaries of the major drainage basins. Areas of high and medium yield were mapped. This datalayer includes polygon attribute coding to help in the identification of areas in which cleanup of hazardous waste sites must meet drinking water standards, as defined in the Massachusetts Contingency Plan (MCP) (310 CMR 40.00000).

Non-Potential Drinking Water Source Areas

Telephone:
Non-Potential Drinking Water Source Areas (NPDWSA) are regulatory in nature representing one of many considerations used in determining the standards to which ground water must be cleaned in the event of a release of oil or hazardous material. NPDWSAs are not based on existing water quality and do not indicate poor ambient conditions.

DEP Approved Zone IIs

Telephone:
The Department of Environmental Protection (DEP) approved Zone IIs datalayer was compiled by the DEP Division of Water Supply (DWS). The database contains 281 approved Zone IIs statewide. As stated in 310 CMR 22.02, a Zone II is 'that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation.) It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone IIs shall extend up gradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary).' These data are used in association with the Public Water Supplies datalayer. The following describes certain unique features of this association.\n - Any proposed new well which will pump at least 100,000 gallons per day must have a Zone II delineation completed and approved by DEP prior to the well coming on line. \n- Additionally, a new source may not be on-line yet, but other, older wells may fall within its Zone II boundary.\n - Further, existing wells must have a Zone II delineated as a condition of receiving a water withdrawal permit under the Water Management Act.

OTHER STATE DATABASE INFORMATION

RADON

State Database: MA Radon
Source: Department of Health
Telephone: 413-586-7525
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Appendix J:

Local Records

Physical Characteristics Date: July 1, 2024

Print This Page

FY2025 Tax Rate for Wellesley, MA $10.28

Assessment Valuation Date: January 1, 2024

Parcel Information:

Location: 99 Turner Rd
Parcel ID: 184-1- -
Class: 932-Municipal-Conservation-vacant
Type: Vacant Land
Lot Size: 216,232
Census: 0
Zoning: SR15-Single Residence
Survey #: 0

Assessed Values

	2025 Market Value
Land	$1,081,000
Building	$0
Other	$0
Total	$1,081,000

Assessment History

Year	Total Value
2025	$1,081,000
2024	$1,081,000
2023	$1,081,000
2022	$757,000
2021	$757,000
2020	$757,000
2019	$757,000
2018	$757,000
2017	$757,000
2016	$757,000
2015	$757,000

Owner Information

Name: Town of Wellesley
Natural Resources Department
Conservation Land
Address: 525 Washington St. Wellesley, MA 02482

Notes: one of the parcels granted by the Boston Ice Company and transferred to the jurisdiction of the NRC, deed book1926, page 173

Building Information

Area	Lower	First	Second	Third	Area

Other Improvements

Code	Type	Qty	Year	Length	Width	Grade	Condition	Adj
none								

Notes:

Land Description

Topography	Utilities		Street		Landlocked	No	View	Average
Swampy			Road	Public	Sidewalk	No	Landscaping	
					Gas	No		

Market

Type	Description	Zone	Nhbd	Area	Infl	Traffic
3	Undeveloped	SR15-Single Residence	302	216232	1	L5

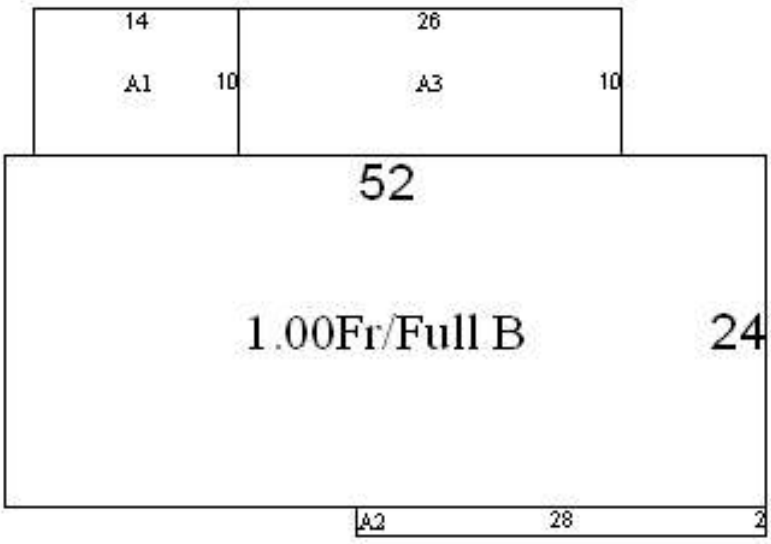
Sales Information

Date	Price	Vol	Page	Seller	Valid Code
none					

Print This Page

Print This Image

99 Turner Rd



Morses Pond

7/31/2025, 12:37:57 PM

Points of Interest

Assessor Parcels

Beach

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.18 km

Wellesley GIS | Wellesley Planning | Chas H. Sells, MassDEP | Wellesley NRC | FEMA | WSP |

MORSES POND BEACH & BATHHOUSE FEASIBILITY STUDY

May 7, 2024

MARYANN THOMPSON ARCHITECTS
www.maryannthompson.com

Weston & Sampson SM
design studio

INDEX

Acknowledgements	3
Introduction	3-4
The Site Master Planning Process	5-8
History and Evolution of the Site	9
Existing Site Conditions	10-18
Existing Bathhouse Conditions	19-21
Community Needs Building Assessment	22-23
Building Code Review	24-25
Preferred Site Master Plan Recommendations	26-38
Conceptual Building Design	39-44
Proposed Site Renderings	45-48
Estimated Construction Costs for Value Engineered Concept	49
Site Value Engineering Exercise	50
Estimated Construction Costs for Value Engineered Concept	51-52
Permitting	52
Estimated Designer Services Fees	53-55
Conclusion	56
Appendices	57

Acknowledgements

We would like to thank every stakeholder, Town employee, public official, and resident who contributed their time and input during this feasibilty study. Your participation, knowledge, and dedication has been instrumental in guaranteeing that this feasibilty study reflects the needs and desires of the Town of Wellesley, MA. Your work on the Morses Pond Beach and Bathhouse Improvements project will ensure that future generations of town residents will enjoy this wonderful resource for many years to come.

Introduction

The Town of Wellesley Recreation Department engaged Weston & Sampson Engineers as the prime consultant for this feasibilty study for the renovation of the Morses Pond Beach property in Wellesley. Maryann Thompson Architects (architecture), TCi Consulting (cost opinion), and Brennan Consulting (topographical land survey) were included as sub consultants to assist with the study. The beach and surrounding property form a treasured and essential asset for the town and its residents, having been a leisure and recreation destination for generations.

Aerial image of Morses Pond

During 2019, and early 2020, Weston & Sampson developed a series of preliminary and final master plan designs, which were generated in response to the expressed needs and desires from a wide variety of town departments as well as residents from the surrounding neighborhood and greater town. Three community meetings were held and this created a venue for residents to express their opinions and preferences on a wide range of topics that included:

- The condition of the existing site and bathhouse
- Need and location options for new bathhouse
- Improved guest amenities
- Parking and pedestrian circulation system needs

- Town wellhead and water quality protection
- Traffic and safety issues
- Maintenance and operations concerns
- Security issues
- Other elements of community interest

After a brief hiatus to obtain approvals for CPC funds to perform this feasibilty study, the project started back up in January 2022. The Town formed its own working group to assist the design team in moving the project forward to reach concensus on the final preferred master plan for the site. Due to the pandemic all meetings were conducted remotely.

The design team met twice with the Town working group in early 2022. During these meetings, the site master plan was reviewed and revised slightly to accommodate emergency access as vehicles enter the main 12-foot-wide pedestrian path that runs parallel to the beach. During this time the site master plan also went through an opinion of probable costs exercise to determine the overall project budget current costs. Due to the pandemic, material and construction costs had increased significantly which had an impact on the master plan overall projected costs.

After further discussions with the Town regarding the increase in project costs it was decided that the removal of some scope items were required to get the costs back inline with the conceptual design budget. The items to be removed were agreed upon after discussions with Town staff. The items removed from the scope can be designed and constructed at a later date should more funds become available.

The final preferred site master plan, as shown in this document, represents the "consensus plan" as it matches the goals and aspirations of the majority of the individuals who participated in the planning process. It is understood that the plan will be implemented over a period of time and potentially include multiple phases of improvements.

It is important to note that "Site Master Plan" recommendations are typically general and therefore they should not be considered to be "cast in stone". It is expected that future improvements will generally follow the recommendations contained in this report, but that specific details will be adjusted or refined as needed to meet community preference and actual site conditions.

This report represents the culmination of the master planning process and feasibilty study. The document contains narrative and graphic depictions of the preferred site master plan with relevant sections dedicated to identifying the full extent of potential improvements. The overall goal is to improve the Morses Pond Beach and surrounding property with a series of context appropriate enhancements. It is required that the enhancements respect unique and inherent historical, environmental and landsape qualities in a way that will foster enhanced beach and pond usage, community interaction, park aesthetics, and environmental stewardship.

The Site Master Planning Process

The overall site master planning effort included three basic tasks. The tasks were performed by Weston & Sampson and Maryann Thompson Architects with support from town staff as follows:

Weston & Sampson was hired by the Town to develop the initial site master plans in 2019 and 2020. In 2021, the Town retained their services to prepare this feasibility study. Tasks also included design updates to the previously approved site master plans. Key aspects of these three basic work tasks are included below.

Task 1 | Project Kick-off Meeting

This initial meeting was held with Town staff, elected officials, and other key project stakeholders. The meeting confirmed the scope of work that was to be performed by the consultant team, with support from the Town and set forward all basic project goals and expectations. The Town also turned over for review all documents that contributed to the understanding of the Morses Pond Beach site and all of its natural and manmade features. Documents included topographic and property maps and other pertinent site and architectural plans.

Task 2A | Master Planning Public Meetings in 2019 and 2020

Three (3) advertised public meetings and multiple other project related meetings were held as summarized in the table below.

Date	Venue	Meeting Purpose
06.19.2019	Town Hall	Kick-off Meeting with Recreation Department to outline project goals, timelines, and review initial thoughts and desires for improvements to Morses Pond.
08.07.2019	Town Hall	Presentation of concepts to public to solicit comments and desires to be included in project.
10.16.2019	Warren Building	Meeting with Recreation Commission to review design progress and solicit feedback

Date	Venue	Meeting Purpose
12.16.2019	Warren Building	Public Forum to present design progress
01.21.2020	Wellesley DPW	Presentation to Public Works Commission to present concepts and solicit feedback.
02.12.2020	Police Department	Review of draft design plan to solicit comments and concerns from residents regarding design.
03.03.2020	Warren Building	Recreation Commission meeting to present final concepts and solicit final comments prior to preparation of the Master Plan report.

The community engagement meetings were very productive with a great deal of spirited discussion. Between 20 and 30 residents attended each meeting, with nearly every attendee contributing his or her thoughts on a variety of matters.

In essence, the intention was to achieve common ground on the level of renovation to the property while attempting to retain and enhance the rustic and natural character of the beach and overall property while also satisfying the varying neighborhood and town-wide recreational and municipal needs.

Task 2B | Feasibility Study Public Meetings in 2022 and 2023

The design team conducted a further ten (10) virtual meetings when the feasibility study began after CPC funding approvals and the pandemic related break. These meetings are summarized in the table below.

Date	Venue	Meeting Purpose
01.07.2022	Online	Kick-off Meeting with Recreation Department to discuss timelines, and review current approved Morses Pond master plan.
02.11.2022	Online	Working Group Meeting #1. Project recap. Discuss updates to site, architecture, MEP.
03.07.2022	Online	Public Meeting #1. Project recap. Discuss updates to the master plan and the schedule.

Date	Venue	Meeting Purpose
03.25.2022	Online	Working Group Meeting #2. What we heard at the public meeting. Emergency vehicle egress. Site and architecture updates.
05.02.2022	Online	Select Board Meeting. Discuss current site plan and accessibility, architecture, project costs, and schedule.
05.26.2022	Online	Cost Estimate Meeting. Discuss TCi estimate. Review town proposed value engineered items, and design team revised site plan.
10.11.2022	Online	NRC Meeting #1. Discuss TCi estimate. Review town proposed value engineered items, and design team revised site plan.
03.21.2023	Online	NRC Meeting #2. Discuss current master plan with value engineered revisions to the site and architecture.
05.16.2023	Online	Recreation Committee Meeting. Discuss current master plan with value engineered revisions to the site and architecture.
07.31.2023	Online	Public Meeting #2. Discuss full build master plan with costs. Value engineered cost savings and current site master plan, site accessibility, and schedule.

Task 3A | DRAFT and FINAL Master Plan

After completing the third community meeting and receiving considerable input from the National Resources Commission, Recreation Department, Recreation Board, Department of Public Works, Engineering Department related to final recommendations for improving the Morses Pond Beach, a draft master plan was prepared and submitted to the Recreation Department for review and for posting on the town website.

Task 3B | Feasibility Study

After CPC approvals to begin the feasibility study were given, unfortunately due to the pandemic, the project was put on hold for a period of time. During this period geotechnical borings were completed and a report of the findings from those borings was issued to the Town. These results can be found in the appendix at the end of this report.

In January 2022, the feasibility study phase began with a kick-off meeting between the design team and Town staff from the Facilities Department and Recreation Department. Topics discussed were the approved master plan, geotechnical report, and the new bathhouse building architecture.

An opinion of probable construction costs was developed for the 2021 site master plan. Due to the rise in construction materials and labor rates related to the pandemic, the project costs had seen a significant increase. The design team analyzed the current site master plan design to determine areas where design scope could be removed to help reduce overall costs.

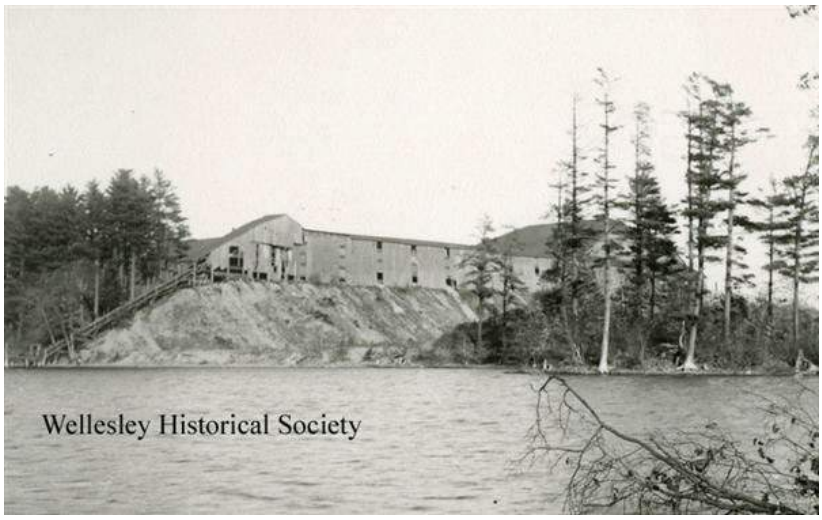
At a meeting on May 26, 2022 the design team presented these cost saving measures. Some of the recommended value engineering measures included removing the following scope items: kayak storage shed, parking lot, and the Ice House Pond boardwalk. The Town agreed to incorporate the design team recommendations into the preferred site master plan alternative.

Over the next 19-months the design team met multiple times with Town Agencies, stakeholders, and residents. From the feedback received at these meetings, the preferred alternative master plan for the buildings and site was developed and finalized.

History and Evolution of the Site

Morses Pond has a rich history dating back to 1738, when Edward Ward dammed his brook to create a small mill pond. The original Morses Pond was much smaller than the pond we enjoy today. During the following century, a string of owners from railroad companies to paint manufacturers built up the dam and used the impounded water as a source of hydropower.

Towards the end of the 1800's and into the early 1900's, the property was used as a location for ice harvesting in the winter.

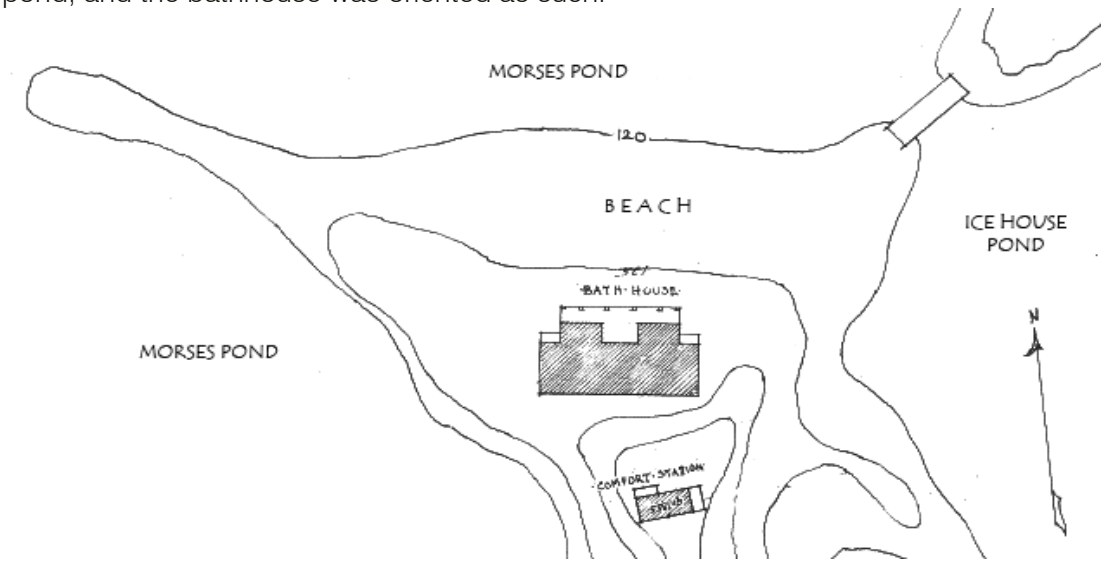


Ice making facility

Two different ice-making companies sequentially owned the pond, the Russell Ice Company in 1888 and the Boston Ice Company in 1902. Both companies built the pond up to the Morses Pond as it exists today. Icehouse workers carved blocks of ice out of the pond and loaded them onto a large conveyor belt which brought them to the warehouse atop the pond's bank, before being loaded onto rail cars as needed. The advent of refrigeration and the struggles of the Great Depression forced the Boston Ice Company to close. The property was then purchased by the Town in 1931 for $3,000 and opened as a public beach in 1935. It has been a community recreation resource since that time.

Existing Beach & Bathhouse Location

The 'old beach' as it is referred to now was on the north side of the peninsula that extends into the pond, and the bathhouse was oriented as such.



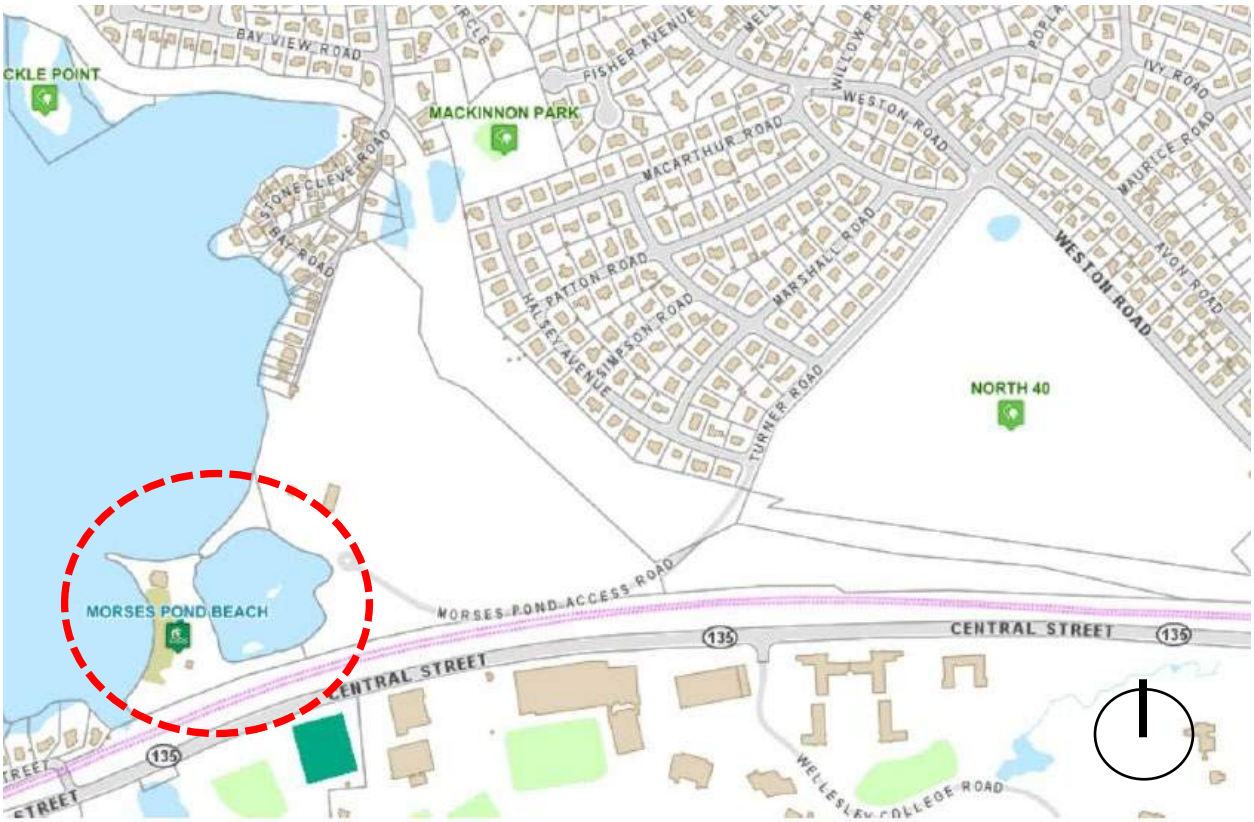
Plan of the original beach with bathhouse

Existing Site Conditions

Summary

Morses Pond covers about 100 acres of area between Central Street (Rt 135) and Worcester Street Rt 9) in the northwest corner of Wellesley. A large area of the pond is less than 10-feet deep; its average depth is about 8-feet, and its maximum depth is 23-feet. Water enters the north end of the pond from Bogle Brook, Boulder Brook, and Jennings Brook. Water exits the pond through the dam adjacent to Route 135 and continues south onto Paintshop Pond, Lake Waban, and eventually the Charles River. Water also exits via the groundwater wells that extract water for public consumption in both Natick and Wellesley.

The property is accessed off Weston Road via the Morse Pond Access Road which begins at the intersection of Turner Road and Halsey Avenue. The Wellesley College campus is located to the south of this property across the railroad tracks and Route 135.



Locus map of Morses Pond

Access & Circulation

Morses Pond entry sign

The site is accessed off Weston Road by Turner Road. At the corner of Turner Road and Halsey Avenue is the entry gate which is currently locked during the evenings and all but two weeks of the unprogrammed off season, marking the beginning of the Morses Pond Access Road. During the times when the gate is locked cars often park along Turner Road in order to access the site for trail and dog walking. We heard this is an issue for the abutters in this area.

The Morses Pond trails are popular and connect to the Crosstown Trail. Along with the North 40 property to the southwest of the site, there are many smaller walking trails through the woods. Within the project area is a portion of what is identified below as the Morses Pond Trail, a popular route for residents and guests both during and off-season.

Morses Pond Trail map

Vegetation & Wildlife Habitat

The site is comprised of a predominance of coarse to fine sand, which was mined over the years. This soil type also results in the vegetation of the site being primarily composed of white pine (Pinus strobus) and a combination of other deciduous trees including red oak, white oak, red maple, beech, birch, catalpa, and poplar. Certain invasive species have begun to populate the site, most notably oriental bittersweet and European buckthorn.

The site is populated by a wide variety of wildlife including birds, waterfowl (ducks, herons, swans, and Canada geese), squirrels, racoons, chipmunks, opossum, and the occasional fox and coyote and well as a wide variety of turtles, amphibians, and fish.

Local wildlife enjoying Morses Pond

Pond Ecology

Over the years as a result of residential development upstream and around Morses Pond, it has become eutrophic primarily from an excess of phosphorus, typically from lawn fertilizers.

Extra phosphorus reduces water clarity and supports the rampant growth of algae and other undesirable plants and weeds. While algae and undesirable plants and weeds thrive in a phosphorus-rich environment, they strangle fish and other aquatic animals by consuming the oxygen necessary for life.

Algal blooms kill fish and other animals, create unpleasant odors, and nurture vegetation that grows dense and thick enough to close large areas of the pond to swimmers and boaters for much of the summer.

Weed harvester in the pond

The Town has been managing this issue with the assistance of a weed harvester, which collects the weeds daily during the summer season and hauls the material off site to be composted. The Wellesley Department of Public Works manages and maintains a phosphorus inactivation system to help combat the weed growth in addition to the weed harvesting.

Shade Shelters

There are two shade shelters on the property with picnic tables, grills, and trash cans. These structures are fairly basic in their construction and the asphalt shingle roofs and in fair to poor shape.

Existing shelter with seating

One is ADA accessible, located directly of the main path that cuts along the back of the site, whereas the second is located in the lawn area, and therefore not ADA accessible. These are popular both for families and for day camps.

This smaller shade structure, with built in table and seats is located closer to the beach and is used by a variety of guests, lifeguards, and the park ranger.
There are no places directly at the beach to seek shelter from the elements. This makes it difficult for parents to supervise their children from the beach if they want to take a break from the sun.

Existing smaller shelter

The Recreation Department also uses a temporary seasonal canopy structure every summer at the south end of the beach, in the sand.

Retaining Wall

The site is divided between a lawn area and the sandy beach area by a pressure treated timber retaining wall which is starting to fail. Guests enjoy the ability to lay blankets on either the grass or the sand. The height of the wall varies from approximately 18” to 8” in height.

The walls make the transition from the lawn to the beach difficult for some users because of the step down. Small amounts of CCA can also leach into the surrounding areas over time which is not ideal for this natural resource environment utilized by people and wildlife.

Existing retaining wall looking toward the shelter

Storage

There exists an incongruous and haphazard collection of storage solutions on the site, that do not fully and adequately meet the current program requirements, such as lifeguard supplies, kayaks, paddles and life jackets, and miscellaneous maintenance equipment. This collection is both unsightly and inefficient.

Existing storge container

Existing dumpsters

Existing dumpsters

Play Equipment

There are two areas of 'dry play' play equipment. The first is a swing set located off the main path, while the second is a multi-feature slide and play area down on the sandy beach.

Although the play equipment location is convenient for parents who want to keep an eye on some kids who may be in the water and others on the play equipment, the current location and lack of walkways to the slide structure make this non-ADA accessible.

The wood chip surfacing in the playground area is not ideal for walking and it is not ADA accessible. The wood chips are also not the safest surface when dealing with trips and falls.

The playground also does not accommodate play for children with disabilities. The play structure is not accessible, and the swings do not have any seating that can be used by children with mobility difficulties.

Existing swings with wood chip surfacing

Existing play structure with wood chip surfacing

Aerial view of the beach area and playground

There is also a sand volleyball court located approximately in the middle of the beach front, within the grass area. This is used primarily by day campers, but only periodically.

Given its limited usage, and prime location roughly at the center of the beach, during the public engagement it was determined this area would be more useful as lawn area for sunbathers.

The sand volleyball court could be relocated to roughly the location of the existing play equipment which is typically a lesser populated portion of the beach.

Volleyball area adjacent to the beach

Ice House Pond

Ice House Pond is a wonderful natural resource within the Town of Wellesley. It is a place that is currently underutilized by town residents, but with some of the work listed below, this could become a year-round attraction. A place to be at one with nature.

In conjunction with dredging, invasive species removal, and other measures this small pond could have improved water clarity, and biodiversity, and create additional opportunities for recreation such as fishing, ice skating, and interacting with the wildlife that is drawn to this area.

Ice House Pond looking north

Boat Access

There is an ADA accessible kayak launch located at the north side of the beach was installed in the summer of 2014 and is recommended to remain. The grassed area to reach this boat launch is not ADA accessible and will be addressed. Kayaks and equipment are available for rental from the office in the bathhouse. Kayaks are stored in the green storage container and brought out by guards for rental.

The ADA accessible boat / kayak dock

Kayak storage facilities during the season

Shipping container used for storage

Access to this launch by residents bringing their own kayaks is difficult given the distance away from the parking lot.

A shipping container is utilized to store boating items.

Road to the boat launch

The existing boat launch is able to be accessed for public rooftop boats and kayaks, but it is fairly hidden from view and often busy with the operating weed harvesting equipment for the pond.

Signage to direct users to the boat launch is not easily recognizable for users of this amenity.

Turning movements for vehicles dropping boats off in this area are also restricted by the current road layout. The stone dust surfacing is also prone to damage from the effects of stormwater run-off, so maintenance is required.

Existing Parking

The existing parking area is located on the east side of Ice House Pond and the Water Department Building. The lot is approximately one and a half acres and has a compacted gravel surface. The western edge of the lot is adjacent to the Zone 1 wellhead protection area. There is no striping or

signage to help the organization of the lot, and this leads to inefficient parking congestion on busy days.

The existing entry drive to the main public parking lot

Other than the signage, the existing ADA parking adjacent to the beach areas is essentially non-conforming on multiple fronts.

Both the dirt parking and the slope from parking up to the main walkway, do not conform to the requirements set forth for accessible parking. As with the main public parking lot there are no delineated parking spaces.

Existing parking located closer to the beach area

Lawn Areas

One feature of the Morses Pond Beach area that is not seen at many other pond beaches is the lawn area that lies beyond the sandy beach. Current beach guests expressed a strong desire to maintain and enhance this feature, since it provides a softer and cooler place to lay out and enjoy the beach area without having to be directly on the sand. Additionally, maintaining and adding shade trees provides respite from the sun on the hottest days of summer.

View from the existing lawn area looking toward the pond

These lawn areas provide an opportunity for flexible gathering and the chance for visitors to run around and play in an open area but still within sight of the beach.

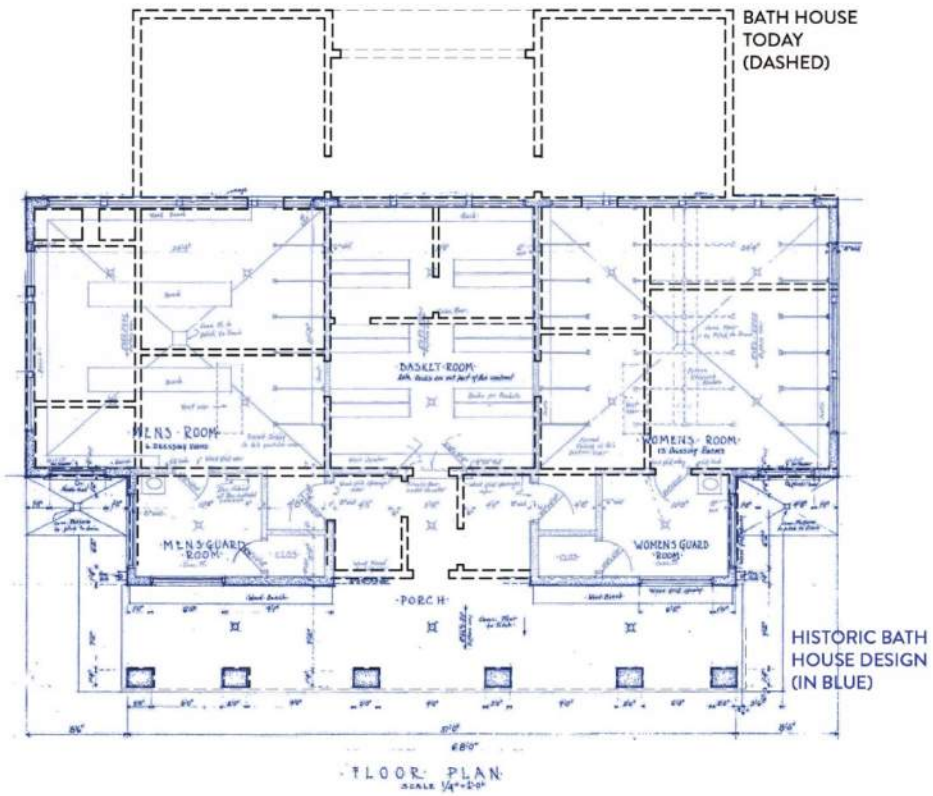
Existing Bathhouse Conditions

Summary

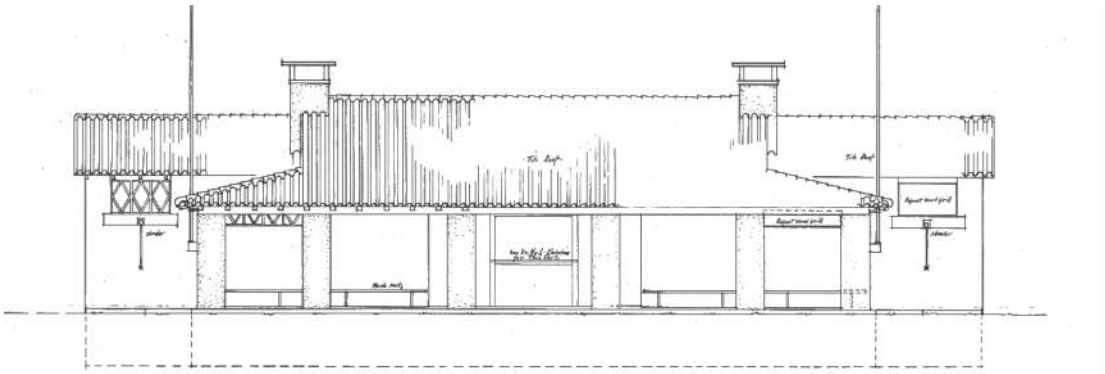
Maryann Thompson Architects along with the Weston & Sampson team and Wellesley Recreation Staff toured the existing bathhouse structure during the master plan phase and again in early 2022 to assess the current condition of the building. In general, the team agreed that the existing bathhouse structure contains dated systems beyond their useful life, is not currently configured to best meet the needs of visitors and staff and does not meet current accessibility standards. To meet the project goals, reuse of the existing structure was determined to not be feasible without major renovation and rebuilding and so the construction of a new bathhouse structure was determined to be the preferred approach to best meet the project goals.

Existing Bathhouse Description

The original bathhouse was a simple structure with a central 'basket room' where guests would leave their change of clothes after having put on bathing suits in either the men's or women's changing rooms. There were also a small room for each male and female lifeguards. The original design drawings for the structure show the building in the Mediterranean Revival architectural style with clay tile roof and a stucco finish, which was popular regionally during the time period that this was built, in the early 1930's.



Original Bathhouse with Current Floorplan Overlay illustrating additions and changes to the original floorplan



Original Bathhouse Elevation

Over the years this original structure underwent a series of renovations and additions which carved up the original spaces as the need for staff space, storage and bathroom facilities grew. The current building finishes also underwent changes as well with the primary materials being painted brick and an asphalt shingle roof. The roof is simple exposed wood framing with some small vents under the eaves which don't allow for adequate ventilation leading to issues with mold and mildew. As it stands now, the current facility configuration is poor and does not meet programmatic needs and code requirements, particularly as regards accessibility and storage.

Current bathhouse elevation

Single accessible bathroom

Small storage area

Roof structure

Bathroom ventilation

Storage area

Staff area

Community Needs Building Assessment

Existing Program Assessment

Through a collaborative process with town staff and community stakeholders the study team reviewed the existing bathhouse program and assessed the programmatic needs that weren't being met with the current facility. In general, the current bathhouse bathroom and changing facilities were seen as too small, dark, and not well ventilated. Staff areas were similarly seen as too small and not arranged to face the beach area. Storage areas are also spread around in several locations instead of a centralized space. The public also felt strongly that a portion of a redesigned bathhouse could be used in more seasons for visitors to the larger park area in the off-season.

Existing Bathhouse Program

Interior Spaces: 2,063gsf

Public Uses

- Women's Bathroom 426 nsf
  - Separate bathroom / changing areas
- Men's Bathroom 325 nsf
  - Separate bathroom / changing areas
- Accessible / Family Bathrooms 74 nsf
  - (1) provided
  - Accessed off corridor to staff area

Staff Uses

- Guardroom 206 nsf
  - Room for lockers / cubbies
  - Storage for equipment
  - Fridge / microwave for lunches
- Lifeguard changing rooms 242 nsf
  - (2): Women's/Men's
- First Aid 110 nsf
  - Room for first aid bed, supply cabinet and desk
  - Contains one hand sink
  - Not large enough for group training (approx. 10 ppl)
- Office/Gatekeeper 174 sf

Mechanical

- Mechanical spaces 62 nsf
  - Spread out in a few different areas plus overhead hot water tank in family bathroom

Storage

- General storage area 444 nsf
  - Spread out in three different building areas

Exterior Areas, Storage, and Elements: 868gsf

- Covered porch 180 sf
  - Vending Machine Location
  - Provides sheltered waiting area outside bathrooms
- Lifeguard break area 488 sf
  - Doesn't address beach area
- Water Fountain
  - Wall mounted model
  - Ability to drain down for winter
- Rinse station
- Storage container 200 sf

Proposed Program

Following the assessment of the existing bathhouse program the study team incorporated the comments received from town staff and the public to outline the program for the new facility. This program includes larger spaces for visitor use, adequately sized staff and storage areas. The new program also incorporates the ability to use the staff and family bathroom areas in the off-season. Below is the program developed through this process.

Proposed Bathhouse Program

Interior Spaces Total: 3,200 gsf

Unconditioned spaces: 1,837 gsf

Public Uses

- Women's Bathroom **465 nsf**
  - Separate bathroom / changing areas
- Men's Bathroom **465 nsf**
  - Separate bathroom / changing areas

Storage

- General storage area **740 nsf**
  - Consolidated in one space
  - Large enough for off-season storage

Grossing Factor (10%): 167 sf

Conditioned Spaces: 1,363 gsf

Public Uses

- Accessible / Family Bathrooms **140 nsf**
  - (2) provided
- Concession **130 nsf**
  - Walk up counter
  - Small kitchen

Staff Uses

- Gatekeeper office **165 nsf**
  - Adjacent to beach area entry
  - Visitor walk-up window
- Guardroom **265 nsf**
  - Room for lockers / cubbies
  - Storage for equipment
  - Fridge / microwave for lunches
  - Women's/Men's changing rooms
- First Aid **295 nsf**
  - Room for first aid bed, supply cabinet and desk
  - Contains one hand sink
  - Large enough for group training
- Town office **100 sf**
  - For full time staff use when on site

Mechanical / Storage

- General storage/mechanical areas **144 nsf**

Grossing Factor (10%): 124 sf

Exterior Elements: 3,450 gsf

- Covered porch **2,350 sf**
  - Picnic/BBQ area
  - Lifeguard break area
- Uncovered porch **1,100 sf**
  - Dogtrot area
  - Monitored entry to beach area
  - Views through from arrival to pond
  - Additional seating areas
- Rinse stations
  - Includes two to four sets of heads
  - Located on exterior wall of bathroom volume
- Water Fountain
  - Hi/low with bottle filler
  - Ability to drain down for winter

Building Code Review

Project Description

The Project involves the design and construction of a new bathhouse and administration building at Morses Pond. The building is proposed to have one level with an area of approximately 3,200 gsf split over two separate buildings.

Applicable Codes

The following primary codes are applicable to this project:

- Accessibility - Massachusetts Architectural Access Board, 521-CMR and the Americans with Disabilities Act Guidelines (ADAAG).
- Building - Massachusetts State Building Code (780 CMR) 9th Edition. 780 CMR is an amended version of the 2015 International Building Code.
- Electrical - Massachusetts Electrical Code, 527 CMR §12.00. The Massachusetts Electrical Code is an amended version of the 2017 National Electrical Code (NFPA 70).
- Fire Prevention - Massachusetts Fire Prevention Regulations, 527 CMR.
- Mechanical - International Mechanical Code, 2015, as adopted and amended by 780 CMR (IMC).
- Plumbing - Massachusetts Fuel Gas and Plumbing Codes, 248 CMR
- Building Energy – Massachusetts Specialized (Opt-in) Code, 225 CMR 23.00 including Appendix CC.

Assumptions

The code review and this report have been prepared based on the following specific assumptions:

1. The Building will not be equipped throughout with an automatic sprinkler system.
2. If any hazardous materials are to be located within the buildings now or in the future, the amounts will be limited to the exempt amounts permitted by 780 CMR §307.1.
3. There will be no Hydrogen Cutoff rooms, paint shops or similar incidental uses.

Use and Occupancy Classification

The following Uses are considered included in the Building:

1. Restroom Areas, breakroom and first aid room (Utility and Miscellaneous Group U per 780 CMR §312)
2. Moderate Hazard Storage (Storage Use S-1 per 780 CMR §311)

Mixed Use Approach

Because two or more occupancies are provided, compliance with Section 508.1 Mixed Use and Occupancy is required.

508.1 Mixed occupancies. Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy group, the portion thereof shall comply with the applicable provisions of Section 508.2, 508.3 or 508.4, or a combination of these sections.

Given the uses present and proposed total gsf, a non-separated mixed-use approach is recommended. The building is addressed as a non-separated mixed use with Utility and Miscellaneous Group (U) and Moderate Hazard Storage (S-1) areas present.

Construction Classification

Type V-B construction is proposed wherein the structural elements, exterior wall and interior walls can be of any material allowable by code. Occupancy classification U allows for a maximum one-story building with up to 5,500 gsf of area.

Means of Egress

At least one (1) accessible means of egress is provided from an accessible room or space. There are no spaces where more than one (1) means of egress or exit is required. Accessible means of egress must provide a continuous path of travel to a public way (780 CMR §1009.2).

Exits are located such that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed line of travel does not exceed 200-feet (780 CMR §1017.2).

Fire Protection Systems

- Sprinkler Systems - An NFPA 13 compliant sprinkler system is not required (780 CMR §903.2).
- Fire Extinguishers - Portable fire extinguishers are required in accordance with 780 CMR §906 and the 527 CMR. All fire extinguishers to be provided are to be in accordance with NFPA 10, Standard for the Installation of Portable Fire Extinguishers (780 CMR §906.0)
- Fire Alarm System - A fire alarm system is required to be provided per 780 CMR §907.2.

Fire Department Access

527 CMR addresses fire department access requirements and states that the head of the fire department shall require and designate public or private fire lanes as deemed necessary for the efficient and effective use of fire apparatus. The arrangement of fire department access to the project must be reviewed with the Wellesley Fire Department. Preliminary plans were reviewed with the Wellesley Fire Department and were found acceptable. Once the project reaches the Design Development phase an additional review will occur.

Plumbing Fixtures

Under the plumbing code (248 CMR), plumbing fixtures are required based on use and occupancy. Total fixtures supplied are to comply with Section 10.10 denoting minimum plumbing facilities as required by total occupant load. The proposed bathhouse design exceeds the minimum fixtures required and is based on maintaining the same quantities as the existing bathhouse.

Accessibility

The entire building must be designed to be accessible to, functional for and safe for use by persons with disabilities in accordance with 521 CMR and the Americans with Disabilities Act (ADA). This includes site access, entrances, bathrooms, and all public spaces within the building.

Preferred Site Master Plan Recommendations

The preferred site master plan was established in direct response to the ideas and preferences put forth by very engaged community members, Recreation Commission, and other key stakeholders. As previously noted, dialogue at the three public meetings was extremely spirited and thoughtful, with participants interested in striking just the right balance in the approach to refurbishing and enhancing this important property and recreational resource. To find that balance, project proponents kept returning to the central themes that community members continually gravitated toward, and these are summarized below:

- The site is very much loved as it is, so a master plan tenet should include preserving and enhancing all that is great.
- The bathhouse has outlived its practical and functional life and given the extent of repairs and upgrades required in order to bring the building into full code compliance and functionality, it is more cost effective and practical to demolish the existing building and create a new building.
- In order to improve universal access for all site amenities, walkways and paths must be graded in compliance with ADA guidelines.
- Designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.
- Through the establishment of meadows and native landscape plantings, wildlife habitat can be improved.
- New enhancements should be attractive, low-intensity, and supportive of neighborhood and town-wide use both during and outside of the summer swimming season.

The site master plan was designed to strike the right balance as it introduces a relatively modest array of improvements that are in keeping with the preferences of master planning participants. This plan also considers the Town of Wellesley's capacity to maintain and operate the property in good order, while protecting the public drinking water supply wells and systems.

Aerial view of the site

Preliminary Building Location Studies

The design team developed a series of three (3) preliminary beach area designs looking at three main building configurations and where was the best location for them to be placed on the site was.

Master Plan Scheme 1

Master plan scheme one first looked at creating a new building in roughly the same location as the existing building. The location of the buildings are a not conducive to the new drop-off and parking area. This would require visitors to navigate across the site from the drop-off to pay their entry fee to use the beach facilities.

This scheme was not pursued because the building did not function well with trying to squeeze all of the programming into a single footprint, and its position in the relation to the primary swim area was not advantageous.

Master plan scheme 1

Master Plan Scheme 2

Master plan scheme two created a new pair of buildings closer to the existing bridge on the northern portion of the site. Advantages of this scheme included the creation of a formal and highly visible gateway between the buildings and to create the sense of arrival, while the building locations help to open up more space for guests around the perimeter of the beach.

The location of the playground would require some extensive regrading of the site to accommodate this amenity. The location of the buildings are a not conducive to the new drop-off and parking area. This would require visitors to navigate across the site from the drop-off to pay their entry fee to use the beach facilities. For these reasons, this scheme was not selected.

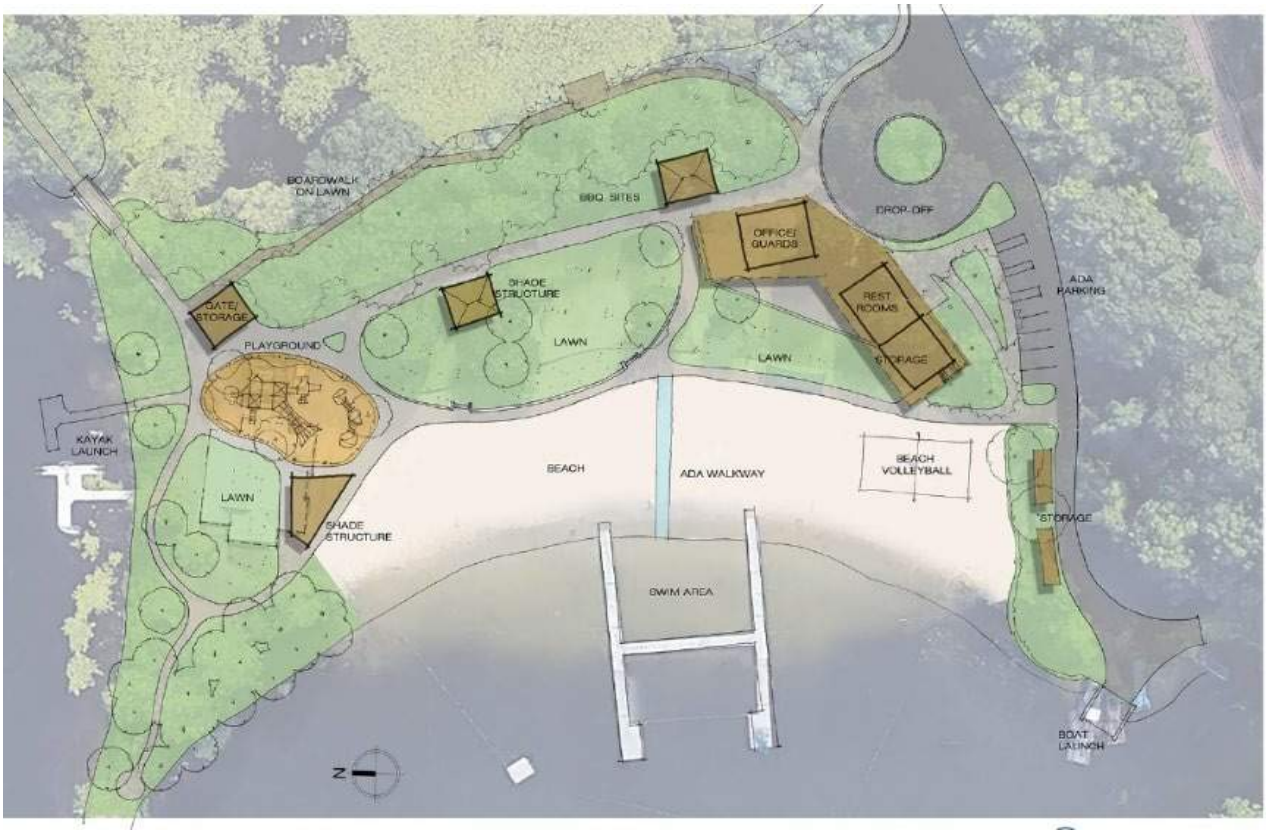
Master plan scheme 2

Master Plan Scheme 3

Master plan scheme three became the preferred scheme after receiving input from stakeholders. The building has been moved to the opposite side of the beach, closer to the drive on the southern edge of the site. This maintained the benefit of the second scheme in creating a gateway entrance while also opening up green space and view corridors by removing the existing structure from its current location.

With the buildings being located closer to the proposed drop-off and new parking area, it makes for a much simpler and quicker entry experience to the beach facilities. It also is advantageous for visitors who have mobility issues.

The location of the playground is also in an existing area that is relatively flat so extensive grading would not be required to make this a fully accessible and inclusive space.



Master plan scheme 3

Preferred Site Master Plan Design

This design reflects the full potential build out option that was derived from stakeholder feedback received after reviewing the first master plan developed in 2019 and 2020. The current proposed project scope within this study has components of this plan that are not included due to budget constraints.

Key Features of this Site Master Plan include:

Parking and Arrival

- Reconfigured and more efficient parking lot layout, with potential for future PV solar arrays.
- Reconfigured drop off.
- Open lawn area on east side of Ice House Pond.
- New wooden boardwalk along southern portion of Ice House Pond.
- New walkway along west edge of Ice House Pond, allowing guests without passes to have access to the new bathhouse building location.
- Walkway separated from Water Department driveway.

Bathhouse

- New bathhouse building's location closer to entrance drive/walkway.
- Bathhouse broken into two buildings, one which can be shut down during off-season.
- ADA parking brought into compliance.
- Increased and improved storage areas.

- One continuous roof connecting the two building footprints to create covered shaded outdoor space.

Open Space

- New children's playground along walkway.
- Volleyball relocated to beach area.
- Open lawn areas for flexible gathering opportunities.
- New kayak rental/storage which small check-in office.
- Adult outdoor exercise equipment areas.
- New tree plantings to frame the beach entry and important views of the pond.

Pedestrian Accessibility

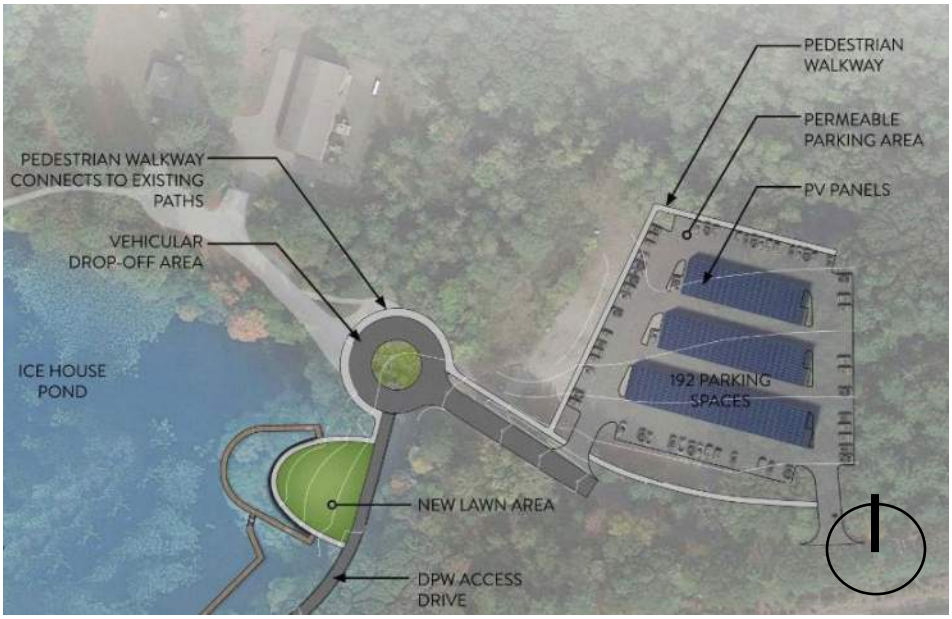
- New walkways at beach area including flush wooden walkway at beach.
- Site side ADA accessible walkways.
- ADA accessible mat across beach.
- Secondary path system through wooded area adjacent to Ice House Pond that allows visitors to use the site without entering the paid beach area.
- Peninsula walk with bench seating for pond views.

Ice House Pond

- Removal of invasive species.
- Dredging.
- Boardwalk with viewing and seating areas through Ice House Pond.

Parking Area /Drop-off Modifications

The current parking and drop off sequence is very unclear as to where exactly the entrance is, and how either vehicles or pedestrians are supposed to get to the beach area from their car.



Proposed entry drop-off and parking area

In order to clarify and remedy this issue the intent is to reconfigure the drop-off area, developing signage and visual clues to promote using what is currently the service and handicapped parking drive into the main pedestrian walkway. These changes will also create a more distinct vehicular access drive for the Water Department.

A total of 192 parking spaces have been created in this new more efficient layout, including six (6) ADA accessible stalls. A new sidewalk connection from the northern side of the parking lot will provide better pedestrian access to Morses Pond. The parking lot will be porous asphalt to help with stormwater run-off.

In an effort to help protect the town drinking wells, the parking lot, which currently abuts the Zone 1 wellhead protection area is proposed to be moved approximately 100' to the east in order to give a larger buffer to the wellheads.

Unless the lack of rebates and credits makes it cost prohibitive, there is the potential of adding solar array panels at the parking area. These solar array panels could possibly be purchased and installed under a separate contract when funds become available.

Image of canopy supported PV array

Pedestrian/ADA Parking Access at the Bathhouse

Reconfigured drive to boat launch and accessible parking stalls

In addition to expanding the width of the drive to allow for emergency vehicle access, the drive will have designated drive and walkway lanes in the infrequent event that both pedestrians and a vehicle are sharing the road.

Two (2) ADA accessible and seven (7) short-term/staff parking stalls are incorporated into the design. The roadway has also been slightly widened adjacent to the new boat launch dock to allow

for better maneuverability for vehicles in this area. A new sidewalk connects the parking area to bathhouse and main beach entrance.

The intent is that only the following vehicles would be allowed on roadway:

- Emergency vehicles.
- DPW vehicles in conjunction with the weed harvester.
- ADA/Accessible guest vehicles (with proper identification).
- Short-term/staff parking.
- Cartop boat vehicles utilizing boat launch.

Site-wide Pedestrian Access

Providing ADA access for the entire Morses Pond facility was an important goal of the design team when we began to think about existing and new pedestrian movements, and how they would navigate through the site.

The existing topography is challenging in certain areas with steep changes in grade. Through our design process and study of the existing topography we were able to make the whole site ADA accessible with all walkways graded with slopes less than 5%. The main building entry plaza is graded with cross slopes not to exceed 1.5% in any direction, again within the allowable limits for ADA accessibility. The accessible mat at the beach will allow for more people to access this area and the existing boat dock.

The plan includes two sets of stairs, one which leads from the lower Ice House Pond deck and a stair leading from the bathhouse gathering plaza to the beach front wooden deck pedestrian path. There are alternative accessible pedestrian routes, so these stairs are not the only means of egress in these areas. They can be used to gain a more direct route to connect these areas of the site.

A sidewalk is included on north and west perimeter side of the new parking lot. This will allow pedestrians to navigate through the parking lot in a much safer way and reduce the conflict with vehicles. The existing pedestrian route connection to Morses Pond from the parking lot along the northern side of Ice House Pond will remain in place.

The materials proposed for the site wide pedestrian sidewalks include bituminous concrete, concrete unit pavers, wood decking, and compacted stone dust. All of these surfaces are considered to be ADA compliant.

The diagram below indicates the accessible pedestrian routes from the parking lot to the bathhouse and other amenities throughout the site.

Site Master Plan Accessibility Diagram

LEGEND

- NEW PEDESTRIAN ACCESSIBLE ROUTE: SLOPE AT 5% OR LESS
- NEW PEDESTRIAN ROUTE WITH STAIR ACCESS
- SHARED ACCESS BETWEEN VEHICLES & PEDESTRIANS
- EXISTING PEDESTRIAN ACCESSIBLE ROUTE: SLOPE AT 5% OR LESS

Removal of Invasive Plant Species at Ice House Pond

There are several invasive species that affect the property, but oriental bittersweet (Celastrus orbiculatus) has had a particular impact on the aesthetics and openness of Ice House Pond. By eliminating this pervasive climbing vine, wide areas of currently inaccessible shoreline would be opened up and would prevent further damage to the surrounding landscape. Other invasive species to be controlled include buckthorn, multiflora rose, poison ivy, bush honeysuckle, autumn olive, and black locust.

Invasive species at Ice House Pond

Erosion Control Measures

At several locations throughout the site, measures should be taken to reduce soil erosion and siltation into the pond. A variety of solutions will likely be required including the use of riprap stabilization, groundcover plantings, and grading to redirect stormwater.

One location in particular need of attention is the woodland path on the north side of the 'Old Beach' near the Water Department property.

Erosion at Old Beach

Beach Area

Within the beach area itself there are minor modifications. The play structure will be moved in order to be in a more accessible location, while the volleyball area was moved from the hillside down onto the beach.

Additionally, an accessible mat system is proposed to allow guests with disabilities to get across the sand to the docks and water. These mats are easily to install and can be removed during the months when the beach area is closed to the public.

An accessible beach mat for wheelchair users

Lawn Areas

One feature of the Morses Pond Beach area that is not seen at many other pond beaches is the lawn area that lies beyond the sandy beach. Current beach guests expressed a strong desire to maintain and enhance this feature, since it provides a softer and cooler place to lay out and enjoy the beach area without having to be directly on the sand.

Programmed lawn activities

The new lawn areas are designed with flexibility in mind. Users can determine how they use these spaces. They can be used for programmed events like group yoga on the lawn, or something as simple as kicking the soccer ball with your child. Additionally, maintaining and adding shade trees that will provide respite from the sun on the hottest days of summer is an important inclusion to the master plan.

Maintenance of the lawn areas will be required, with weekly mowing and an organic pesticide program developed.

Playground

The existing play structure is located down on the sandy beach area which makes it inaccessible from an ADA point of view.

The new playground has been relocated to be accessible from the surrounding walkways. Its location is such that parents are still able to keep an eye on kids at both the beachfront and the play area simultaneously. It also makes accessing this facility much easier for users.

The playground has been graded to meet current ADA guidelines with cross slopes of less than 2%. Rubberized safety surfacing to help prevent serious injuries from trips and falls is proposed . A new main play equipment structure, swing set, and educational/sensory pieces are included in the design.

A fence surrounds the perimeter of the playground to help coral children in a safe environment while they play.

The proposed playground

Sensory play equipment

Exercise Equipment Areas

Three (3) locations for permanently installed adult exercise equipment have been incorporated into the plan. Health and fitness is becoming more important to people and part of their everyday lives.

Including these types of amenities within the overall design was well received during the stakeholder meetings. They offer visitors the opportunity to be active in a programmed way by using their own body weight.

These pieces of exercise equipment are designed to withstand regular daily uses by many people, potential vandalism, and the elements in this location. They will remain in-situ year-round so do not need any space for storage within the new buildings.

Outdoor exercise equipment

Site Furnishings

At the first public meeting the design team presented options for the proposed site furnishings. These included bike racks, trash and recycling receptacles, benches, and dining seating options.

The overall consensus was that furniture with color was preferred and that it should be able to withstand the elements, and also be made of sustainable materials.

Two (2) benches with arm rests would be placed on the lower secondary walk to provide a place of respite with views of Ice House Pond. Two (2) benches would also be placed on the main pedestrian path and one (1) adjacent to the playground.

The gathering plaza adjacent to the bathhouse will include furniture with options for communal gathering/dining. This furniture will be fixed in place so does not need any storage space within the new buildings.

Bike racks will be located directly adjacent to the bathhouse for convenience. Trash and recycling receptacles will be placed in key locations throughout Morses Pond.

Colorful dining furniture

Fixed communal dining furniture

Boardwalk at Ice House Pond

In order to provide greater access to and through Ice House Pond the design team has proposed a boardwalk that would cross along the southern edge of the pond. This would both allow access closer to the water but also provide a second walkway for pedestrians moving between the parking area and beach front in the event of vehicular traffic along the access drive.

An overlook area with seating would provide an area of respite for visitors using this connection, or a perfect place to fish.

Plan of the Ice House Pond boardwalk

Tropical hardwood decking and steel guardrails

Accessible fishing area

The material recommended for the decking and guardrails would either be Trex or a tropical hardwood. Trex is a sustainable product constucted of recyclable materials that requires no maintenance. Ipe or similar tropical hardwoods also require no maintenance and come from sustainable sources. Using these materials would prolong the lifespan of this amenity within Ice House Pond.

Conceptual Building Design

Overview

As described in the site master plan, the preferred bathhouse scheme was determined to be a two-building solution. One building footprint contains bathrooms with changing areas and a large storage space. This volume will be unconditioned and shut down after the summer beach season. The other volume contains staff spaces, first aid room, family bathrooms and concession spaces.

This volume will be conditioned and could be used year-round if desired. This approach would give the facility flexibility for use beyond the peak summer season. During the summer season, the two building volumes create a gateway to the beach area which visitors walk through and where a staffed walk-up window serves as a checkpoint where passes and entry fees are collected.

Both structures are proposed to have large overhang/canopies, to provide both shade from the sun and shelter from passing rain showers. Additionally, a larger roofed area adjacent to the concession space would allow for seating/dining in the shade during the summer and protection from snow and rain in the colder seasons.

Finish Materials / Design Character

During the course of the study, a series of images were presented to stakeholders as a way to discuss and select a preferred design character for the buildings. Through this process a general consensus was formed on the design character that the new buildings for the facility should exhibit. Below is a summary of the characteristics that were requested by both Town residents and Town staff members.

- Simple, modest appearance (not fancy or ornate).
- Natural material palette (i.e., wood) was preferred to man-made materials.
- Durable materials for ease of maintenance and longevity.
- Bathrooms and staff spaces opening toward the beach area.
- Lots of natural light for interior spaces.
- Blending of landscape and building through the use of building siting or layering of architecture and landscape elements.
- Roof with overhangs for covered gathering areas to provide areas of shade.

System and Material Narratives

Maryann Thompson Architects worked with project Mechanical, Electrical, Plumbing and Fire Protection engineers to develop a basis of design for building systems. A brief summary of these systems and the building structural system can be found below, for full design narratives refer to the appendix.

Structural Systems

Structural foundation systems will include concrete slab on grade foundation system with either concrete footing or helical piles. Geotechnical investigation would need to be performed early in the next phase to determine the best approach for the site. The wall structure will consist of typical wood framing. The roof structure is proposed to be timber beams supported by steel columns or wood framed bearing walls.

HVAC

The primary mechanical system of the proposed facility will be central exhaust fan ducted to all occupiable spaces. This system will be complemented with natural ventilation through louvers and operable windows. For the staff areas an air-source heat pump (VRF) system will be installed to provide heating and cooling. Supplemental electric heating will be installed in spaces desired to be used through colder seasons.

Electrical Systems

Electrical systems shall be designed to provide the lowest level of base energy use achievable. Lighting will be provided with all LED fixtures and controlled through daylight and occupancy sensors where practical. Any site lighting that will be provided that complies with dark-sky friendly products to minimize light pollution. A fire alarm system will be provided to meet all current codes and safety standards.

Plumbing Systems

Plumbing systems will be designed with water conserving low or no flow fixtures. Electric point of use water heaters will be used over a centralized water heating system to conserve energy.

Sustainability

As supported by town and stakeholder input, including the Climate Action Committee's Sustainability Guidelines for Municipal Buildings, the study team approached the design of the new bathhouse facility with sustainability as a key consideration. The bathhouse will feature a range of sustainability features and strategies such as:

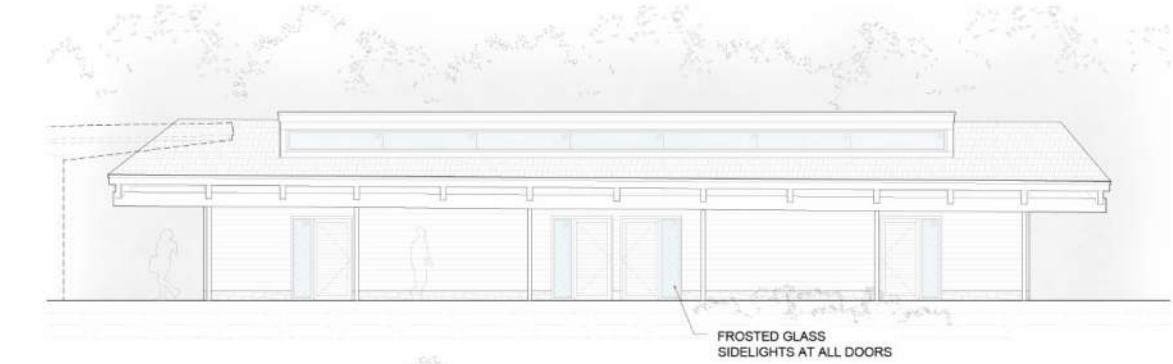
- Daylighting: Large windows allow interior spaces to be lit during the day by natural sunlight rather than electric light.
- Cross Ventilation: The building will be designed to be cooled down by natural breezes through the use of operable windows. This will reduce the use of AC systems in any conditioned spaces.
- Roof Overhangs: Large overhangs shade the exterior envelope to keep the building cooler in the summer but will allow low winter light in.
- Exterior envelope: Conditioned spaces to be super-insulated (approx. R-40 walls and R-60 roof). This will keep the building warmer in the winter and cooler in the summer. Windows for these spaces to be triple-paned.
- Materials: Specify wherever possible the use of locally available and environmentally friendly materials
- LED lighting: All lighting to be highly efficient LED lighting, lowering the energy consumption of the building.
- Electric Building Systems: HVAC and hot water systems to be all electric, eliminating the use of fossil fuels.
- PV system: a PV system located in the parking area or elsewhere could be installed to offset building energy use.

Administration and Bathhouse Buildings

The following images highlight the proposed plans and elevations for the new bathhouse and administration building. These plans and elevations include the feedback received from multiple sources during the public engagement and stakeholder's meetings.

Floor plans of Bathhouse and Administration Building

Elevations – Bathroom and Changing Room Building



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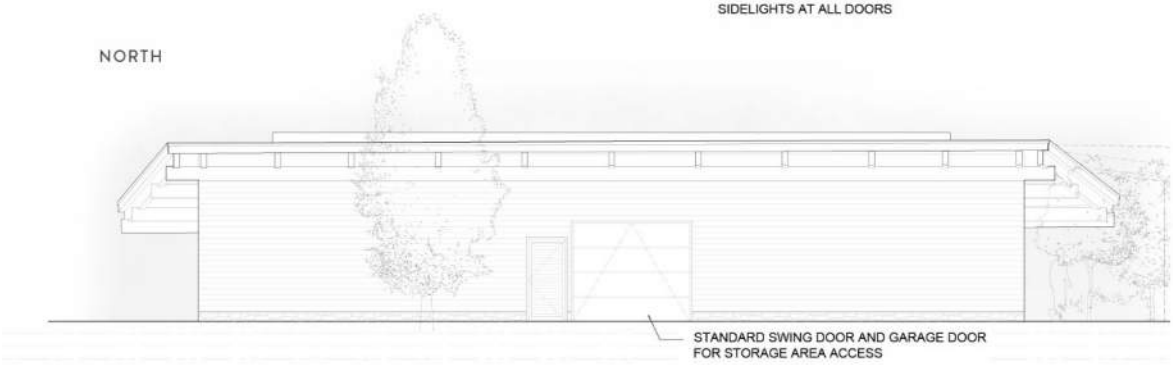

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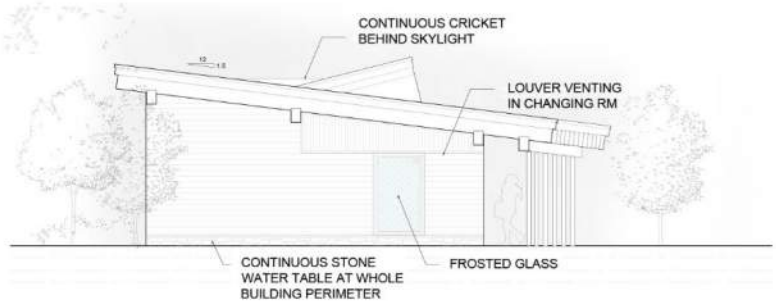

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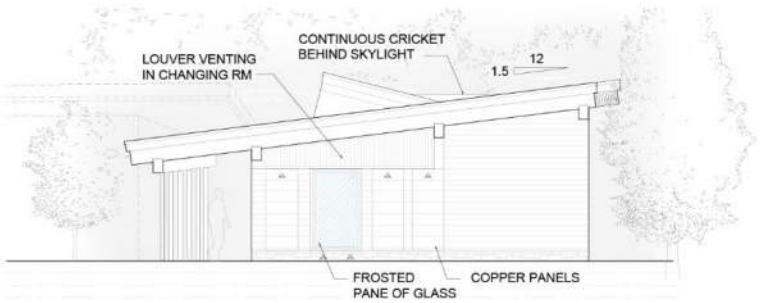
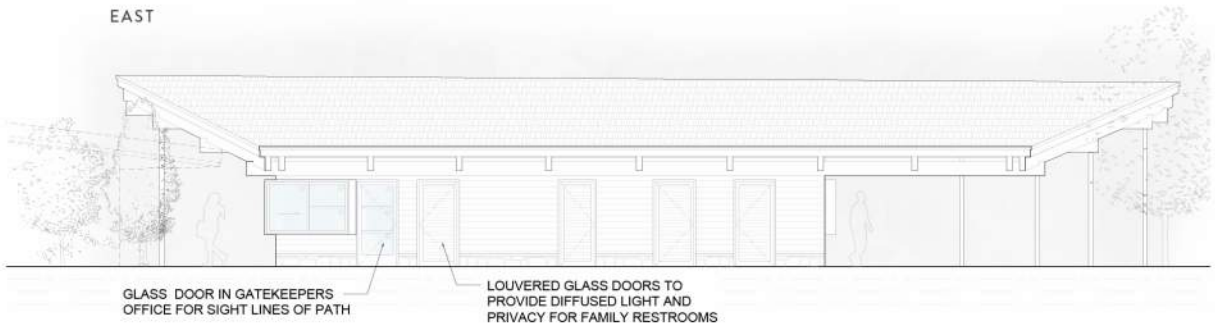


EAST

Elevations - Administration Building

EAST



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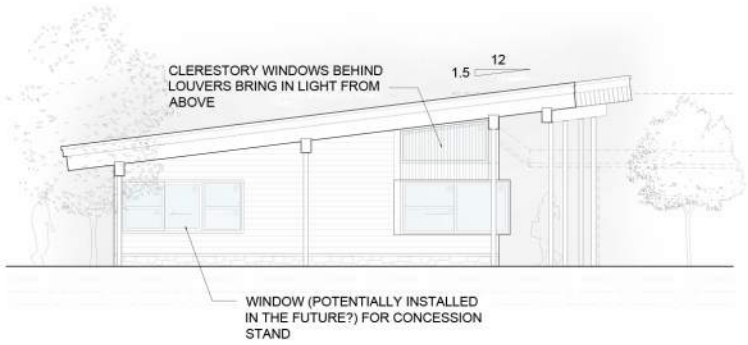

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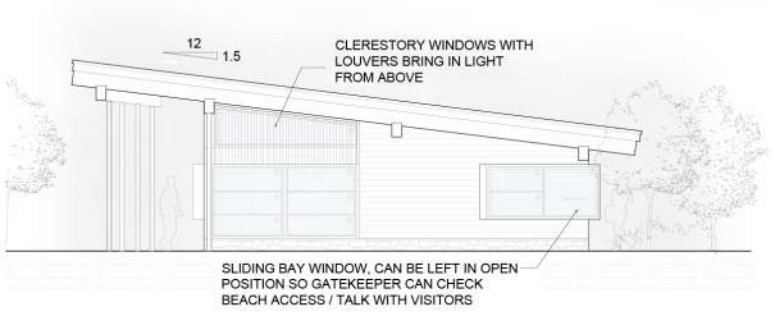
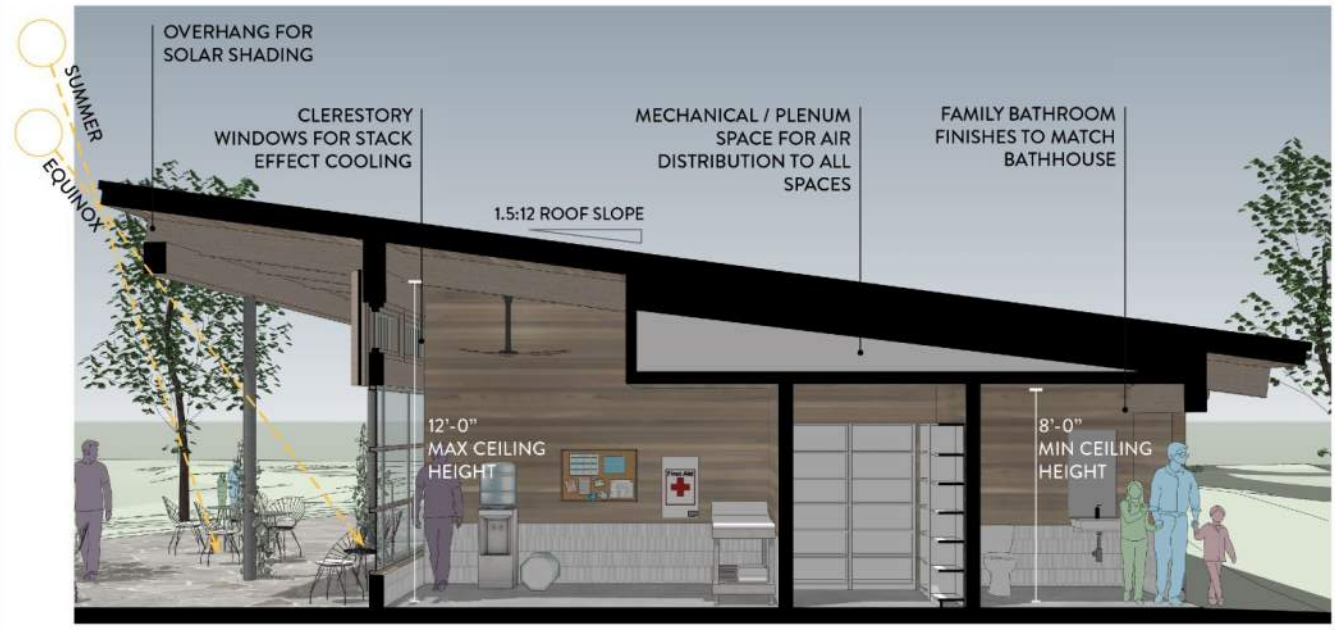
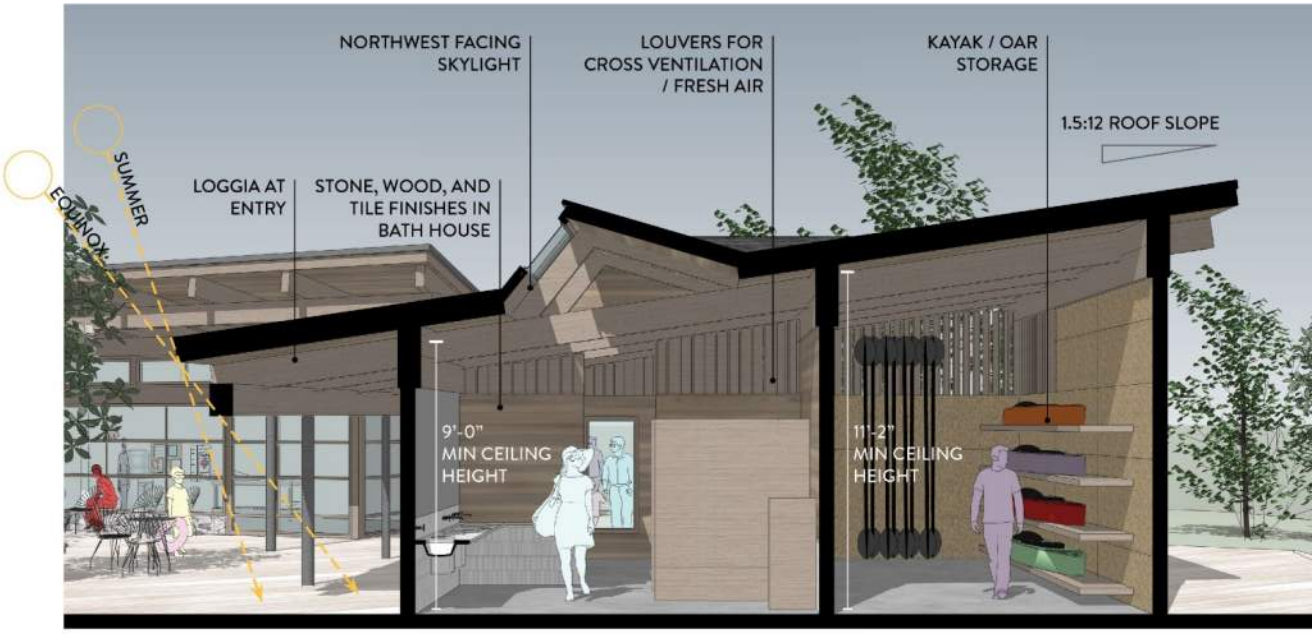


SOUTH

Proposed Interior Building Sections



Section through the Administration Building



Section through the Bathhouse Building

Proposed Site Renderings

Pedestrian entry approach from the accessible parking area

Framed view of the pond from the approach to the administration building

Proposed Site Renderings

First view of the pond as you enter the past the administration building

View of the pond from the dining plaza

Proposed Site Renderings

View of the pond from beneath the administration building canopy

View from the open lawn of the dining plaza with moveable furniture

Proposed Site Renderings

Aerial view of the two building volumes

Aerial view from above the pond looking east

Estimated Construction Cost for Preferred Option

The improvements can be accomplished by phasing one at a time or in groups or all at once, based on funding availability. The Friends of Morses Pond Beach group has also expressed a strong willingness to participate in the funding of capital improvements at the site and their continued support should be further encouraged and understood.

The estimated construction costs (or opoinion of probable construction costs) for the Full Build Site Master Plan identified above within this report is outlined below.

Improvement Area	Estimated Probable Cost
Building Improvements	$ 2,554,472
Site Improvements	$ 2,751,179
Sub Total	**$ 5,305,651**
General Conditions, Mobilization, Bonds, Overhead & Profit @ 18%	$ 955,017
Construction Contingency @ 10%	$ 530,565
Escalation/Market conditions to 2026 (7.5% per year) 22.5%	$ 1,193,769
Sub Total	**$ 2,679,351**
Grand Total	**$ 7,985,002**

Site Value Engineering Exercise

After reviewing the opinion of costs document for the overall site master plan, including buildings, with the Town on May 26, 2023, it was determined that some value engineering of scope items was required to bring the overall budget more into line with the Town's expectations.

The pandemic had a big impact on the cost of both materials and labor and this was reflected in the opinion of probable cost document.

The list below includes the cost reduction measures approved by the Town:

- Removal of all work associated with the new parking lot.
- Removal of lawn area overlook by the drop-off.
- Removal of Ice House Pond boardwalk.
- Removal of adult exercise equipment areas.
- Removal of secondary path at northwest peninsula.
- Removal of path and stair connection from Ice House Pond boardwalk.
- Removal of wooden boardwalk between the beach and lawn area.
- Reduce size of paved area at the gathering plaza.
- Reduce retaining walls.
- Relocate accessible dock to location of the existing boat launch.
- Remove the kayak storage building from the scope.

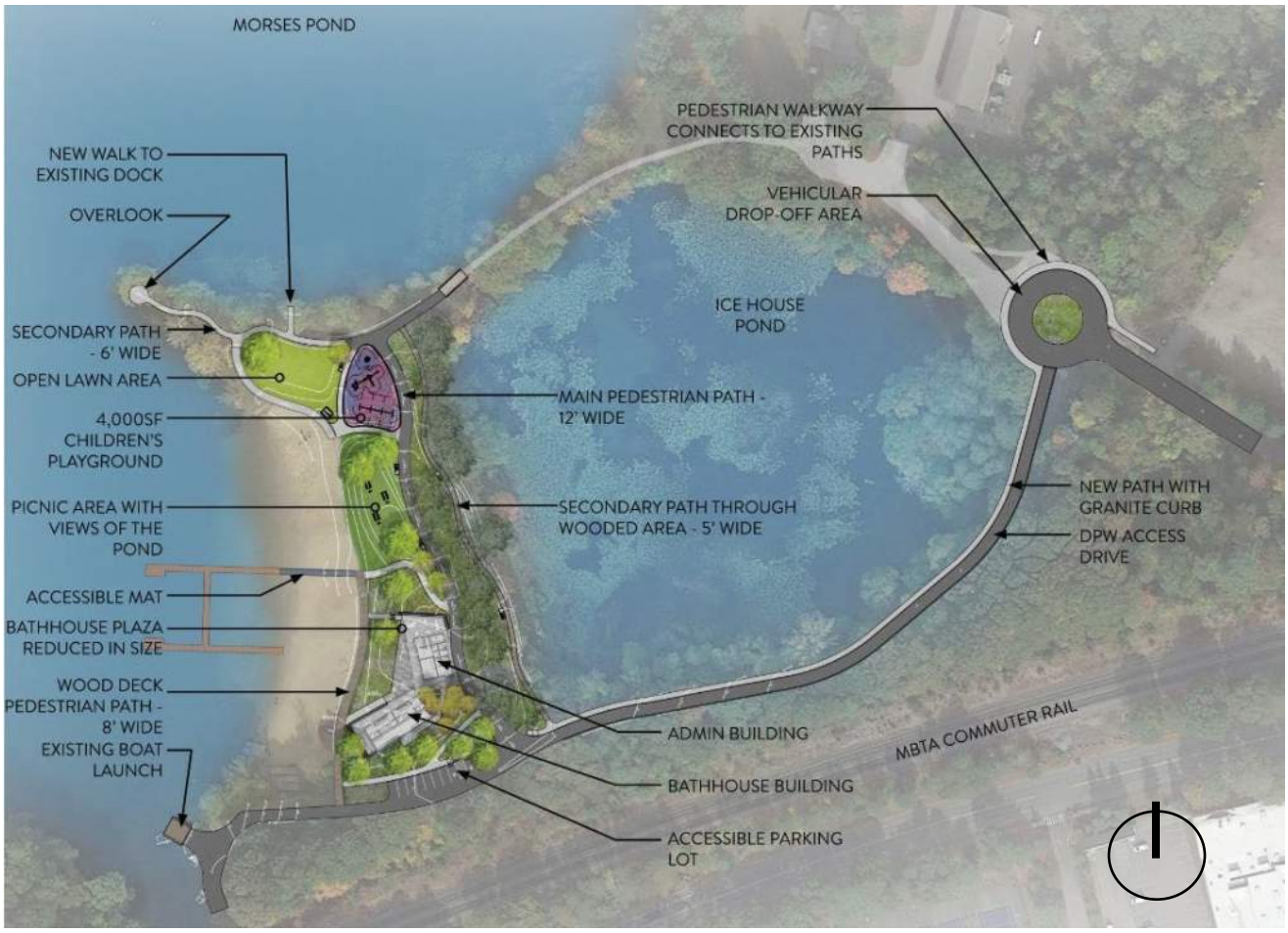
Estimated Construction Costs for Value Engineered Concept

As previously discussed, the design team, along with input from the town, developed the preferred alternative site master plan that included the agreed upon value engineered scope removal. Below is the summarized budget for construction improvements for the site, bathhouse, and administration building. The scope removal resulted in total construction cost savings of $ 1,925,970.

It should be understood that significant soft costs, including designer fees, contingencies, Owner's Project Manager services and other related project costs must be added to the construction cost for a total project cost, which would be the basis for funding request.

Improvement Area	Estimated Probable Cost
Building Improvements	$ 2,173,850
Site Improvements	$ 1,852,087
Subtotal	**$ 4,025,937**
General Conditions, Mobilization, Bonds, Overhead & Profit @ 18%	$ 724,668
Construction Contingency @ 10%	$ 402,593
Escalation/Market conditions to 2026 (7.5% per year) 22.5%	$ 905,834
Subtotal	**$ 2,033,096**
Grand Total	**$ 6,059,032**

Value Engineered Concept Site Master Plan



The beauty of this master plan design is that the scope items removed during the value engineering exercise can easily be designed, and built under separate contracts, even after the construction of this master plan has been completed. This value engineered master plan still delivers major improvements to Morses Pond for Wellesley residents to enjoy for years to come.

Permitting

Based on the current site and building design, we anticipate having to file and obtain the following permits. We will also complete a Wildlife Habitat Report.

- Notice of Intent – for work within and adjacent to wetlands resource areas
- Army Corps of Engineers Pre-Construction Notification – for new structure to provide access in waters of the US
- Wellesley Building Department

Estimated Designer Services Fee

As part of this report, the design team was requested to provide fees to produce a bid ready document package for the preferred alternative site plan, and to assist the town with construction administration services. These fees are a good indication of the budget required to turn this site plan into a set of bid ready documents, but with the understanding they are based on completing these tasks in 2025, with construction administration services extending into 2026. Expenses will be billed separately to the design fees at cost.

The fees related to construction administration have assumed an 18-month construction period. We are carrying the following services to deliver the production of these documents and to supervise the on-site construction:

- Landscape Architecture
- Architecture
- Civil Engineering
- Structural Engineering
- Mechanical Electrical and Plumbing (MEP)
- Permitting
- Opinion of Probable Construction Costs Estimate
- Environmental Support

Below is a table that indicates the estimated design fees by phase.

Task / Design Discipline	Fees
Task 1: Landscape Architecture	
Schematic Design	$ 27,000
Design Development	$ 48,000
Construction Documents	$ 69,000
Bidding	$ 4,000
Construction Administration	$ 62,000
10-month Warranty Review	$3,000
Sub Total	**$ 213,000**

Task / Design Discipline	Fees
Task 2: Architecture, Structural Engineering, MEP	
Schematic Design	$ 69,600
Design Development	$ 82,000
Construction Documents	$ 133,600
Bidding	$ 15,200
Construction Administration	$ 65,000
10-month Warranty Review	$ 6,600
Sub Total	**$ 372,000**
Task 3: Civil Engineering	
Schematic Design	$ 25,000
Design Development	$ 45,000
Construction Documents	$ 29,000
Bidding	$ 2,000
Construction Administration	$ 19,000
10-month Warranty Review	$2,000
Sub Total	**$ 122,000**
Task 4: Permitting	
Notice of Intent	$ 10,600
Design and Stormwater Report	$ 25,000
USEPA NPDES and SWPPP	$ 9,400
Wildlife Habitat Report	$ 5,000
Sub Total	**$ 50,000**

Task / Design Discipline	Fees
Task 5: Opinion of Probable Construction Costs Estimate	
Submissions at 100% SD, 100% DD, and 65% CD	$ 19,000
Sub Total	**$ 19,000**
Task 6: Environmental Support	
Phase 1 Environmental Review	$ 6,000
Design Phase Soil and Groundwater Management Evaluation	$ 22,000
Design Specifications, Soil and Groundwater Management	$ 5,500
Construction Administration	$ 15,000
Sub Total	**$ 48,500**
Grand Total	**$ 824,500**

Conclusion

In laying out the range of potential improvements to the Morses Pond Beach property, an attempt has been made to strike a balance between updating the functionality of the site amenities and maintaining the charming character that has existed at this property for years.

Given the age and condition of the existing bathhouse, it is necessary to develop a new bathhouse solution. This situation gives the Town of Wellesley the opportunity to not just repair or replace the building in its current location but to look at the property more holistically and develop a scheme that works better for both staff and patrons, while at the same time enhancing the overall natural and aesthetic qualities of the site.

Providing accommodations for residents to access the site during the shoulder seasons was a request we heard from the Recreation Department and through our public engagement. The new buildings will provide residents with the opportunity to do this. The architecture and placement of the two new buildings blend seamlessly into the existing fabric of the site, but at the same time help to create a new gateway to the beach area.

This new master plan also transforms a topographically challenged site into a fully ADA accessible inclusive amenity. It allows all Wellesley residents, regardless of mobility constraints, the opportunity to enjoy this wonderful natural resource. It includes a safe system of pathways at varying scales for site users to navigate in groups or alone. Strategically placed benches allow users moments of respite and stunning views of the pond throughout this enhanced site. A new children's playground and flexible lawn areas provide additional areas for gathering and play.

In summary, the production of this master plan is the result of many interested parties coming together in a collaborative way to help deliver a new and improved Morses Pond Beach and Bathhouse facility that will serve the Town of Wellesley for many future generations to come.

Appendices

Appendix A: Opinion of Probable Construction Costs

Appendix B: Site Survey

Appendix C: Geotechnical Report

Appendix D: Wetlands Delineation Report

Appendix E: Electrical System Narrative

Appendix F: HVAC System Narrative

Appendix G: Plumbing System Narrative

Appendix A: Opinion of Probable Construction Costs

Construction Cost Estimate

Morses Pond Beach & Bathhouse Improvements

Wellesley, Ma

Prepared by:

TCi Construction Cost Estimating

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Prepared for:
Weston & Sampson

April 21, 2022

Morses Pond Beach & Bathhouse Improvements
Wellesley, Ma

Construction Cost Estimate

April 21, 2022

MAIN CONSTRUCTION COST SUMMARY

	Building GSF	$/sf	Estimated Construction Cost
Sitework			$3,690,582
Admin Building	1,330	$1,343.28	$1,786,560
Bathhouse Building	1,840	$1,002.90	$1,845,341
Storage Shed/Kayak Rental Building	600	$1,050.96	$630,576
TOTAL ESTIMATED CONSTRUCTION COSTS	**3,770**	**$2,109.56**	**$7,953,059**

PV add costs

Allowance to add for PV panels and supports over parking	$800,000
Allowance to add for PV panels on buildings	$600,000

QUALIFICATIONS

This cost estimate was produced from study drawings and narratives prepared by Weston & Sampson and their design team received April 2022.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumes 2024 bidding and construction.

Bidding conditions are expected to be Chapter 149 public bidding to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

All professional fees and insurance
All Furnishings, Fixtures and Equipment not identified
Items identified in the design as Not In Contract (NIC)
Items identified in the design as by others
Special foundations (unless indicated by design engineers)
Utility company back charges, including work required off-site
Work to City streets and sidewalks, (except as noted in this estimate)
Construction or occupancy phasing or off hours' work, (except as noted in this estimate)
Construction contingency
All Furnishings, Fixtures and Equipment not identified in estimate
Design fees
Building Permit

Morses Pond Beach & Bathhouse Improvements
Wellesley, Ma

Construction Cost Estimate

April 21, 2022

CONSTRUCTION COST SUMMARY IN CSI FORMAT	Sitework	1,330 Admin Building	$/SF	1,840 Bathhouse Building	$/SF	600 Storage Shed/Kayak Rental Building	$/SF	3,770 Total	$/SF
033000 Cast-in-Place Concrete	$7,500	$73,731	*$55.44*	$85,500	*$46.47*	$45,385	*$75.64*	$212,116	*$56.26*
042000 Unit Masonry (part of 040001 FSB)		$7,800	*$5.86*	$9,000	*$4.89*	$11,000	*$18.33*	$27,800	*$7.37*
								$0	
								$0	
051200 Structural Steel Framing		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
053100 Steel Decking		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
055000 Metal Fabrications (part of 050001 FSB)	$15,950	$42,000	*$31.58*	$24,500	*$13.32*	$7,000	*$11.67*	$89,450	*$23.73*
061000 Rough Carpentry		$350,492	*$263.53*	$307,594	*$167.17*	$100,312	*$167.19*	$758,398	*$201.17*
064020 Interior Architectural Woodwork		$45,700	*$34.36*	$24,800	*$13.48*	$4,500	*$7.50*	$75,000	*$19.89*
072100 Thermal Insulation		$15,665	*$11.78*	$920	*$0.50*	$300	*$0.50*	$16,885	*$4.48*
072700 Air Barriers (part of 070001 FSB)		$5,540	*$4.17*	$0	*$0.00*	$46,240	*$77.07*	$51,780	*$13.73*
074600 Wood Siding and Trim		$18,390	*$13.83*	$55,550	*$30.19*	$47,190	*$78.65*	$121,130	*$32.13*
075400 Thermoplastic Membrane Roofing		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
075450 Roofing System		$118,440	*$89.05*	$114,000	*$61.96*	$0	*$0.00*	$232,440	*$61.66*
077200 Roof Accessories		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
078410 Penetration Firestopping		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
079200 Joint Sealants (part of 070001 FSB)		$4,200	*$3.16*	$3,000	*$1.63*	$6,600	*$11.00*	$13,800	*$3.66*
081110 Hollow Metal Doors and Frames		$17,900	*$13.46*	$25,500	*$13.86*	$25,000	*$41.67*	$68,400	*$18.14*
081400 Flush Wood Doors		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
083110 Access Doors and Frames		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
083310 Overhead Doors		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
084110 Wood Windows		$67,500	*$50.75*	$17,630	*$9.58*	$12,500	*$20.83*	$97,630	*$25.90*
084500 Aluminum-Framed Entrances and Storefronts		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
084650 Skylights		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
084660 Sunshades		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
087100 Door Hardware		$8,500	*$6.39*	$5,950	*$3.23*	$6,800	*$11.33*	$21,250	*$5.64*
088000 Glazing		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
089000 Louvers and Vents		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
092110 Gypsum Board Assemblies		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
093000 Tiling		$10,000	*$7.52*	$19,000	*$10.33*	$0	*$0.00*	$29,000	*$7.69*
095100 Acoustical Ceilings		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
096510 Resilient Flooring and Accessories		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
096550 Carpet		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
097300 Resinous flooring and base		$23,000	*$17.29*	$36,800	*$20.00*	$0	*$0.00*	$59,800	*$15.86*
099000 Painting and Coating (part of 090007 FSB)		$13,000	*$9.77*	$6,000	*$3.26*	$2,480	*$4.13*	$21,480	*$5.70*
101400 Signage		$1,500	*$1.13*	$2,000	*$1.09*	$1,200	*$2.00*	$4,700	*$1.25*
102800 Toilet Accessories		$1,860	*$1.40*	$4,635	*$2.52*	$2,247	*$3.75*	$8,742	*$2.32*
104400 Fire Protection Specialties		$600	*$0.45*	$600	*$0.33*	$600	*$1.00*	$1,800	*$0.48*
106500 Toilet Partitions		$0	*$0.00*	$24,900	*$13.53*	$0	*$0.00*	$24,900	*$6.60*
108500 Lockers		$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*

Morses Pond Beach & Bathhouse Improvements
Wellesley, Ma

Construction Cost Estimate

April 21, 2022

CONSTRUCTION COST SUMMARY IN CSI FORMAT		*Sitework*	*1,330* *Admin Building*	*$/SF*	*1,840* *Bathhouse Building*	*$/SF*	*600* *Storage Shed/Kayak Rental Building*	*$/SF*	*3,770* *Total*	*$/SF*
113100 Appliances			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
118100 Concessions Equipment			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
									$0	
122110 Horizontal Louver Blinds			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
122510 Walk-Off Mats			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
									$0	
210000 Fire Suppression			$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
220000 Plumbing - FSB			$63,345	*$47.63*	$223,401	*$121.41*	$0	*$0.00*	$286,746	*$76.06*
220000 HVAC - FSB			$110,390	*$83.00*	$32,031	*$17.41*	$0	*$0.00*	$142,421	*$37.78*
260000 Electrical - FSB		$150,000	$68,995	*$51.88*	$79,560	*$43.24*	$30,300	*$50.50*	$328,855	*$87.23*
311000 Site Clearing		$141,750	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$141,750	*$37.60*
312000 Earthwork		$355,032	$15,835	*$11.91*	$17,190	*$9.34*	$9,085	*$15.14*	$397,142	*$105.34*
312500 Erosion and Sedimentation Controls		$48,000	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$48,000	*$12.73*
315000 Ground Improvements		$0	$0	*$0.00*	$0	*$0.00*	$24,000	*$40.00*	$24,000	*$6.37*
321216 Asphalt Paving		$490,120	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$490,120	*$130.01*
321213 Portland Cement Concrete Paving		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
321613 Curbs and Gutters		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
323100 Site Improvements		$806,410	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$806,410	*$213.90*
329000 Landscaping		$150,000	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$150,000	*$39.79*
331000 Site Water Distribution		$30,800	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$30,800	*$8.17*
333000 Sanitary Sewerage Utilities		$44,500	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$44,500	*$11.80*
334000 Storm Drainage		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
335000 Gas		$0	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*	$0	*$0.00*
		$2,240,062	***$1,084,383***	*$815.33*	***$1,120,061***	*$608.73*	***$382,739***	*$637.90*	***$4,827,245***	*$1,280.44*
GENERAL CONDITIONS & REQUIREMENTS	15%	$336,009	$162,657		$168,009		$57,411		$724,086	
GL INSURANCE	1.4%	$31,361	$15,181		$15,681		$5,358		$67,581	
BONDS	2%	$44,801	$21,688		$22,401		$7,655		$96,545	
OVERHEAD & PROFIT	6%	$159,134	$77,035		$79,569		$27,190		$342,928	
DESIGN AND PRICING CONTINGENCY	15%	$397,835	$192,586		$198,923		$67,974		$857,318	
ESCALATION/MARKET CONDITIONS to 2024	15%	$481,380	$233,030		$240,697		$82,249		$1,037,356	
TOTAL ESTIMATED CONSTRUCTION COSTS		**$3,690,582**	**$1,786,560**	***$1,343.28***	**$1,845,341**	***$1,002.90***	**$630,576**	***$1,050.96***	**$7,953,059**	***$2,109.56***

Sitework

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	A SITEWORK						
	Site Contractor general conditions						
312000	Mobilization	**2**	ea	6,500.00	13,000		
311000	Site fencing, protection, barricades	**1**	ls	15,000.00	15,000		
	Site prep and removals						
311000	Stabilized Construction Entrance	**2**	ea	6,500.00	13,000		
312500	Compost filer tubes	**4,000**	lf	12.00	48,000		
311000	Site removals	**125,000**	sf	0.75	93,750		
311000	Building removals	**1**	ls	20,000.00	20,000		
	Earthwork						
312000	Cut, fill, shape & compact subgrade for new grades and all utilities	**10,000**	cy	12.00	120,000		
312000	Import fill for new grades	**1,500**	cy	40.00	60,000		
	SUBTOTAL					382,750	
	Paving and walks prep						
312000	Bitum. Paving 12" Dense Grade	**4,264**	cy	38.00	162,032		
	Paving						
321216	Pedestrian Bitum conc	**14,712**	sf	3.85	56,641		
321216	Vehicular Bitum conc	**36,679**	sf	4.00	146,716		
321216	Permeable parking bitum conc	**63,725**	sf	4.50	286,763		
	SUBTOTAL					652,152	
	Electrical						
260000	Allowance for secondary services to buildings	**3**	ea	50,000.00	150,000		
	Storm						
334000	No storm systems included						
	Water						
331000	Water lines to bathhouse and admin	**300**	lf	80.00	24,000		
331000	Gates & valves	**4**	ea	950.00	3,800		
331000	Water CTE	**2**	ea	1,500.00	3,000		
	Sanitary						
333000	Sewer lines to bathhouse and admin	**300**	lf	95.00	28,500		
333000	SMH	**2**	ea	5,500.00	11,000		
333000	Connection to existing SMH	**2**	ea	2,500.00	5,000		
	SUBTOTAL					225,300	
	Site Improvements						
323100	On grade wood deck walkway - beach	**4,868**	sf	50.00	243,400		
323100	On grade wood deck walkway - Pond	**4,808**	sf	50.00	240,400		
323100	Accessible Mat	**723**	sf	10.00	7,230		
323100	Concrete pavers around buildings	**6,269**	sf	20.00	125,380		
323100	Stone faced CIP Retaining walls around buildings	**200**	lf	550.00	110,000		
03300	Site stairs	**1**	ea	7,500.00	7,500		
05500	Free standing railings at ramp and stairs	**50**	lf	175.00	8,750		
05500	Bollards	**12**	ea	600.00	7,200		
323100	Relocated docks	**1**	ls	10,000.00	10,000		
323100	Play ground equipment	**1**	ls	50,000.00	50,000		
323100	Benches, tables and misc site equipment	**1**	ls	20,000.00	20,000		
	SUBTOTAL					829,860	
	Landscaping						
329000	Allow for plantings and lawns	**1**	ls	150,000.00	150,000		
	SUBTOTAL					150,000	
	TOTAL - SITEWORK						***2,240,062***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Admin Building							
	GROSS FLOOR AREA CALCULATION						
	First Floor			**1,330**			
	TOTAL GROSS FLOOR AREA				**1,330** ***GSF***		
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings						
03300	Formwork	**310**	sf	16.00	4,960		
03300	Re-bar	**1,080**	lbs	2.50	2,700		
03300	Concrete material	**18**	cy	160.00	2,880		
03300	Placing concrete	**18**	cy	40.00	720		
312000	Excavate and backfill	**207**	cy	30.00	6,210		
312000	Import structural fill	**46**	cy	45.00	2,070		
	Foundation walls						
03300	Formwork	**1,860**	sf	16.00	29,760		
03300	Re-bar	**2,340**	lbs	2.50	5,850		
03300	Concrete material	**36**	cy	160.00	5,760		
03300	Placing concrete	**36**	cy	40.00	1,440		
	Column footings/Piers						
03300	Formwork	**288**	sf	16.00	4,608		
03300	Re-bar	**630.0**	lbs	3.00	1,890		
03300	Concrete material	**8.4**	cy	160.00	1,344		
03300	Placing concrete	**8.4**	cy	45.00	378		
	SUBTOTAL					70,570	
	A1030 LOWEST FLOOR CONSTRUCTION						
	SOG						
07210	Vapor barrier	**1,330**	sf	0.50	665		
03300	Reinforcing	**1,530**	sf	1.50	2,295		
03300	Concrete - 5" thick	**23**	cy	160.00	3,680		
03300	Placing concrete	**23**	cy	35.00	805		
03300	Finishing and curing concrete	**1,330**	sf	1.50	1,995		
03300	Control joints - saw cut	**1,330**	sf	0.20	266		
	Miscellaneous						
312000	Excavate and backfill	**108**	cy	45.00	4,860		
07210	Rigid insulation	**1,240**	sf	5.00	6,200		
312000	Slab subbase	**49**	cy	55.00	2,695		
03300	Misc pads and curbs	**8**	cy	300.00	2,400		
	SUBTOTAL					25,861	
	TOTAL - FOUNDATIONS						***$96,431***
	B10 SUPERSTRUCTURE						
	B1020 ROOF CONSTRUCTION						
	Roof system (materials)						
06100	Roof framing: Doug-Fir 10x14 with 6x14 Doug-Fir purlins. All material to be FSC and kiln	**3,140**	sf	25.00	78,500		
06100	Roof sheathing: 2" T&G Doug-Fir structural decking	**3,140**	sf	10.00	31,400		
06100	Fasteners, hold down and tie hardware	**1**	ls	3,297.00	3,297		
06100	10% potential material increase allowance	**1**	ls	10,990.00	10,990		
05500	Steel Columns: 4" dia. (.25" wall) galvanized steel post	**12**	ea	3,500.00	42,000		
	Roof system (labor)						
06100	Boom crew, install and fasten	**8**	cd	2,560.00	20,480		
	SUBTOTAL					186,667	
	TOTAL - SUPERSTRUCTURE						***$186,667***

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	B20	***EXTERIOR CLOSURE***						
	B2010	**EXTERIOR WALLS**						
		Wall Framing (materials)						
06100		Building framing: 2x6 SPF infill walls with PSL posts for roof support where concealed in walls. ½" Plywood sheathing	**2,200**	sf	18.00	39,600		
06100		10% potential material increase allowance	**1**	ls	3,960.00	3,960		
06100		Fasteners, hold down and tie hardware	**1**	ls	1,306.80	1,307		
		Framing (labor)						
06100		Install exterior walls and misc framing	**3**	cd	2,640.00	7,920		
		SUBTOTAL					52,787	
		Insulation & AB						
07210		R-21 batt insulation	**2,200**	sf	4.00	8,800		
07270		Tyvek or similar air barrier - wrap up to roof edge	**2,200**	sf	1.50	3,300		
		SUBTOTAL					12,100	
		Finish						
07460		Exterior siding and trim - Maple	**613**	sf	30.00	18,390		
04200		Stone water table	**156**	sf	50.00	7,800		
06100		Wood louver system - Maple	**262**	sf	45.00	11,790		
		SUBTOTAL					37,980	
	B2020	**WINDOWS**						
84110		Clerestory windws	**140**	sf	125.00	17,500		
84110		Sliding and awning windows	**400**	sf	125.00	50,000		
		SUBTOTAL					67,500	
	B2030	**EXTERIOR DOORS**						
		Doors						
08111		Ext 3x7 glass doors	**3**	ea	1,800.00	5,400		
08111		Ext 3x7 louvered glass doors	**4**	ea	2,000.00	8,000		
08710		Hardware	**7**	lvs	850.00	5,950		
		Misc						
07920		Backer rod & double sealant	**280**	lf	15.00	4,200		
		SUBTOTAL					23,550	
		TOTAL - EXTERIOR CLOSURE						***$193,917***
	B30	***ROOFING***						
	B3010	**ROOF COVERINGS**						
07545		Ice and water shield	**3,140**	sf	5.00	15,700		
07545		Underlayment	**3,140**	sf	3.00	9,420		
07545		Insulation	**3,140**	sf	8.00	25,120		
07545		Cedar shake roof and metal trims	**31**	sq	2,200.00	68,200		
		SUBTOTAL					118,440	
	B3020	**ROOF OPENINGS**						
07720		N/A						
		SUBTOTAL					-	
		TOTAL - ROOFING						**$118,440**

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	C10	***INTERIOR CONSTRUCTION***						
	C1010	**PARTITIONS**						
		Interior Wall Framing (materials)						
06100		2x framing	**2,240**	sf	8.00	17,920		
06100		Plywood each side	**4,480**	sf	5.00	22,400		
06100		Maple finish each side	**4,480**	sf	15.00	67,200		
06100		20% potential material increase allowance	**1**	ls	10,752.00	10,752		
06100		Fasteners & hardware	**1**	ls	5,376.00	5,376		
		Interior Wall Framing (labor)						
06100		Install exterior walls and misc framing	**10**	cd	1,760.00	17,600		
		SUBTOTAL					141,248	
		Insulation & AB						
07270		Acoustical batt	**2,240**	sf	1.00	2,240		
		SUBTOTAL					2,240	
	C1020	**INTERIOR DOORS**						
		Doors						
08111		Int 3x7 doors	**3**	ea	1,500.00	4,500		
08710		Hardware	**3**	lvs	850.00	2,550		
		SUBTOTAL					7,050	
	C1030	**SPECIALTIES / MILLWORK**						
10440		Fire extinguisher cabinets	**2**	ea	300.00	600		
10140		Interior and exterior code signage	**1**	ls	1,500.00	1,500		
06402		Storage closet shelving	**26**	lf	100.00	2,600		
06402		Office counters/shelving	**16**	lf	400.00	6,400		
06402		Gatekeeper counters/shelving	**14**	lf	400.00	5,600		
06402		Dressing benches	**13**	lf	350.00	4,550		
06402		First aid millwork	**13**	lf	600.00	7,800		
06402		Guard area millwork	**5**	lf	600.00	3,000		
06402		Concessions/storage counters/shelving	**35**	lf	450.00	15,750		
10280		TP dispenser	**2**	ea	85.00	170		
10280		Soap disp	**2**	ea	45.00	90		
10280		HC Mirror	**2**	ea	265.00	530		
10280		GB	**4**	ea	125.00	500		
10280		Changing station	**2**	ea	285.00	570		
		SUBTOTAL					49,660	
		TOTAL - INTERIOR CONSTRUCTION						***$200,198***
	C30	***INTERIOR FINISHES***						
	C3010	**WALL FINISHES**						
09900		Finish interior wood	**4,480**	sf	1.50	6,720		
09300		Tile to wet walls	**400**	sf	25.00	10,000		
		SUBTOTAL					16,720	
	C3020	**FLOOR FINISHES**						
09730		Epoxy floor/base	**1,150**	sf	20.00	23,000		
		SUBTOTAL					23,000	
	C3030	**CEILING FINISHES**						
09900		Finish exposed exposed framing and T&G	**3,140**	sf	2.00	6,280		
		SUBTOTAL					6,280	
		TOTAL - INTERIOR FINISHES						***$46,000***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
	Equipment						
220000	Instantaneous Electric Water Heater	**1**	ea	1,250.00	1,250		
220000	Back flow	**1**	ls	800.00	800		
	Fixtures						
220000	Water Closets	**2**	ea	1,285.00	2,570		
220000	Lavatory	**2**	ea	1,175.00	2,350		
220000	Concession	**2**	ea	1,175.00	2,350		
220000	Non Freeze Wall Hydrants	**2**	ea	385.00	770		
220000	Hose Bibb	**1**	ea	235.00	235		
220000	Floor Drain	**2**	ea	565.00	1,130		
220000	Clean Out	**2**	ea	250.00	500		
220000	Fixture Connections	**6**	ea	350.00	2,100		
	Piping						
220000	Water	**480**	lf	32.00	15,360		
220000	Waste	**240**	lf	68.00	16,320		
220000	Vent	**260**	lf	44.00	11,440		
220000	Insulation	**480**	lf	9.00	4,320		
	Trade Requirements						
220000	Rigging	**1**	ls	500.00	500		
220000	Coordination	**10**	hrs	135.00	1,350		
	SUBTOTAL					63,345	
	TOTAL - PLUMBING						***$63,345***
	D30 HVAC						
	D30 HVAC						
230000	Central inline energy recovery ventilator would be ducted to outdoor air intake and exhaust louvers to provide fresh air to the building and remove code required exhaust air. A duct-mounted DX coil in series with a duct-mounted electric resistance heating coil would provide tempered and de-humidified air to the building occupiable areas.	**1,330**	sf	15.00	19,950		
230000	Variable Refrigerant Flow (VRF) heat pump system shall provide heating and cooling to the regularly occupied areas of the building; a combination of wall and ceiling mounted indoor fan coil units would be installed within the spaces to be served and connected to an outdoor-mounted heat pump condenser unit	**1,330**	sf	60.00	79,800		
230000	Electric radiant ceiling/wall panels shall be provided to heat the non-occupied building spaces (storage/ toilet/ concessions) that are not provided with VRF indoor units	**1,330**	sf	8.00	10,640		
	SUBTOTAL					110,390	
	TOTAL - HVAC						***$110,390***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION						
210000	N/A						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						***$0***
	D50 ELECTRICAL						
	D50 ELECTRICAL						
	Light Fixtures						
260000	Interior lighting	**1,330**	sf	10.00	13,300		
260000	Exterior lighting	**1,810**	sf	10.00	18,100		
	Branch Circuitry						
260000	Branch Circuitry	**1,330**	sf	2.50	3,325		
	Power Circuitry						
260000	Power Circuitry	**1,330**	sf	3.00	3,990		
	Power Equipment						
260000	Power Equipment	**1,330**	sf	6.00	7,980		
	Fire Alarm						
260000	Fire Alarm	**1,330**	sf	5.00	6,650		
	Security						
260000	Security	**1,330**	sf	5.00	6,650		
	Lightning Protection						
260000	Lightning Protection	**1**	ls	6,500.00	6,500		
	Misc						
260000	Temp Power and Lighting	**1**	ls	2,500.00	2,500		
	SUBTOTAL					68,995	
	TOTAL - ELECTRICAL						***$68,995***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	GROSS FLOOR AREA CALCULATION						
	First Floor			**1,840**			
	TOTAL GROSS FLOOR AREA				**1,840**	***GSF***	
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings						
03300	Formwork	**376**	sf	16.00	6,016		
03300	Re-bar	**1,320**	lbs	2.50	3,300		
03300	Concrete material	**22**	cy	160.00	3,520		
03300	Placing concrete	**22**	cy	40.00	880		
312000	Excavate and backfill	**251**	cy	30.00	7,530		
312000	Import structural fill	**56**	cy	45.00	2,520		
	Foundation walls						
03300	Formwork	**2,256**	sf	16.00	36,096		
03300	Re-bar	**2,860**	lbs	2.50	7,150		
03300	Concrete material	**44**	cy	160.00	7,040		
03300	Placing concrete	**44**	cy	40.00	1,760		
	Column footings/Piers						
03300	Formwork	**168**	sf	16.00	2,688		
03300	Re-bar	**367.5**	lbs	3.00	1,103		
03300	Concrete material	**4.9**	cy	160.00	784		
03300	Placing concrete	**4.9**	cy	45.00	221		
	SUBTOTAL					80,608	
	A1030 LOWEST FLOOR CONSTRUCTION						
	SOG						
07210	Vapor barrier	**1,840**	sf	0.50	920		
03300	Reinforcing	**2,116**	sf	1.50	3,174		
03300	Concrete - 5" thick	**32**	cy	160.00	5,120		
03300	Placing concrete	**32**	cy	35.00	1,120		
03300	Finishing and curing concrete	**1,840**	sf	1.50	2,760		
03300	Control joints - saw cut	**1,840**	sf	0.20	368		
	Miscellaneous						
312000	Excavate and backfill	**136**	cy	30.00	4,080		
312000	Slab subbase	**68**	cy	45.00	3,060		
03300	Misc pads and curbs	**8**	cy	300.00	2,400		
	SUBTOTAL					23,002	
	TOTAL - FOUNDATIONS						***$103,610***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	B10 SUPERSTRUCTURE						
	B1020 ROOF CONSTRUCTION						
	Roof system (materials)						
06100	Roof framing: Doug-Fir 10x14 with 6x14 Doug-Fir purlins. All material to be FSC and kiln	**3,000**	sf	25.00	75,000		
06100	Roof sheathing: 2" T&G Doug-Fir structural decking	**3,000**	sf	10.00	30,000		
06100	Fasteners, hold down and tie hardware	**1**	ls	3,150.00	3,150		
06100	10% potential material increase allowance	**1**	ls	10,500.00	10,500		
05500	Steel Columns: 4" dia. (.25" wall) galvanized steel post	**7**	ea	3,500.00	24,500		
	Roof system (labor)						
06100	Boom crew, install and fasten	**8**	cd	2,560.00	20,480		
	SUBTOTAL					163,630	
	TOTAL - SUPERSTRUCTURE						***$163,630***
	B20 EXTERIOR CLOSURE						
	B2010 EXTERIOR WALLS						
	Wall Framing (materials)						
06100	Building framing: 2x6 SPF infill walls with PSL posts for roof support where concealed in walls. ½" Plywood sheathing	**2,604**	sf	18.00	46,872		
06100	10% potential material increase allowance	**1**	ls	4,687.20	4,687		
06100	Fasteners, hold down and tie hardware	**1**	ls	1,546.77	1,547		
	Framing (labor)						
06100	Install exterior walls and misc framing	**3**	cd	2,640.00	7,920		
	SUBTOTAL					61,026	
	Finish						
07460	Exterior siding and trim - Maple	**1,565**	sf	30.00	46,950		
04200	Stone water table	**180**	sf	50.00	9,000		
07460	Wood louver system - Maple	**80**	sf	45.00	3,600		
07460	Copper panels at showers	**50**	sf	100.00	5,000		
	SUBTOTAL					64,550	
	B2020 WINDOWS						
84110	Skylight windows	**88**	sf	125.00	11,000		
84110	Frosted glass windows	**51**	sf	130.00	6,630		
	SUBTOTAL					17,630	
	B2030 EXTERIOR DOORS						
	Doors						
08111	Swing door 10x8	**1**	ea	6,500.00	6,500		
08111	Ext 3x7 door with frosted glass sidelight	**4**	ea	3,500.00	14,000		
08111	Ext 3x7 door and frame	**1**	ea	2,000.00	2,000		
08710	Hardware	**5**	lvs	850.00	4,250		
	Misc						
07920	Backer rod & double sealant	**200**	lf	15.00	3,000		
	SUBTOTAL					29,750	
	TOTAL - EXTERIOR CLOSURE						***$172,956***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	B30 ROOFING						
	B3010 ROOF COVERINGS						
07545	Ice and water shield	**3,000**	sf	5.00	15,000		
07545	Underlayment	**3,000**	sf	3.00	9,000		
07545	Insulation	**3,000**	sf	8.00	24,000		
07545	Cedar shake roof and metal trims	**30**	sq	2,200.00	66,000		
	SUBTOTAL					114,000	
	B3020 ROOF OPENINGS						
07720	N/A						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$114,000**
	C10 INTERIOR CONSTRUCTION						
	C1010 PARTITIONS						
	Interior Wall Framing (materials)						
06100	2x framing	**1,176**	sf	8.00	9,408		
06100	2x framing - 2 rows	**602**	sf	16.00	9,632		
06100	Plywood each side	**2,954**	sf	5.00	14,770		
06100	Maple finish each side	**2,954**	sf	15.00	44,310		
06100	20% potential material increase allowance	**1**	ls	7,812.00	7,812		
06100	Fasteners & hardware	**1**	ls	3,906.00	3,906		
	Interior Wall Framing (labor)						
06100	Install exterior walls and misc framing	**10**	cd	1,760.00	17,600		
	SUBTOTAL					107,438	
	C1020 INTERIOR DOORS						
	Doors						
08111	Int 3x7 doors	**2**	ea	1,500.00	3,000		
08710	Hardware	**2**	lvs	850.00	1,700		
	SUBTOTAL					4,700	
	C1030 SPECIALTIES / MILLWORK						
10440	Fire extinguisher cabinets	**2**	ea	300.00	600		
10140	Interior and exterior code signage	**1**	ls	2,000.00	2,000		
06402	Vanity counter	**22**	lf	400.00	8,800		
10650	Toilet partitions - HC	**4**	ea	1,800.00	7,200		
10650	Toilet partitions - reg	**11**	ea	1,500.00	16,500		
10650	Toilet partitions - screens	**2**	ea	600.00	1,200		
06402	Large storage shelving	**2**	ea	2,000.00	4,000		
06402	Kayak storage	**2**	ea	3,500.00	7,000		
06402	Chaning room benches	**2**	ea	2,500.00	5,000		
10280	TP dispenser	**9**	ea	85.00	765		
10280	Soap disp	**8**	ea	45.00	360		
10280	Mirror	**8**	ea	265.00	2,120		
10280	GB	**4**	ea	125.00	500		
10280	Jan closet MB	**2**	ea	160.00	320		
10280	Changing station	**2**	ea	285.00	570		
	SUBTOTAL					56,935	
	TOTAL - INTERIOR CONSTRUCTION						***$169,073***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	C30 INTERIOR FINISHES						
	C3010 WALL FINISHES						
230000	Finish interior wood	**2,954**	sf	1.50	4,431		
09300	Tile to wet walls	**760**	sf	25.00	19,000		
	SUBTOTAL					23,431	
	C3020 FLOOR FINISHES						
09730	Epoxy floor/base	**1,840**	sf	20.00	36,800		
	SUBTOTAL					36,800	
	C3030 CEILING FINISHES						
09900	Finish exposed exposed framing and T&G	**3,000**	sf	2.00	6,000		
	SUBTOTAL					6,000	
	TOTAL - INTERIOR FINISHES						***$66,231***
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
	Equipment						
220000	Water Meter	**1**	ea	1,200.00	1,200		
220000	Back flow	**1**	ls	800.00	800		
220000	Instantaneous Electric Water Heater	**2**	ea	1,250.00	2,500		
220000	Plumbing Specialties	**1**	ls	1,500.00	1,500		
	Fixtures						
220000	Water Closets	**9**	ea	1,285.00	11,565		
220000	Lavatory	**8**	ea	1,175.00	9,400		
220000	Urinals	**3**	ea	1,150.00	3,450		
220000	Showers - Outdoor	**3**	ea	1,062.50	3,188		
220000	Mop Sink	**2**	ea	1,185.00	2,370		
220000	Electric Water Cooler	**1**	ea	2,437.50	2,438		
220000	Non Freeze Wall Hydrants	**4**	ea	385.00	1,540		
220000	Hose Bibbs	**2**	ea	235.00	470		
220000	Floor Drains	**6**	ea	565.00	3,390		
220000	Clean Outs	**6**	ea	250.00	1,500		
220000	Fixture Connections	**25**	ea	350.00	8,750		
	Piping						
220000	Water	**2,000**	lf	32.00	64,000		
220000	Waste	**1,000**	lf	68.00	68,000		
220000	Vent	**260**	lf	44.00	11,440		
220000	Insulation	**2,000**	lf	9.00	18,000		
	Trade Requirements						
220000	Rigging	**1**	ls	2,500.00	2,500		
220000	Coordination	**40**	hrs	135.00	5,400		
	SUBTOTAL					223,401	
	TOTAL - PLUMBING						***$223,401***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Bathhouse Building							
	D30 HVAC						
	D30 HVAC						
230000	HVAC system - central inline exhaust fan shall be ducted to all regularly occupiable spaces to provide code-required ventilation. Make-up air for the exhaust system shall be provided through the use of operable windows and/or louvered intakes	**1,840**	sf	15.00	27,600		
	SUBTOTAL					27,600	
	TOTAL - HVAC						***$27,600***
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION						
210000	N/A						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						***$0***
	D50 ELECTRICAL						
	D50 ELECTRICAL						
	Light Fixtures						
260000	Interior lighting	**1,840**	sf	10.00	18,400		
260000	Exterior lighting	**1,160**	sf	10.00	11,600		
	Branch Circuitry						
260000	Branch Circuitry	**1,840**	sf	2.50	4,600		
	Power Circuitry						
260000	Power Circuitry	**1,840**	sf	3.00	5,520		
	Power Equipment						
260000	Power Equipment	**1,840**	sf	6.00	11,040		
	Fire Alarm						
260000	Fire Alarm	**1,840**	sf	5.00	9,200		
	Security						
260000	Security	**1,840**	sf	5.00	9,200		
	Lightning Protection						
260000	Lightning Protection	**1**	ls	7,500.00	7,500		
	Misc						
260000	Temp Power and Lighting	**1**	ls	2,500.00	2,500		
	SUBTOTAL					79,560	
	TOTAL - ELECTRICAL						***$79,560***

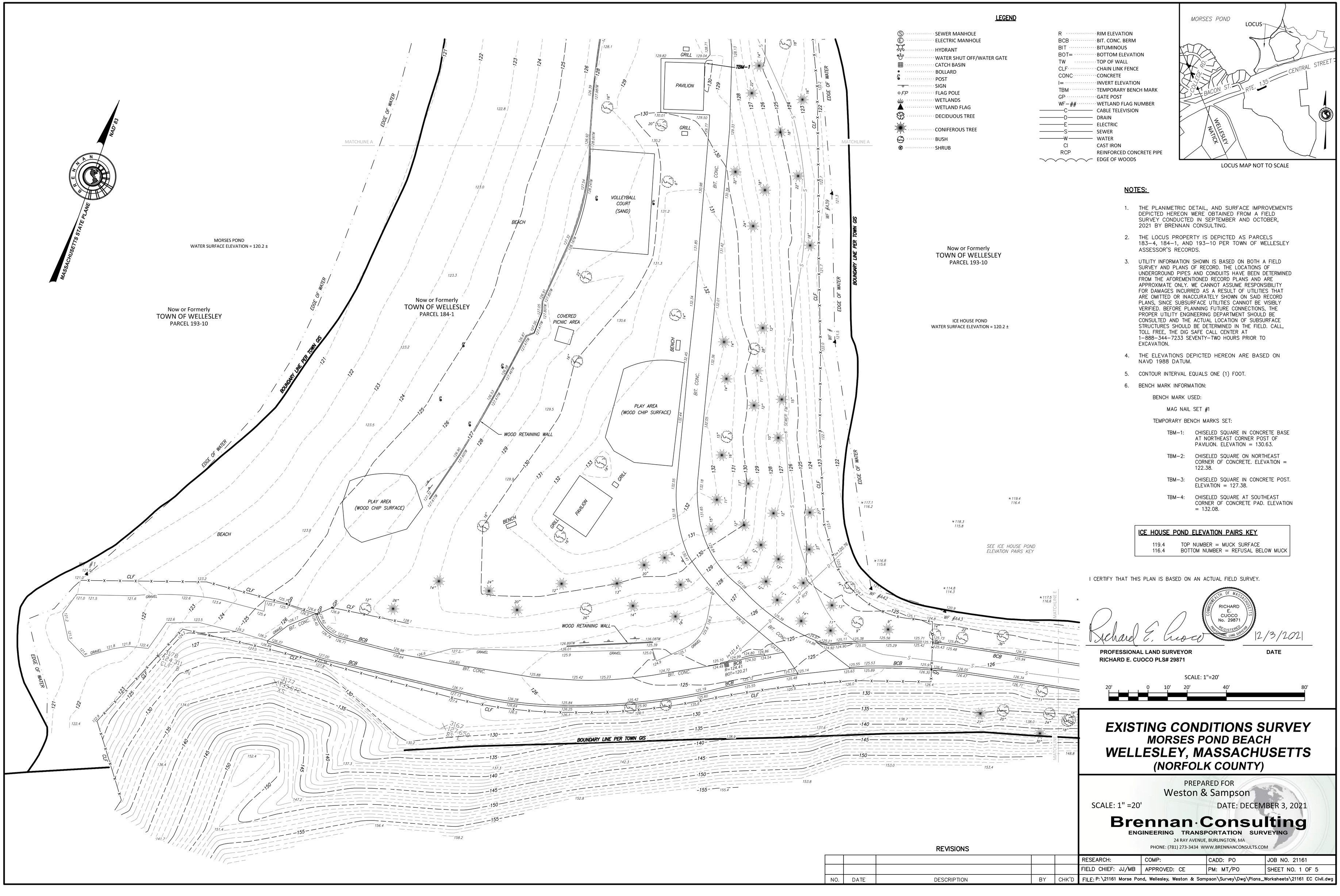
CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Storage Shed/Kayak Rental Building							
	GROSS FLOOR AREA CALCULATION						
	First Floor			**600**			
	TOTAL GROSS FLOOR AREA				**600**	***GSF***	
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings						
03300	Formwork	**220**	sf	16.00	3,520		
03300	Re-bar	**780**	lbs	2.50	1,950		
03300	Concrete material	**13**	cy	160.00	2,080		
03300	Placing concrete	**13**	cy	40.00	520		
312000	Excavate and backfill	**147**	cy	30.00	4,410		
312000	Import structural fill	**33**	cy	45.00	1,485		
	Foundation walls						
03300	Formwork	**1,320**	sf	16.00	21,120		
03300	Re-bar	**1,690**	lbs	2.50	4,225		
03300	Concrete material	**26**	cy	160.00	4,160		
03300	Placing concrete	**26**	cy	40.00	1,040		
	Column footings/Piers						
03300	Formwork	**48**	sf	16.00	768		
03300	Re-bar	**105.0**	lbs	3.00	315		
03300	Concrete material	**1.4**	cy	160.00	224		
03300	Placing concrete	**1.4**	cy	45.00	63		
	SUBTOTAL					45,880	
	A1030 LOWEST FLOOR CONSTRUCTION						
	SOG						
07210	Vapor barrier	**600**	sf	0.50	300		
03300	Reinforcing	**690**	sf	1.50	1,035		
03300	Concrete - 5" thick	**11**	cy	160.00	1,760		
03300	Placing concrete	**11**	cy	35.00	385		
03300	Finishing and curing concrete	**600**	sf	1.50	900		
03300	Control joints - saw cut	**600**	sf	0.20	120		
	Miscellaneous						
315000	Helical Piers	**20**	ea	1,200.00	24,000		
312000	Excavate and backfill	**44**	cy	50.00	2,200		
312000	Slab subbase	**22**	cy	45.00	990		
03300	Misc pads and curbs	**4**	cy	300.00	1,200		
	SUBTOTAL					32,890	
	TOTAL - FOUNDATIONS						***$78,770***
	B10 SUPERSTRUCTURE						
	B1020 ROOF CONSTRUCTION						
	Roof system (materials)						
06100	Roof framing: Doug-Fir 10x14 with 6x14 Doug-Fir purlins. All material to be FSC and kiln	**1,240**	sf	25.00	31,000		
06100	Roof sheathing: 2" T&G Doug-Fir structural decking	**1,240**	sf	10.00	12,400		
06100	Fasteners, hold down and tie hardware	**1**	ls	1,302.00	1,302		
06100	10% potential material increase allowance	**1**	ls	4,340.00	4,340		
05500	Steel Columns: 4" dia. (.25" wall) galvanized steel post	**2**	ea	3,500.00	7,000		
	Roof system (labor)						
06100	Boom crew, install and fasten	**5**	cd	2,560.00	12,800		
	SUBTOTAL					68,842	
	TOTAL - SUPERSTRUCTURE						***$68,842***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	Storage Shed/Kayak Rental Building						
	B20 EXTERIOR CLOSURE						
	B2010 EXTERIOR WALLS						
	Wall Framing (materials)						
06100	Building framing: 2x6 SPF infill walls with PSL posts for roof support where concealed in walls. ½" Plywood sheathing	**1,498**	sf	18.00	26,964		
06100	10% potential material increase allowance	**1**	ls	2,696.40	2,696		
06100	Fasteners, hold down and tie hardware	**1**	ls	889.80	890		
	Framing (labor)						
06100	Install exterior walls and misc framing	**3**	cd	2,640.00	7,920		
	SUBTOTAL					38,470	
	Finish						
07460	Exterior siding and trim - Maple	**1,498**	sf	30.00	44,940		
04200	Stone water table	**220**	sf	50.00	11,000		
07460	Wood louver system - Maple	**50**	sf	45.00	2,250		
	SUBTOTAL					58,190	
	B2020 WINDOWS						
84110	Wood windows	**100**	sf	125.00	12,500		
	SUBTOTAL					12,500	
	B2030 EXTERIOR DOORS						
	Doors						
08111	Ext 6x7 door with frame	**6**	ea	3,500.00	21,000		
08111	Ext 3x7 door and frame	**2**	ea	2,000.00	4,000		
08710	Hardware	**8**	lvs	850.00	6,800		
	Misc						
07920	Backer rod & double sealant	**320**	lf	15.00	4,800		
	SUBTOTAL					36,600	
	TOTAL - EXTERIOR CLOSURE						***$145,760***
	B30 ROOFING						
	B3010 ROOF COVERINGS						
07270	Ice and water shield	**1,240**	sf	5.00	6,200		
07270	Underlayment	**1,240**	sf	3.00	3,720		
07270	Insulation	**1,240**	sf	8.00	9,920		
07270	Cedar shake roof and metal trims	**12**	sq	2,200.00	26,400		
	SUBTOTAL					46,240	
	B3020 ROOF OPENINGS						
07720	N/A						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$46,240**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Storage Shed/Kayak Rental Building							
	C10 INTERIOR CONSTRUCTION						
	C1010 PARTITIONS						
	N/A						
	SUBTOTAL					-	
	C1020 INTERIOR DOORS						
	N/A						
	SUBTOTAL					-	
	C1030 SPECIALTIES / MILLWORK						
10440	Fire extinguisher cabinets	**2**	ea	300.00	600		
10140	Interior and exterior code signage	**1**	ls	1,200.00	1,200		
06402	Gatekeeper counters/shelving	**15**	lf	300.00	4,500		
	SUBTOTAL					6,300	
	TOTAL - INTERIOR CONSTRUCTION						***$6,300***
	C30 INTERIOR FINISHES						
	C3010 WALL FINISHES						
10280	Finish interior wood	**1,498**	sf	1.50	2,247		
	SUBTOTAL					2,247	
	C3020 FLOOR FINISHES						
07920	Sealed concrete	**600**	sf	3.00	1,800		
	SUBTOTAL					1,800	
	C3030 CEILING FINISHES						
09900	Finish exposed exposed framing and T&G	**1,240**	sf	2.00	2,480		
	SUBTOTAL					2,480	
	TOTAL - INTERIOR FINISHES						***$6,527***
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
	N/A						
	SUBTOTAL					-	
	TOTAL - PLUMBING						***$0***
	D30 HVAC						
	D30 HVAC						
	N/A						
	SUBTOTAL					-	
	TOTAL - HVAC						***$0***

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Storage Shed/Kayak Rental Building							
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION						
210000	N/A						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						***$0***
	D50 ELECTRICAL						
	D50 ELECTRICAL						
	Light Fixtures						
260000	Interior lighting	**600**	sf	10.00	6,000		
260000	Exterior lighting	**640**	sf	10.00	6,400		
	Branch Circuitry						
260000	Branch Circuitry	**600**	sf	2.50	1,500		
	Power Circuitry						
260000	Power Circuitry	**600**	sf	3.00	1,800		
	Power Equipment						
260000	Power Equipment	**600**	sf	6.00	3,600		
	Fire Alarm						
260000	Fire Alarm	**600**	sf	5.00	3,000		
	Security						
260000	Security	**600**	sf	5.00	3,000		
	Lightning Protection						
260000	Lightning Protection	**1**	ls	3,500.00	3,500		
	Misc						
260000	Temp Power and Lighting	**1**	ls	1,500.00	1,500		
	SUBTOTAL					30,300	
	TOTAL - ELECTRICAL						***$30,300***

Appendix B: Site Survey



LEGEND

- SEWER MANHOLE
- ELECTRIC MANHOLE
- HYDRANT
- WATER SHUT OFF/WATER GATE
- CATCH BASIN
- BOLLARD
- POST
- SIGN
- FP FLAG POLE
- WETLANDS
- WETLAND FLAG
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH
- SHRUB

R	RIM ELEVATION
BCB	BIT. CONC. BERM
BIT	BITUMINOUS
BOT=	BOTTOM ELEVATION
TW	TOP OF WALL
CLF	CHAIN LINK FENCE
CONC	CONCRETE
I=	INVERT ELEVATION
TBM	TEMPORARY BENCH MARK
GP	GATE POST
WF-##	WETLAND FLAG NUMBER
C	CABLE TELEVISION
D	DRAIN
E	ELECTRIC
S	SEWER
W	WATER
CI	CAST IRON
RCP	REINFORCED CONCRETE PIPE
	EDGE OF WOODS

LOCUS MAP NOT TO SCALE

NOTES:

1. THE PLANIMETRIC DETAIL, AND SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM A FIELD SURVEY CONDUCTED IN SEPTEMBER AND OCTOBER, 2021 BY BRENNAN CONSULTING.
2. THE LOCUS PROPERTY IS DEPICTED AS PARCELS 183-4, 184-1, AND 193-10 PER TOWN OF WELLESLEY ASSESSOR'S RECORDS.
3. UTILITY INFORMATION SHOWN IS BASED ON BOTH A FIELD SURVEY AND PLANS OF RECORD. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFOREMENTIONED RECORD PLANS AND ARE APPROXIMATE ONLY. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLANS, SINCE SUBSURFACE UTILITIES CANNOT BE VISIBLY VERIFIED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL, TOLL FREE, THE DIG SAFE CALL CENTER AT 1-888-344-7233 SEVENTY-TWO HOURS PRIOR TO EXCAVATION.
4. THE ELEVATIONS DEPICTED HEREON ARE BASED ON NAVD 1988 DATUM.
5. CONTOUR INTERVAL EQUALS ONE (1) FOOT.
6. BENCH MARK INFORMATION:

BENCH MARK USED:

MAG NAIL SET #1

TEMPORARY BENCH MARKS SET:

TBM-1: CHISELED SQUARE IN CONCRETE BASE AT NORTHEAST CORNER POST OF PAVILION. ELEVATION = 130.63.

TBM-2: CHISELED SQUARE ON NORTHEAST CORNER OF CONCRETE. ELEVATION = 122.38.

TBM-3: CHISELED SQUARE IN CONCRETE POST. ELEVATION = 127.38.

TBM-4: CHISELED SQUARE AT SOUTHEAST CORNER OF CONCRETE PAD. ELEVATION = 132.08.

ICE HOUSE POND ELEVATION PAIRS KEY

119.4	TOP NUMBER = MUCK SURFACE
116.4	BOTTOM NUMBER = REFUSAL BELOW MUCK

I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY.

COMMONWEALTH OF MASSACHUSETTS
RICHARD E. CUOCO No. 29871 REGISTERED PROFESSIONAL LAND SURVEYOR

Richard E. Cuoco 12/3/2021

PROFESSIONAL LAND SURVEYOR **DATE**
RICHARD E. CUOCO PLS# 29871

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20' DATE: DECEMBER 3, 2021

Brennan·Consulting
ENGINEERING TRANSPORTATION SURVEYING
24 RAY AVENUE, BURLINGTON, MA
PHONE: (781) 273-3434 WWW.BRENNANCONSULTS.COM

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 1 OF 5
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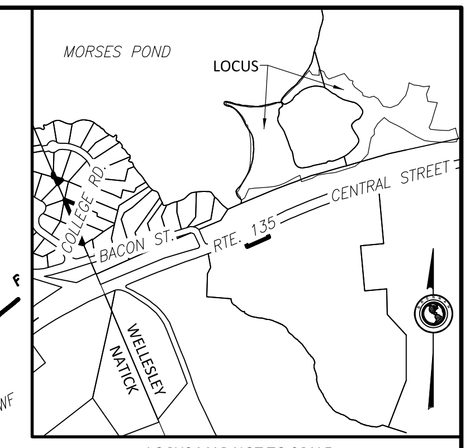

LOCUS MAP NOT TO SCALE

NAD 83

MASSACHUSETTS STATE PLANE

BRENNAN

Now or Formerly
TOWN OF WELLESLEY
PARCEL 193-10

Now or Formerly
TOWN OF WELLESLEY
PARCEL 184-1

MORSES POND
WATER SURFACE ELEVATION = 120.2 ±

CANOE/KAYAK LAUNCH
COMPOSITE LLDPE DOCK
113.3 = ELEV. OF MUCK SURFACE
113.1 = ELEV. OF REFUSAL BELOW MUCK

BOUNDARY LINE PER TOWN GIS

EDGE OF WATER

WF #13 WF #14 WF #15 WF #16 WF #17 WF #18 WF #19 WF #20 WF #21 WF #22 WF #23 WF #24 WF #25 WF #26 WF #27 WF #29 WF #30 WF #31 WF #33 WF #34 WF #35 WF #36 WF #37 WF #38 WF #39 WF #40 WF #41 WF #42 WF #43 WF #44 WF #45 WF #46 WF #47 WF #48 WF #49 WF #50 WF #51 WF #52 WF #53 WF #54 WF #55 WF #56 WF #57 WF #58 WF #59 WF #60 WF #61 WF #62 WF #63 WF #64 WF #65 WF #66 WF #67 WF #68 WF #69 WF #70 WF #71 WF #72 WF #73 WF #74 WF #75 WF #76 WF #77 WF #78 WF #79 WF #80 WF #81

EXISTING BATH HOUSE
POST WITH LOUD SPEAKER
BRICK COLUMN
BRICK BACK
BENCH
WOOD RETAINING WALL
PAVILION
VOLLEYBALL
BEACH
GRILL
HANDRAIL
12" HDPE INV=119.68
6" SEWER FM
SMH
1 a=131.44 6" CI
1 b=123.41 2" STEEL
1 c=117.64 6" CI
1 d=117.49 6" CI
TBM-1
TBM-2
BIT. CONC.
CONC.
CLF
2" WATER
MATCHLINE A
MATCHLINE B

MORSES POND
WATER SURFACE ELEVATION = 120.2 ±

Now or Formerly
TOWN OF WELLESLEY
PARCEL 193-10

ICE HOUSE POND
WATER SURFACE ELEVATION = 120.2 ±

Now or Formerly
TOWN OF WELLESLEY
PARCEL 193-10

Now or Formerly
TOWN OF WELLESLEY
PARCEL 184-1

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

Brennan·Consulting
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RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 2 OF 5
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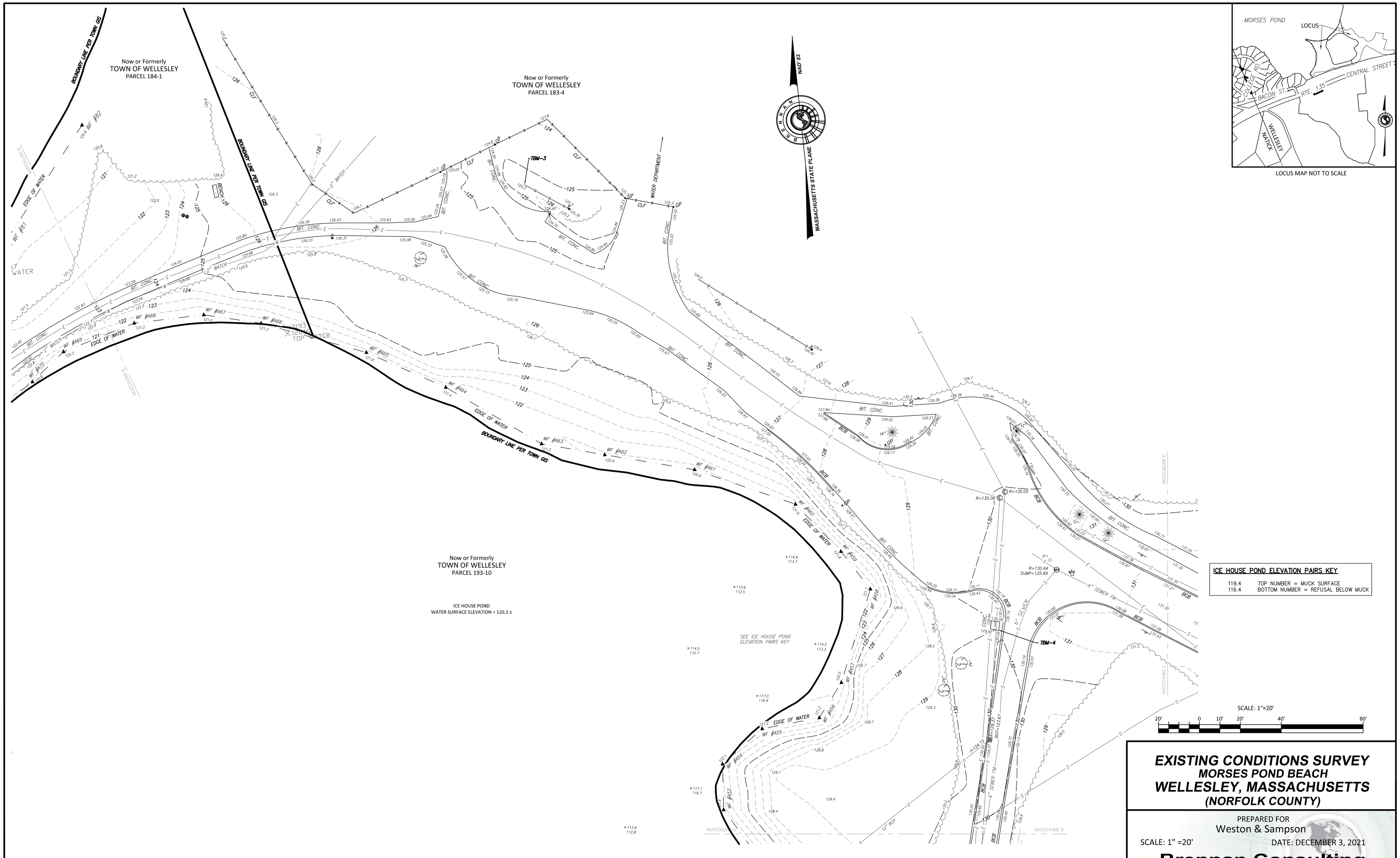

ICE HOUSE POND ELEVATION PAIRS KEY

119.4 TOP NUMBER = MUCK SURFACE
116.4 BOTTOM NUMBER = REFUSAL BELOW MUCK

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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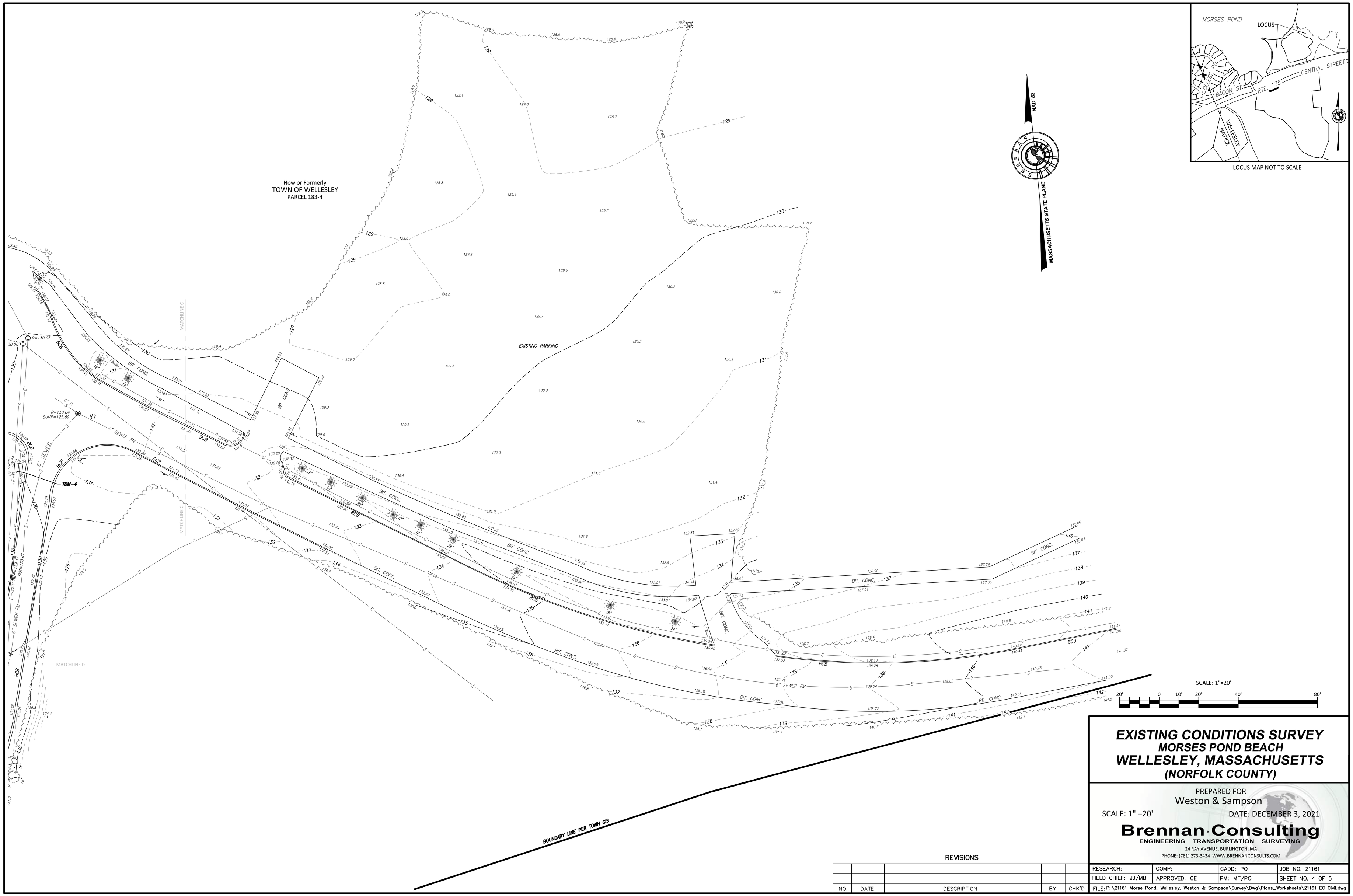

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 4 OF 5
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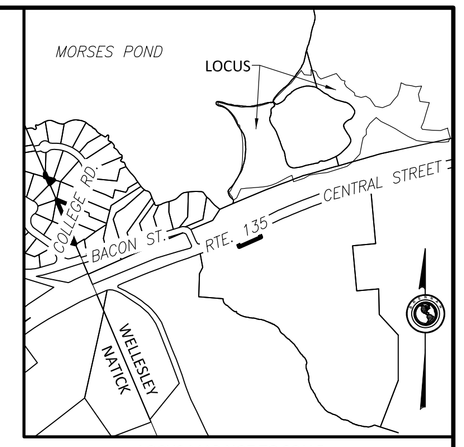
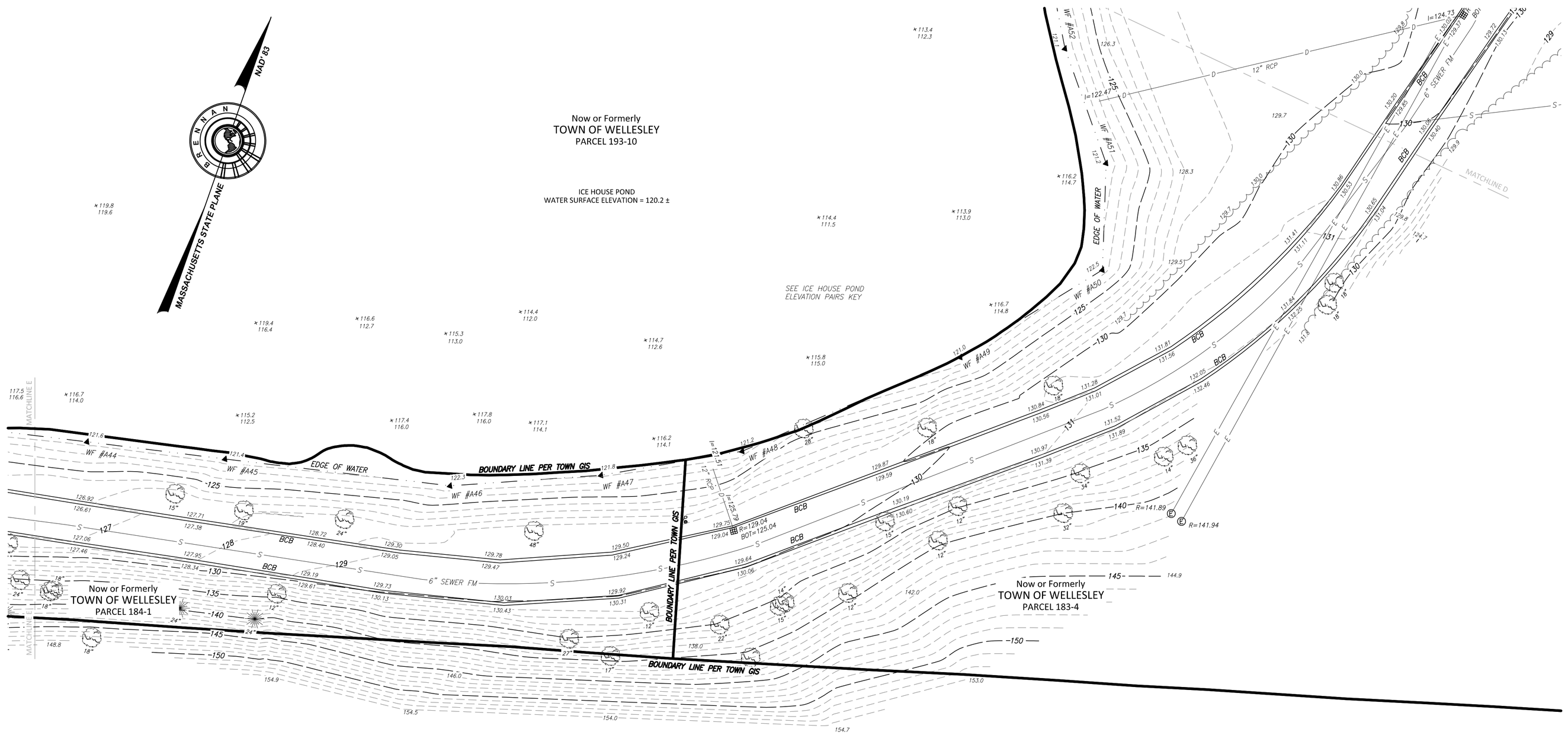


LOCUS MAP NOT TO SCALE



ICE HOUSE POND ELEVATION PAIRS KEY

119.4 TOP NUMBER = MUCK SURFACE
116.4 BOTTOM NUMBER = REFUSAL BELOW MUCK

SCALE: 1"=20'

20' 0 10' 20' 40' 80'

EXISTING CONDITIONS SURVEY
MORSES POND BEACH
WELLESLEY, MASSACHUSETTS
(NORFOLK COUNTY)

PREPARED FOR
Weston & Sampson

SCALE: 1" =20'

DATE: DECEMBER 3, 2021

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REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

RESEARCH:	COMP:	CADD: PO	JOB NO. 21161
FIELD CHIEF: JJ/MB	APPROVED: CE	PM: MT/PO	SHEET NO. 5 OF 5
FILE: P:\21161 Morse Pond, Wellesley, Weston & Sampson\Survey\Dwg\Plans_Worksheets\21161 EC Civil.dwg			

Appendix C: Geotechnical Report

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

November 23, 2021

Town of Wellesley
c/o Johnathan Law, RLA
Weston & Sampson
85 Devonshire Street, 3rd Floor
Boston, MA 02109

RE: Preliminary Geotechnical Report
Proposed Morses Pond Improvements
Wellesley, Massachusetts

INTRODUCTION

Weston & Sampson Engineers, Inc. (Weston & Sampson) is pleased to present this letter report summarizing our geotechnical evaluation and feasibility-level study for the proposed improvements at the Morses Pond Beach Area located along Morses Pond Access Road in Wellesley, Massachusetts. The purpose of our feasibility study was to identify preliminary geotechnical considerations for the proposed project. Our understanding of the proposed project is based on our correspondence with the project team and an August 2021 conceptual plan titled "Morses Pond Beach Area Improvements" prepared by Weston & Sampson and Maryann Thompson Architects.

EXISTING CONDITIONS

The Morses Pond Beach Area (the "site") is an approximately 11-acre parcel bound by Morses Pond to the north and west, Morses Pond Access Road to the east, and the Massachusetts Bay Transportation Authority (MBTA) Framingham/Worcester Line commuter rail right-of-way to the south, as shown on *Figure 1 – Project Locus* and *Figures 2A and 2B – Site Plan – West* and *Site Plan - East*. The site has served as a Wellesley Town Beach since approximately 1935 and includes the approximately 4.5-acre Ice House Pond on the eastern part of the site, the main beach area on the west side of Ice House Pond extending westward to Morses Pond, and an approximately 25 to 50 ft. wide strip of land supporting an asphalt-paved walking path between the north side of Ice House Pond and Morses Pond. A portion of this path is supported by a pedestrian bridge where Ice House Pond and Morses Pond are connected by a small waterway. Handicapped and maintenance vehicle access is via an asphalt-paved access drive along the south side of Ice House Pond. The Town of Wellesley Morses Pond Pump Station and Water Treatment Facility is present to the northeast of the site and is encompassed by a drinking water protection area.

The main beach area contains an approximately 70 ft. by 60 ft. single-story brick bathhouse building to the north, a swimming area along the western border with Morses Pond, a playground structure and boat ramp south of the swimming area, two approximately 27 ft. by 23 ft. canopy shade structures east of the swimming area and several benches and asphalt-paved walking paths. A swim dock is present within the swimming area and a similar boat dock is present to the north of the existing bathhouse building.

Known utilities at the site include water and electric below the walking path and strip of land to the north of Ice House Pond and force-main sewer below the access drive and beach area to the south and west of Ice House Pond. The three known utilities connect to the existing bathhouse.

Our understanding of existing grades at the site is based on our site visits and an October 2021 Existing Conditions Survey Plan prepared by Brennan Consulting. Water surface elevations in Morses and Ice House Ponds are generally between about El. 120 to El. 121. The ground surface between these two ponds rises to approximately El. 133 near the south shade structure and grass-covered area. The site is generally gently sloping downwards towards Morses Pond to the west with slopes up to about 9H:1V along the swimming area. To the east side of the beach area, the site generally slopes down to Ice House Pond at about 5H:1V. Grades increase steeply along the southern edge of Ice House Pond (generally up to 1.8H:1V) and between the access drive and MBTA ROW (generally up to about 1.4H:1V). Elevations described herein are in feet (ft.) and reference the North American Vertical Datum of 1988 (NAVD88).

PROPOSED PROJECT

Based on the conceptual plan included as *Figure 3*, we understand the proposed project includes improvements to the main beach area including new bathhouse (30 ft. by 65 ft.) and administration (40 ft. by 30 ft.) buildings connected by an overhead canopy and ADA parking areas at the southern end; a new playground area and kayak storage shed at the north end; a flush wood walkway along the existing beach area, and new landscaped areas and walking paths. The project also includes a new boardwalk crossing the southern area of Ice House Pond. The existing single-story brick bathhouse and shade canopies will be demolished.

The new administration and bathhouse buildings are proposed at the apparent high point of the site based on the existing site grades depicted in *Figures 2A* and *2B*.

Based on our experience with similar projects, we assume the proposed boardwalk will be supported on helical piers or driven timber piles and will be designed for typical pedestrian traffic loads.

Proposed grading was not made available to us at the time of this report however we assume that grade changes will generally be limited to within approximately 2 ft. of existing grades. Structural loading information was not made available to us at the time of this report.

SUBSURFACE CONDITIONS

Geologic Setting

Based on the United States Geological Survey (USGS) 2018 “Surficial Materials Map of the Natick Quadrangle, Massachusetts” compiled by Janet R. Stone and Byron D. Stone, surficial soils are anticipated to consist of coarse sand and gravel deposits. According to the Massachusetts Office of Geographic Information (MassGIS) OLIVER system, bedrock at the site is mapped as Granite at depths between approximately 50 ft. and 100 ft. The nearest bedrock outcrops to the site are mapped

approximately ½-mile to the northeast. No outcrops were observed at the site during our site reconnaissance.

Subsurface Explorations

Subsurface conditions at the site were explored on September 1, 2021, by advancing five borings (B-1 through B-5) to depths ranging from 6 to 21 ft. Approximate boring locations are shown in *Figure 2*. Weston & Sampson geotechnical engineering staff monitored explorations in the field and prepared logs for each exploration.

The borings were completed by Technical Drilling Services of Sterling, MA. Standard penetration tests (SPTs) were conducted in each boring at two- to five-foot intervals by driving a split spoon sampler with an automatic hammer in general accordance with ASTM D1586. Additional details are provided on the Guide to Subsurface Exploration Logs included in *Attachment A*. Each of the borings were backfilled with cuttings upon completion.

Subsurface conditions encountered in the explorations are described in the following section and included in *Attachment A – Boring Logs*.

Subsurface Conditions

Subsurface conditions encountered in the borings below surficial topsoil generally consisted of native sand, silty sand or undocumented fill over variable sand and gravel. The subsurface conditions encountered in the borings were generally consistent with mapped surficial geology.

Subsurface soil and groundwater conditions described below have been interpreted based on a limited number of explorations that were observed by Weston & Sampson. Variations may occur and should be expected between locations. The strata boundaries shown in our boring logs are based on our interpretations and the actual transitions may be gradual. Refer to the boring logs included in *Attachment A* for detailed descriptions of the soil samples collected. The general Unified Soil Classification System (USCS) designation(s) for each stratum is included in the descriptions below in parentheses. Depths provided below are relative to the existing ground surface at the time of drilling.

Topsoil – Approximately 3 to 6 inches of topsoil was encountered at the ground surface in each of the borings.

Undocumented Fill – Undocumented Fill was encountered below the topsoil in B-2 and B-5 and extended to depths of approximately 4 ft. and 10 ft., respectively. The undocumented fill encountered in B-2 generally consisted of medium dense fine to coarse sand with some fine gravel and little silt (SM). The undocumented fill encountered in B-5 generally consisted of soft to very stiff, dark brown, organic silt with some sand and trace gravel (OL) with trace debris including wood chips, glass, and plastic.

Review of existing information including historic imagery and maps of the site indicate previous land areas within the current bounds of Ice House Pond that no longer appear to be present. Additionally, Morses Pond dredging efforts were completed in 2012 and the Morse Pond Beach was used as a staging and dewatering area. Based on the observed organics and debris, it is possible that the thick organic fill deposit encountered in B-5 may be redistributed and graded dredge spoils sourced either from Ice House Pond or Morses Pond.

Buried Topsoil – Medium stiff, organic, buried topsoil was encountered below the fill in B-2 and extended to a depth of approximately 7.5 ft. The buried topsoil was approximately 3.5 ft. thick and generally consisted of dark brown, organic silt with some sand and little gravel (OL). An organic odor and occasional plant fibers were noted within the buried topsoil.

Native Sand and Gravel – Medium dense to very dense interbedded native sand and gravel was encountered below the surficial topsoil in B-1, B-3, and B-4; below the buried topsoil in B-2, and below the undocumented fill in B-5. The gravel layers generally consisted of mostly gravel with few to some sand and few to little silt. (GM, GP-GM, GW-GM). The sand layers generally consisted of mostly fine to coarse sand with few to some silt and trace to some fine gravel (SM, SP-SM, SW-SM). The native sand was generally siltier at shallower depths. Each of the borings were terminated in this stratum at depths between approximately 4 and 21 feet.

Groundwater – Depth to water was measured in each boring at the end of drilling and ranged from approximately 4 to 12.5 ft. below ground surface which corresponds to approximately El. 118.5 to El. 119.5. Groundwater was not encountered in B-4 (terminated at 6 ft.). We anticipate that groundwater levels at the site will fluctuate with water levels of Morses Pond and Ice House Pond and with season, variations in precipitation, construction in the area, and other factors. Perched groundwater conditions could exist close to the ground surface, especially during and after extended periods of wet weather.

Geotechnical Laboratory Testing

Select samples were submitted for geotechnical laboratory testing to confirm field descriptions and determine engineering properties of the encountered soils. Geotechnical laboratory testing was completed on two samples from the borings to confirm field descriptions and determine engineering properties of the soil. One grain size analysis (ASTM D6913) was performed on the silty sand from B-1. One moisture, ash, and organic content test (ASTM D2974) was performed on the undocumented fill from B-5. The laboratory test results are presented on the boring logs and in *Attachment B – Geotechnical Laboratory Test Results.*

PRELIMINARY GEOTECHNICAL DESIGN RECOMMENDATIONS

General

As indicated above, our project understanding and recommendations are based upon the April 2018 conceptual level plans. We understand some of the proposed design features described above are subject to change and may be modified or removed in final design. Our recommendations included herein are based on our current understanding of the project as described above and depicted in *Figure 3*. Design of proposed improvements should be in accordance with the International Building Code (IBC) as adapted by the Massachusetts State Building Code (MSBC) including supplemental Massachusetts requirements.

The proposed improvements include three buildings: administration, bathhouse, and storage shed. The administration and bathhouse buildings can be supported on shallow spread footings bearing on the natural sand encountered below the surficial topsoil. Boring B-2 completed in the vicinity of the proposed storage shed encountered undocumented granular fill overlying buried topsoil extending to about 7.5 feet below existing grade; these materials are not suitable (or allowed by the MSBC) for support of foundations, slabs, or other rigid structural site improvements that could be adversely affected by differential settlement. Therefore, we recommend

supporting storage shed on shallow spread footings following removal and replacement of these materials, or on deep foundations.

The proposed improvements also include a new boardwalk across the southern side of Ice House Pond. Boring B-5 completed in the vicinity of the proposed west boardwalk landing encountered soft to very stiff, organic, undocumented fill extending to about 10 feet below existing grade. We anticipate thick organic deposits on the bottom of Ice House Pond. We recommend supporting the boardwalk on deep foundations bearing in the natural sand below the fill and organic deposits.

These geotechnical considerations are further discussed in the following sections. Additional geotechnical explorations, analyses, and laboratory testing may be required to provide design level geotechnical recommendations once site grading has been determined and building locations and structural loadings have been finalized.

Shallow Foundations

Based on the encountered subsurface conditions and our analysis, the proposed administration and bathhouse buildings, and storage shed can be supported by shallow foundations bearing on undisturbed, medium dense (or denser) native sand or gravel or on properly constructed Structural Fill overlying such soils.

Existing undocumented fill and buried topsoil should be completely removed from within the zone-of-influence (ZOI) beneath proposed foundations and other structural elements. The ZOI is defined by planes extending horizontally away from the bottom outside edges of footings and other structural site improvements a distance of 2 ft. in all directions, then down and away at 1H:1V (horizontal: vertical) slopes to the intersection with undisturbed, native soils. Excavation to remove the fill and buried topsoil below the proposed storage shed are anticipated to extend several feet below the water level.

Footings bearing on these materials can be designed using an allowable bearing pressure of 4,000 psf. The allowable bearing pressure can be increased to 6,000 psf to resist temporary wind and seismic loads provided load eccentricities are within the middle third of the footing. Resistance to lateral loads can be obtained by a passive equivalent fluid unit weight of 250 pcf, ignoring the top 12 inches of embedment, and by a footing base friction coefficient of 0.45.

Footings should be embedded at least 4 ft. below the nearest proposed adjacent ground surface exposed to freezing. Interior footings not exposed to freezing should be embedded at least 18 inches below the lowest overlying floor slab elevation. These footings may require special frost protection measures if constructed during freezing conditions. Shallow foundations constructed as recommended herein are anticipated to undergo total and differential settlements of less than 1 inch and ½ inch, respectively.

Slabs On-Grade

Slabs for the proposed administration, bathhouse buildings, and storage buildings can be designed and constructed as slabs-on-grade supported by the undisturbed, medium dense (or denser) native sand or gravel or on properly constructed Structural Fill overlying such soils. The building slabs on-grade should be designed and constructed in accordance with recommendations contained in the latest editions of ACI Committee Reports 360R

and 302.1R. Based on subgrade preparation procedures recommended herein and the existing soil conditions, a subgrade modulus (k) of 200 pounds per cubic inch (pci) is recommended for slab-on-grade design.

Concrete slabs on-grade should be supported on a minimum of 6 inches of clean, well graded, angular crushed stone with no more than 10 percent passing a #200 sieve placed between the prepared subgrade and concrete. If the underslab stone is saturated or trapping water, the water should be removed prior to slab placement.

Some flooring manufacturers require specific slab moisture levels and/or vapor barriers to validate the warranties on their products. A properly installed and protected vapor flow retardant can reduce slab moistures. If a vapor flow retardant is used, care should be taken not to trap moisture within the overlying crushed stone and floor slab concrete.

Building slabs on-grade supporting loads up to 250 psf and bearing on the materials discussed above are expected to induce less than one inch of total settlement.

Helical Pier Foundations

As discussed above, the proposed storage shed and boardwalk can be supported on helical piers as currently sited. Up to approximately 7.5 feet of fill and buried topsoil was encountered below the proposed storage shed and up to approximately 10 ft. of existing organic fill was encountered in B-5, located at the west end of the proposed boardwalk. No borings were completed within the limits of Ice House Pond however, soft, organic pond-bottom sediment should be expected. Helical piers supporting the storage shed or boardwalk sections should extend through fill and loose, soft, or organic soils and derive support in the underlying medium dense or denser native sand or native gravel. Due to the variable nature of the site soils, actual pier lengths should be expected to vary.

We expect a helical pier design to support the storage shed and boardwalk structures will consist of vertical helical piers to resist axial loads and cross bracing or battered (angled) piers to resist lateral loads. Where sections of the boardwalk are not within Ice House Pond, buried foundation elements such as pier caps and grade beams may be viable options for resistance to lateral loads.

We can provide additional recommendations for helical piers, including minimum embedment depths and torque requirements, recommended pile design, and corresponding allowable axial capacities during final design. Ultimately, the helical pier installation contractor should provide a helical pier design for capacities required by the structural engineer. The helical pier design should be stamped by a Professional Engineer licensed in the Commonwealth of Massachusetts and include calculations that demonstrate adequate geotechnical and structural capacities including resistance to buckling.

Seismic Site Class

Seismic site class is determined in accordance with the IBC as adapted by the MSBC using a weighted average of SPT blow counts in the upper 100 ft. of soil at a site. Based on the results of explorations and analyses and depths of proposed structures, we recommend that the subject project be evaluated using parameters associated with Site Class D.

Liquefaction can occur in loose, saturated, granular soils. Strong shaking, such as that experienced during earthquakes, can cause a sudden loss of shear strength, densification, and subsequent settlement of these soils. We evaluated the potential for liquefaction in accordance with the latest provisions of the MSBC using the soil types and consistencies encountered in our explorations and interpretation of the existing subsurface information referenced above. Based on our evaluation, the risk of structurally damaging ground deformations due to liquefaction is low.

CONSTRUCTION RECOMMENDATIONS

Site Preparation

The Site should be prepared by removing all vegetation, topsoil, and existing unsuitable (e.g. soft, disturbed, or organic) soils from the ZOI beneath shallow foundations, slabs-on-grade, pavement, and fill areas as described above. Deeper stripping depths and removal of loose surficial organic soil should be anticipated in areas of trees and brush.

Root balls from trees and brush may extend several feet and grubbing operations can cause considerable subgrade disturbance. In general, roots greater than one inch in diameter should be removed as well as areas of concentrated smaller roots. All disturbed material should be removed to undisturbed subgrades.

Excavations required for site preparation and grubbing should be brought back to grade with Structural Fill as recommended below. In general, the sides of these excavations should be sloped back flatter than 1.5H:1V to allow proper compaction of the interface between existing soil and new fill.

Excavation Considerations

Excavation will be required for site preparation, foundation construction, utility construction, site grading, etc. Groundwater and surface water should be controlled during construction and prevented from eroding slopes and disturbing excavation and subgrade materials. Groundwater was observed in some of the borings at depths ranging from about 4 to 12.5 feet below existing grades. Some excavations may encounter groundwater and moderate to severe caving and possible flowing conditions should be expected where seepage is present.

Surface water should be controlled during construction and prevented from eroding temporary slopes and disturbing excavation and subgrade materials. If excavations encounter groundwater, moderate to severe caving should be expected where seepage is present. Flowing conditions are likely where granular soils and groundwater seepage are present.

Depending on excavation depths and amount of groundwater seepage, dewatering may be necessary. Flow rates for dewatering are likely to vary depending on location, soil type, and the season during which the excavation occurs. The dewatering system should be capable of lowering the groundwater table at least 2 ft. below the anticipated excavation depths and be kept operational until fill placement and compaction and concrete installation have been completed to at least 2 ft. above the groundwater table elevation. The dewatering system should be capable of handling variable flow rates and should be the responsibility of the Contractor.

All excavations should be made in accordance with applicable OSHA safety regulations. Temporary excavation support may be required depending on depths of excavations and if excavations need to approach the ZOI

beneath existing structures or other site features. Excavation support systems, if necessary, should be the responsibility of the Contractor and designed by a Professional Engineer licensed in the Commonwealth of Massachusetts. Foundations and utilities should be designed and constructed so that excavations into ZOIs below and adjacent to footings are not required.

Subgrade Preparation and Protection

Following site preparation and excavation to the required subgrade elevations, the native sand or native gravel subgrades should be proof compacted with at least four (4) complete passes of a 10-ton vibratory roller, or equivalent effort. Footing subgrades and other areas with limited access should be proof compacted with at least four (4) complete passes of a 700-pound vibratory plate compactor, or equivalent effort. Weston & Sampson should be contacted to evaluate the exposed subgrades prior to placement of foundation forms, rebar, or overlying materials.

Soft and/or disturbed areas will require re-compaction or over-excavation and backfilling with compacted angular crushed stone or compacted Structural Fill. A geosynthetic separation layer between the excavation subgrade and crushed stone backfill may also be required. We recommend that a geosynthetic used for stabilization consist of a woven geosynthetic with an AOS of #70 to #100 sieve, and a minimum puncture resistance of at least 120 pounds (such as Mirafi FW700 or equivalent).

Soils containing more than trace amounts of silt are highly susceptible to softening and disturbance by construction activity during wet or freezing weather. Subgrade protection should be the responsibility of the Contractor and special precautions and protective measures appropriate for the weather and traffic conditions during construction should be used during earthwork and foundation construction to preserve the integrity of subgrades. Construction traffic should not operate directly on prepared subgrades.

A few inches of crushed stone can be placed and compacted at the base of footing excavations to protect subgrades from disturbance during construction, particularly if footing construction occurs during wet weather conditions. If footing construction occurs during freezing conditions, insulating blankets, heaters, or other suitable measures should be employed to prevent foundation subgrades from freezing until the foundations are backfilled sufficiently to prevent frost from reaching the footing subgrade.

Fill

Imported well-graded sand and gravel with less than approximately 10 percent passing the No. 200 sieve and a maximum particle size of 3-inches (such as MassDOT M1.03.0 Gravel Borrow, type b or M2.01.7 Dense Graded Crushed Stone for Subbase) is recommended for use as Structural Fill within the ZOI beneath new foundations and slabs. Structural Fill should be placed in maximum 10-inch-thick lifts (uncompacted thickness), with each lift compacted to at least 95 percent of the materials maximum dry density as determined by ASTM D1557.

Crushed Stone may also be acceptable for use as Structural Fill with prior approval of the geotechnical engineer. Crushed stone should be compacted until dense and well-keyed with several passes of a vibratory plate compactor.

On-site granular soil meeting the grain size requirements of Structural Fill can be used as such provided they are free of organics, contamination (including metals, VOCs, SVOCs, etc.), and other deleterious materials. On-site

granular soils with less than approximately 20 percent passing the No. 200 sieve may be re-used in landscaped areas (Common Fill). Common Fill should be placed in maximum 10-inch-thick lifts (uncompacted thickness), with each lift compacted to at least 92 percent of the materials maximum dry density as determined by ASTM D1557.

Trenches

Open utility trench excavations should be completed as recommended above. Pipe bedding should be installed in accordance with the pipe manufacturers' recommendations. If groundwater seepage or standing water is present in the base of utility trench excavations, we recommend over-excavating the trench by 12 to 18 inches and placing trench stabilization material in the base. Trench stabilization material should consist of well-graded, angular crushed stone with a maximum particle size of 4 inches and free of deleterious materials. The percent passing the No. 200 Sieve should be less than 5 percent by weight when testing in accordance with ASTM C117.

Trench backfill above the pipe zone should consist of imported granular sand and gravel with less than approximately 10 percent fines such as Structural Fill or granular soils from on-site excavations meeting the above requirements. Trench backfill should be placed in 6-inch maximum loose lifts with each lift compacted to 92 percent of ASTM D1557 and to 95 percent of ASTM D1557 within 2 ft. of finished grades. Construction of overlying hard surfaces, such as pavement, should not occur before at least one week after backfilling.

Additional Explorations and Analyses

Our explorations were completed at widely spaced locations and located based on conceptual-level design layouts. Design plans are still being evaluated and the locations of structures and other site features have not been finalized. Additional explorations and geotechnical analyses may be required to develop final design recommendations for foundation support and earthwork design. We should be contacted prior to final design to review design plans and revise and/or supplement our recommendations as necessary.

LIMITATIONS

Observation of Construction

Satisfactory earthwork and foundation performance depends to a large degree on the quality of construction. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions often requires experience; therefore, qualified personnel should visit the site with sufficient frequency to evaluate whether actual subsurface conditions differ from those anticipated. In addition, full-time construction observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications.

The recommendations in this report are preliminary as actual subsurface conditions may differ from those interpreted based on our subsurface explorations. In order for our recommendations to be considered final, we must be retained to observe the actual subsurface conditions encountered during construction. Our observations will allow us to interpret the actual conditions present during construction and adapt our recommendations if needed.

Variations of Subsurface Conditions and Use of Report

We have prepared this report for use by the owner, members of the design and construction team for the subject project and site, only. The data and report can be used for estimating purposes, but our report, conclusions, and interpretations should not be construed as a warranty of the subsurface conditions and are not applicable to other sites.

Explorations indicate soil conditions only at specific locations and only to the depths penetrated. They do not necessarily reflect subsurface conditions that may exist outside or between exploration locations. If subsurface conditions differing from those described are noted during the course of excavation and construction, reevaluation will be necessary and we should be consulted.

Site development plans and design details were considered preliminary at the time this report was prepared. If changes are made in site grades, configuration, design loads, or type of construction for the structure, the conclusions and recommendations may not be applicable. We should be consulted to review final design drawings and specifications to see that our recommendations are suitably followed. If design changes are made, we should be retained to review our conclusions and recommendations and provide a written evaluation or modification. Additional geotechnical engineering analyses and explorations may be necessary.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices in this area at the time this report was prepared. No warranty or other conditions, expressed or implied, is given. For additional information on the use of this report, please refer to the document titled “Important Information about This Geotechnical-Engineering Report” included in *Attachment C*.

It has been a pleasure assisting you with this project and we look forward to our continued involvement. Please call if you have any questions.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

Matthew J. Zanchi, PE
Project Engineer

Jennifer MacGregor, PE
Technical Leader

Attachments:
Figure 1 – Project Locus
Figure 2A – Site Plan - West

Figure 2B – Site Plan - East
Figure 3 – Site Concept Plan
Attachment A – Boring Logs
Attachment B – Geotechnical Laboratory Test Results
Attachment C – Important Information about This Geotechnical-Engineering Report

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FIGURES

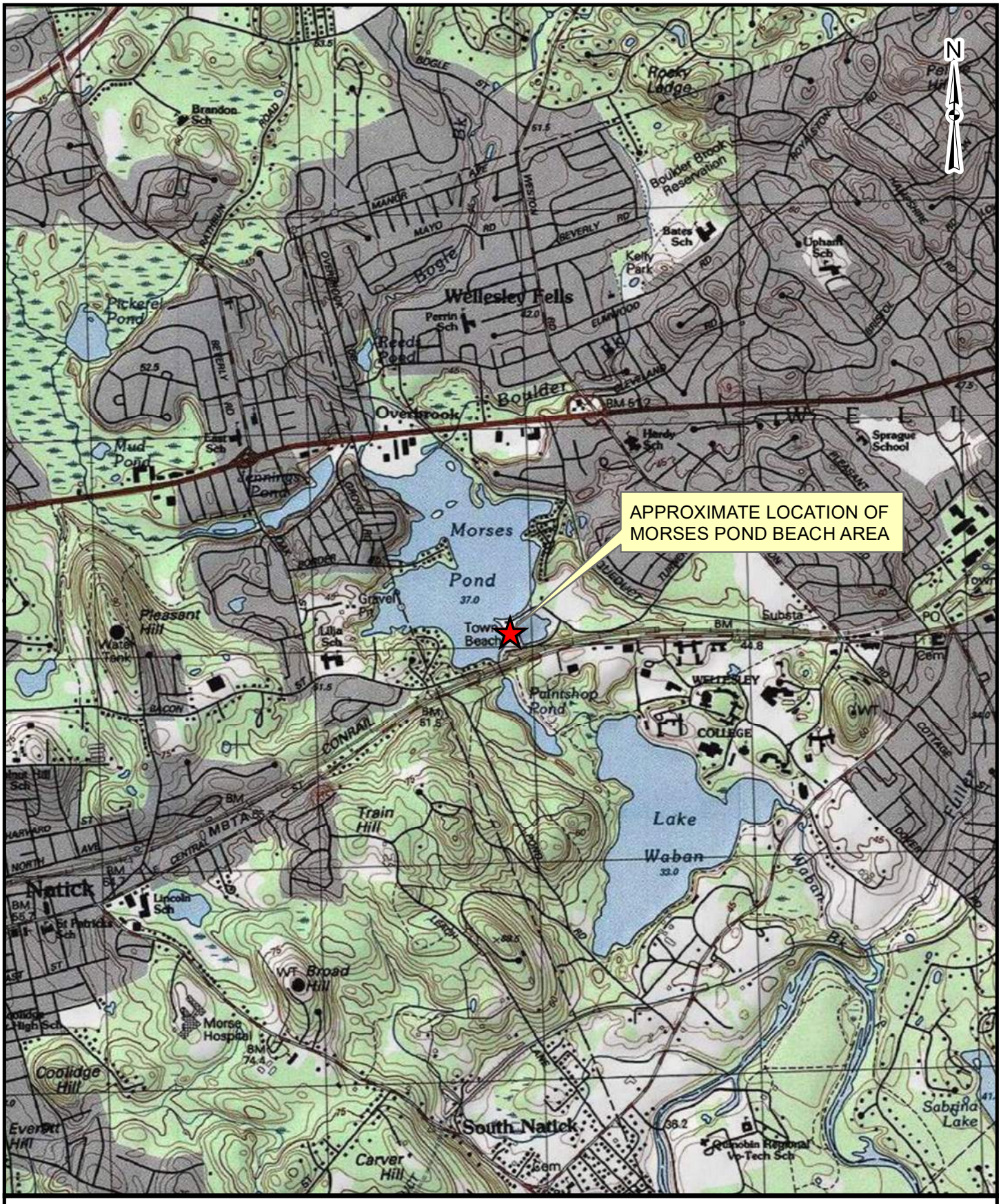


FIGURE 1
PROJECT LOCUS

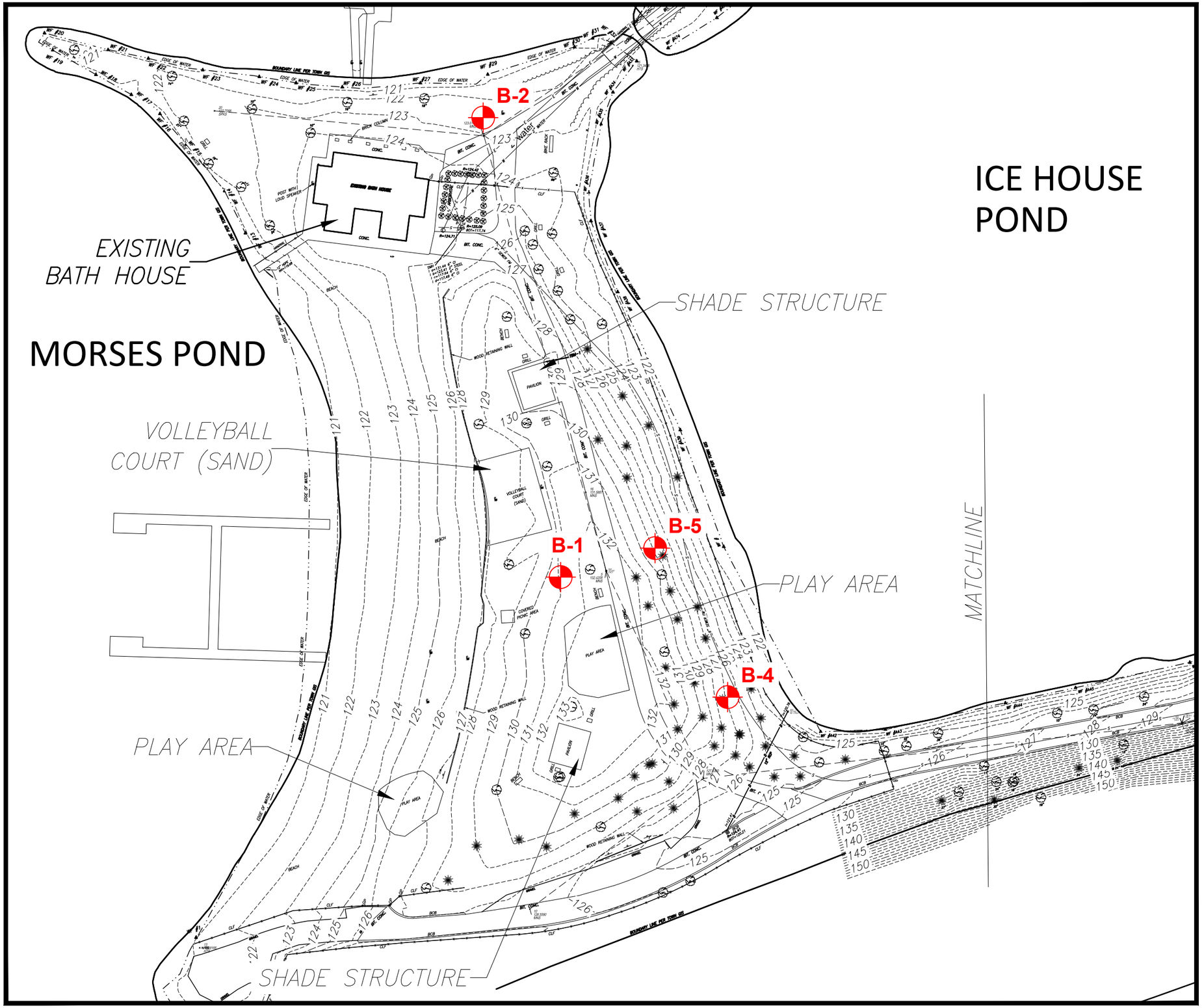
MORSES POND BEACH AREA FEASIBILITY STUDY
WELLESLEY, MASSACHUSETTS

2,000 0 2,000

Scale In Feet

Weston & Sampson

Path: P:\MA\Wellesley MA\Morses Pond Beach Area Feasibility Study\Geotech\Plans\GIS\Figure 1. Project Locus.mxd **User:** ZanchiM **Saved:** 8/26/2021 4:39:12 PM **Opened:** 8/26/2021 4:39:50 PM



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Reading, MA 01867
978.532.1900 800.SAMPSON
www.westonandsampson.com

NOTES

1. THIS PLAN IS BASED ON AN EXISTING CONDITIONS SURVEY OF MORSES POND BEACH PREPARED BY BRENNAN CONSULTING DATED OCTOBER 2021.
2. BORINGS WERE COMPLETED BY TECHNICAL DRILLING SERVICES, INC. OF STERLING, MA ON SEPTEMBER 1, 2021.
3. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON ENGINEER.
4. BORING LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-1 DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – WEST
	PROJECT: MORSES POND BEACH AND BATH HOUSE, WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	WZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2A

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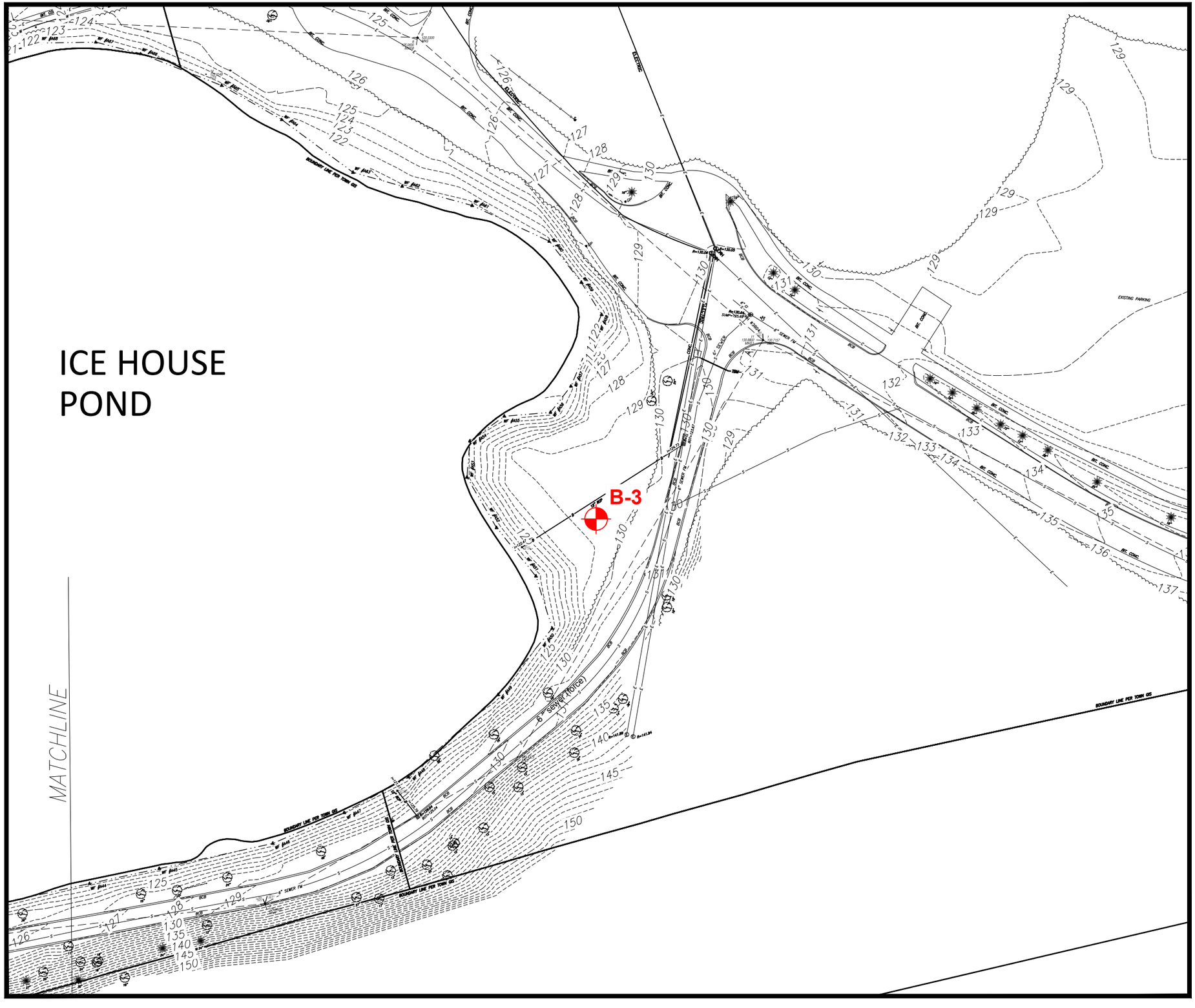

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3. ALL EXPLORATIONS WERE OBSERVED BY A WESTON & SAMPSON ENGINEER.
4. BORING LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON FIELD MEASUREMENTS RELATIVE TO EXISTING SITE FEATURES.
5. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

LEGEND

B-3 — DESIGNATION AND APPROXIMATE LOCATION OF BORING

GRAPHIC SCALE

60 30 0 60 120

SCALE: 1"=60'

ORIENTATION	TITLE
	SITE PLAN – EAST
	PROJECT
	MORSES POND BEACH AND BATH HOUSE
	WELLESLEY, MA 02482

DATE	11/2021
DRWN BY	AJC
CHKD BY	MZ
PRJ. NO.	ENG21-0701
REV. NO.	-

FIGURE

FIGURE 2B

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NOTES:

1. THIS FIGURE IS BASED ON A SITE CONCEPT PLAN PREPARED BY WESTON AND SAMPSON ENGINEERS, INC. DATED MARCH 2020.
2. FIGURE IS NOT DRAWN TO SCALE.

NOT TO SCALE

FIGURE 3
CONCEPTUAL SITE PLAN

MORSES POND BEACH AND BATHHOUSE
WELLESLEY, MASSACHUSETTS

DESIGNED BY: MJZ	CHECKED BY: JACM	DATE: NOVEMBER 2021

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Attachment A
Boring Logs

Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-1

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
			● N-Value, Raw (bpf) ☒ Organic Content (%) 10 20 30 40 ⊕ Moisture Content (%) ▶ Plastic Limit, PL (%) ◀ Liquid Limit, LL (%) 25 50 75 100		Surface: Grass area.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
	S-1 12/24	9 17 16 17	33		Topsoil- 4 inches thick. Well graded gravel with silt and sand (GW-GM) - Medium dense to dense; light brown; moist; mostly fine to coarse GRAVEL, some fine to coarse sand, few non plastic fines.	
	S-2 6/24	8 10 9 8	19			[2.0 - 21.0] Intermittent auger grinding.
5	S-3 10/24	11 6 6 11	12		Silty sand (SM) - Medium dense; brown; moist; mostly fine to coarse SAND, little non plastic fines, few fine gravel. 2-inch seam of fine sand	[4.0] GC: 9%, SC: 74%, FC: 17%
					Silty sand with gravel (SM) - Dense; brown; moist; mostly fine to coarse SAND, some fine gravel, little non plastic fines.	
10	S-4 6/24	21 23 20 16	43			
					Poorly graded gravel with silt (GP-GM) - Very dense; brown; wet; mostly coarse GRAVEL, few fine to coarse sand, few non plastic fines.	[12.5] Estimated water level at time of drilling based on changes in sample moisture.
15	S-5 6/24	20 24 32 46	>> 56		Sample is primarily gravel-sized rock fragments	
	S-6 12/12				Silty sand (SM) - Brown; wet; mostly fine to medium SAND, some non plastic fines, few fine gravel.	[16.0] Split spoon advanced 12 inches to obtain sample but blow counts not recorded.
20	S-7 9/24	19 17 19 33	36		Silty gravel with sand (GM) - Dense; brown; wet; mostly fine to coarse GRAVEL, some medium to coarse sand, little non plastic fines.	
						Exploration ended at 21.0 ft.

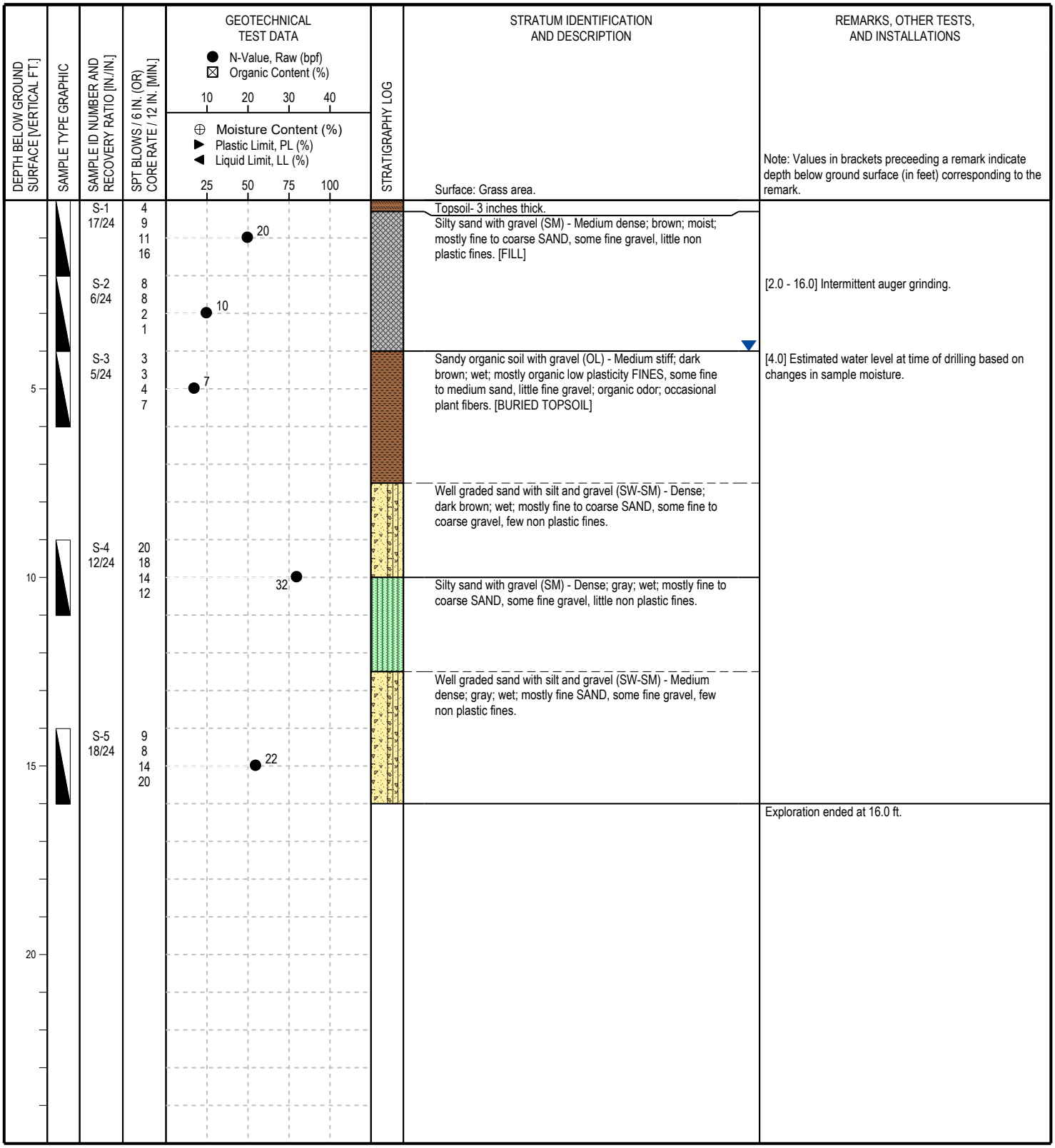
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-2

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-3

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	16.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A

DEPTH BELOW GROUND SURFACE [VERTICAL FT.]	SAMPLE TYPE GRAPHIC	SAMPLE ID NUMBER AND RECOVERY RATIO [IN./IN.]	SPT BLOWS / 6 IN. (OR) CORE RATE / 12 IN. [MIN.]	GEOTECHNICAL TEST DATA	STRATIGRAPHY LOG	STRATUM IDENTIFICATION AND DESCRIPTION	REMARKS, OTHER TESTS, AND INSTALLATIONS
				N-Value, Raw (bpf); Organic Content (%); 10 20 30 40; Moisture Content (%); Plastic Limit, PL (%); Liquid Limit, LL (%); 25 50 75 100		Surface: Forest debris.	Note: Values in brackets preceeding a remark indicate depth below ground surface (in feet) corresponding to the remark.
		S-1 8/24	3 9 6 6	15		Topsoil- 5 inches thick.	
						Silty sand with gravel (SM) - Loose to medium dense; brown; moist; mostly fine SAND, some fine to coarse gravel, little non plastic fines.	
		S-2 10/24	5 4 5 5	9			[2.0 - 16.0] Intermittent auger grinding.
5		S-3 9/24	8 10 14 12	24		Well graded sand with silt and gravel (SW-SM) - Medium dense; light brown; moist to wet; mostly fine to coarse SAND, some fine to coarse gravel, few non plastic fines.	
10		S-4 8/24	14 14 12 9	26		▼	[10.0] Estimated water level at time of drilling based on changes in sample moisture.
15		S-5 15/24	8 8 11 22	19			
							Exploration ended at 16.0 ft.
20							

Refer to the attached index sheets for important information about this log including general notes, legends, and guidance on description methods and procedures.

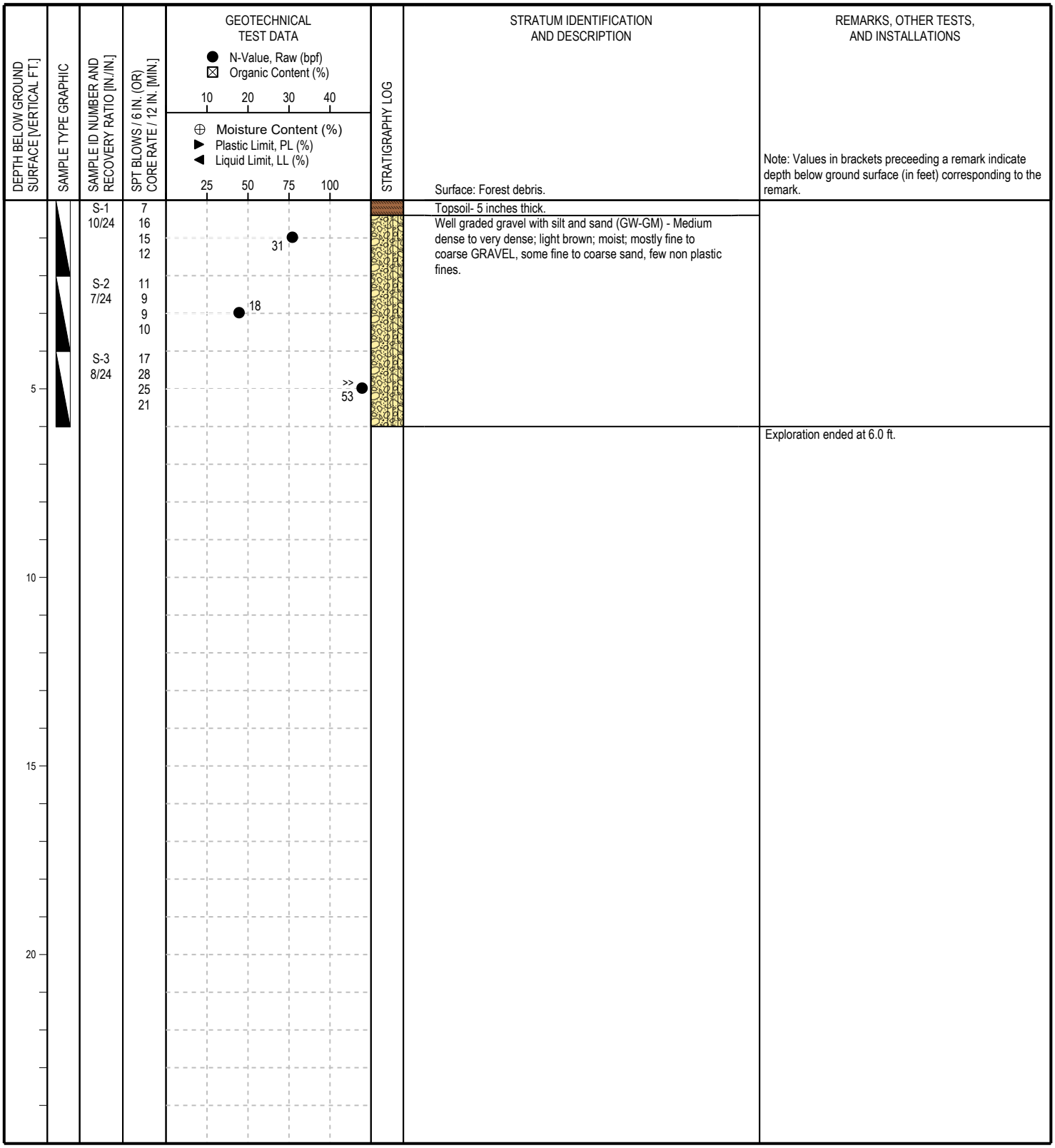
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-4

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	6.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



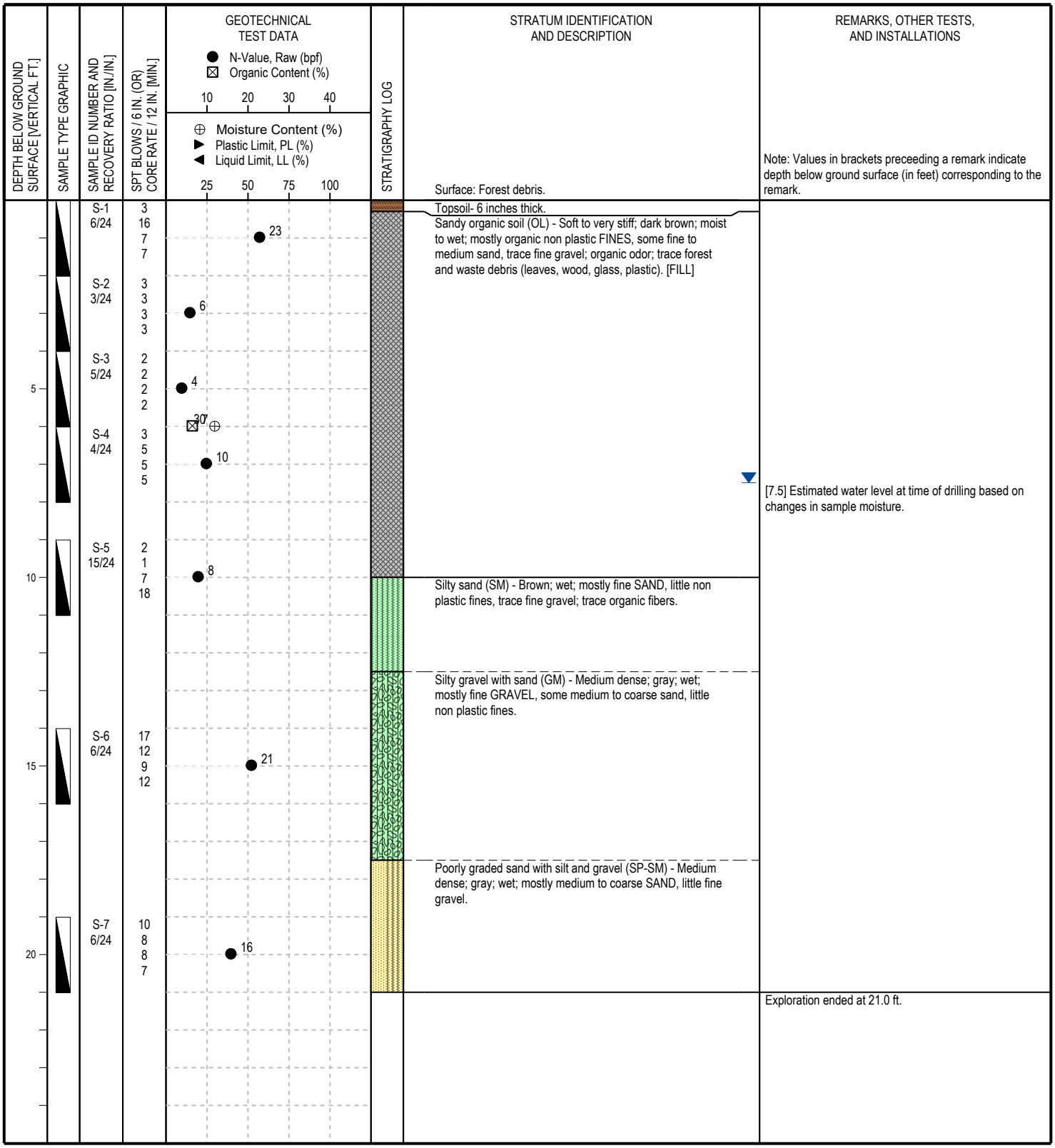
Weston & Sampson

WSE Project: ENG21-0701

Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA

BORING ID: B-5

CONTRACTOR:	Technical Drilling Services, Inc.	BORING LOCATION:	See Attached Figure	DATE START:	September 1, 2021
FOREMAN:	Donny Watson	ADVANCE METHOD:	Hollow-Stem Auger Drilling	DATE FINISH:	September 1, 2021
LOGGED BY:	Aaron Chabot, E.I.T.	AUGER DIAMETER:	4-1/4" ID (Stem), 7-5/8" OD (Flights)	GROUND EL:	Not Available
CHECKED BY:	TJ Blair, P.E.	SUPPORT CASING:	N/A	FINAL DEPTH:	21.0 ft.
EQUIPMENT:	Deidrich D-50, ATV Mounted	CORING METHOD:	N/A	GRID COORDS:	N/A
SPT HAMMER:	Automatic (140-lb.)	BACKFILL MATERIAL:	Drill Cuttings	GRID SYSTEM:	N/A



GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 1 GENERAL INFORMATION

GENERAL NOTES AND USE OF LOGS

1.) Explorations were made by ordinary and conventional methods and with care adequate for Weston & Sampson's study and/or design purposes. The exploration logs are part of a specific report prepared by Weston & Sampson for the referenced project and client, and are an integral part of that report. Information and interpretations are subject to the explanations and limitations stated in the report. Weston & Sampson is not responsible for any interpretations, assumptions, projections, or interpolations made by others.

2.) Exploration logs represent general conditions observed at the point of exploration on the date(s) stated. Boundary lines separating soil and rock layers (strata) represent approximate boundaries only and are shown as solid lines where observed and dashed lines where inferred based on drilling action. Actual transitions may be gradual and changes may occur over time.

3.) Soil and rock descriptions are based on visual-manual examination of recovered samples, direct observation in test pits (when permissible), and laboratory testing (when conducted).

4.) Water level observations were made at the times and under the conditions stated. Fluctuations should be be expected to vary with seasons and other factors. Use of fluids during drilling may affect water level observations. The absence of water level observations does not necessarily mean the exploration was dry or that subsurface water will not be encountered during construction.

5.) Standard split spoon samplers may not recover particles with any dimension larger than 1-3/8 inches. Reported gravel conditions or poor sample recovery may not reflect actual in-situ conditions.

6.) Sections of this guide provide a general overview of Weston & Sampson's practices and procedures for *identifying* and *describing* soil and rock. These procedures are predominantly based on ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)*, the International Society of Rock Mechanics (ISRM) standards, and the *Engineering Geology Field Manual* published by the Bureau of Reclamation. Not all aspects of this guide relating to description and identification procedures of soil and rock may be applicable in all circumstances.

SAMPLER GRAPHICS

- Split Spoon (Standard) 2" OD, 1-3/8" ID
- Split Spoon (Oversize) 3" OD, 2-3/8" ID
- Shelby or Piston Tube 3" OD, 2-7/8" ID
- Double-Tube Rock Core Barrel 2" Core Diameter
- Direct Push with Acetate Liner Various Liner Sizes
- A — Auger Sample *(from cuttings or hand auger)*
- G — Grab Sample *(manual, from discrete point)*
- C — Composite Sample *(multiple grab samples)*

WELL GRAPHICS

- Cement concrete seal around casing or riser pipe
- Bentonite seal around casing or riser pipe
- Cement grout seal around casing or riser pipe
- Soil backfill around riser pipe or beneath screen
- Gravel backfill around screen or riser pipe
- Sand backfill around screen or riser pipe (filter sand)
- Solid-wall riser; Sch. 40 PVC, 1" ID unless noted otherwise
- Slotted screen; Sch. 40 PVC, 1" ID with machined slots

CAVING / SEEPAGE TERMS

The following caving and/or seepage terms may appear on a test pit log.

Caving Term	Criteria
Minor	less than 1 cubic ft.
Moderate	1 to 3 cubic ft.
Severe	greater than 3 cubic ft.

Seepage Term	Criteria
Slow	less than 1 gpm
Moderate	1 to 3 gpm
Fast	greater than 3 gpm

KEY TO WATER LEVELS

- Observed in exploration during advancement.
- Measured in exploration at completion, prior to backfilling or well installation.
- Measured in exploration after the stated stabilization period, prior to backfilling, or in well installation if noted.

DEFINITIONS OF COMMON TERMS

Sample Recovery Ratio - The length of material recovered in a drive or push type sampler over the length of sampler penetration, in inches (e.g. 18/24).

Standard Penetration Test (*SPT*) - An in-situ test where a standard split-spoon sampler is driven a distance of 12 or 18 inches (after an initial 6-inch seating interval) using a 140-lb. hammer falling 30 inches for each blow.

SPT Blows - The number of hammer blows required to drive a split-spoon sampler each consecutive 6-inch interval during a *Standard Penetration Test*. If no discernable advancement of a split spoon sampler is made after 50 consecutive hammer blows, 50/X indicates *sampler refusal* and is the number of blows required to drive the sampler X inches.

SPT N-Value (*N*) - The uncorrected blow count representation of a soil's penetration resistance over a 12-inch interval after an initial 6-in. seating interval, reported in blows per foot (bpf). The N-value is correlated to soil engineering properties.

Auger Refusal - No discernable advancement of the auger over a period of 5 minutes with full rig down pressure applied.

Casing Refusal (Driven) - Casing penetration of less than 6 inches after a minimum 50 blows of a drop hammer weighing 300 lbs. or a minimum 100 blows of a drop hammer weighing 140 lbs.

PID Measurement - A measurement (electronic reading) taken in the field using a photoionization detector (PID) to detect the presence of volatile organic compounds in a soil sample. Values are reported as benzene equivalent units in parts per million (ppm) unless noted otherwise.

Rock Quality Designation (RQD) - A qualitative index measure of the degree of jointing and fracture of a rock core taken from a borehole. The RQD is defined as the sum length of solid core pieces 4 inches or longer divided by the run (cored) length, expressed as a percentage. Higher RQD values may indicate fewer joints and fractures in the rock mass.

Fill (Made Ground) - A deposit of soil and/or artificial waste materials that has been placed or altered by human processes.

LABORATORY TESTS AND FIELD MEASUREMENTS

MC	Moisture Content	IC	1D Incremental Consolidation
OC	Organic Content	VS	Laboratory Vane Shear
PL	Plastic Limit	US	Unconfined Compression
LL	Liquid Limit	TC	Triaxial Compression
GC	Gravel Content	PP	Pocket (Hand) Penetrometer
SC	Sand Content	TV	Torvane (Hand Vane)
FC	Fines Content	PID	Photoionization Detector
DS	Direct Shear	FID	Flame Ionization Detector

BORING ADVANCEMENT METHODS

Hollow-Stem Auger Drilling - Utilizes continuous flight auger sections with hollow stems to advance the borehole. Drill rods and a plug are inserted into the auger stem to prevent the entrance of soil cuttings into the augers.

Rotary Wash Drilling - Utilizes downward pressure and rotary action applied to a non-coring bit while washing the cuttings to the surface using a circulating fluid injected down the drill rods. The borehole is supported with either steel casing or the drilling fluid. Where a casing is used, the borehole is advanced sequentially by driving the casing to the desired depth and then cleaning out the casing. The process of driving and cleaning the casing is commonly referred to as the 'drive-and-wash' technique.

Continuous Sampling - Includes a variety of methods and procedures during which the borehole is advanced via continuous recovery of soil samples. *Direct Push* sampling is a common method that uses static downward pressure combined with percussive energy to drive a steel mandrel into the ground at continuous intervals while recovering soil samples in disposable acetate liners.

Rock Coring - Utilizes downward pressure and rotary action applied to a core barrel equipped with a diamond-set or tungsten carbide coring bit. During conventional coring, the entire barrel is retrieved from the hole upon completion of a core run. Wireline coring allows for removal of the inner barrel assembly containing the actual core while the the drill rods and outer barrel remain in the hole. Various types and sizes of core barrels and bits are used.

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INDEX SHEET 2
SOIL DESCRIPTION

SOIL CONSTITUENTS

Naturally occurring soils consist of one or more of the following matrix constituents defined in terms of particle size.

Constituent		U.S. Sieve Size			Observed Size (in.)		
Gravel	(Coarse)	3/4 in.	-	3 in.	3/4	-	3
Gravel	(Fine)	No. 4	-	3/4 in.	1/5	-	3/4
Sand	(Coarse)	No. 10	-	No. 40	1/16	-	1/5
Sand	(Medium)	No. 40	-	No. 10	1/64	-	1/16
Sand	(Fine)	No. 200	-	No. 40	1/300	-	1/64
Fines	(Silt or Clay)	Smaller than		No. 200	Less than		1/300

SOIL IDENTIFICATION

Soil identification refers to the grouping of soils with similar physical characteristics into a category defined by a **group name** and corresponding **group symbol** based on estimation of the matrix soil constituents to the nearest 5% and simple manual tests. Proportions of cobbles, boulders, and other non-matrix soil materials are not considered during this procedure but are included in the overall soil description if observed or thought to be present. Refer to the following descriptions and tables adapted from ASTM D2488.

Coarse-Grained Soil - Coarse-grained soils contain fewer than 50% fines and are identified based on the following table.

Primary Constituent	Fines Percent	Type of Fines and Gradation		Group Symbol	Group Name [1]
GRAVEL *% gravel > % sand*	≤ 5%	well graded		GW	Well graded gravel
		poorly graded		GP	Poorly graded gravel
	10%	clayey fines	well graded	GW-GC	Well graded gravel with clay
			poorly graded	GP-GC	Poorly graded gravel with clay
		silty fines	well graded	GW-GM	Well graded gravel wth silt
			poorly graded	GP-GM	Poorly graded gravel with silt
	15% to 45%	clay fines		GC	Clayey gravel
		silt fines		GM	Silty gravel
SAND *% sand ≥ % gravel*	≤ 5%	well graded		SW	Well graded sand
		poorly graded		SP	Poorly graded sand
	10%	clayey fines	well graded	SW-SC	Well graded sand with clay
			poorly graded	SP-SC	Poorly graded sand with clay
		silty fines	well graded	SW-SM	Well graded sand with silt
			poorly graded	SP-SM	Poorly graded sand with silt
	15% to 45%	clay fines		SC	Clayey sand
		silt fines		SM	Silty sand

[1] If soil is a gravel and contains 15% or more sand, add "with sand" to the group name. If soil is a sand and contains 15% of more gravel, add "with gravel" to the group name.

Inorganic Fine-Grained Soil - Fine-grained soils contain 50% or more fines and are identified based on the following table.

Plasticity Criteria	Dry Strength	Coarse Fraction S = Sand, G = Gravel		Group Symbol	Group Name [1]
Medium	Medium to high	< 15% S + G		CL	Lean clay
		≥ 30%	% S ≥ % G	CL	Sandy lean clay
		S + G	% S < % G	CL	Gravelly lean clay
Non-plastic	None to low	< 15% S + G		ML	Silt
		≥ 30%	% S ≥ % G	ML	Sandy silt
		S + G	% S < % G	ML	Gravelly silt
High	High to very high	< 15% S + G		CH	Fat clay
		≥ 30%	% S ≥ % G	CH	Sandy fat clay
		S + G	% S < % G	CH	Gravelly fat clay
Low to Medium	Low to medium	< 15% S + G		MH	Elastic silt
		≥ 30%	% S ≥ % G	MH	Sandy elastic silt
		S + G	% S < % G	MH	Gravelly elastic silt

[1] If soil contains 15% to 25% sand or gravel, add "with sand" or "with gravel" to the group name.

Organic Fine-Grained Soil - Fine-grained soils that contain enough organic particles to influence the soil properties are identified as Organic Soil and assigned the group symbol **OL** or **OH**.

Highly Organic Soil (Peat) - Soils composed primarily of plant remains in various stages of decomposition are identified as Peat and given the group symbol **PT**. Peat usually has an organic odor, a dark brown to black color, and a texture ranging from fibrous (original plant structure intact or mostly intact) to amorphous (plant structure decomposed to fine particles).

SOIL DESCRIPTION

Soils are *described* in the following general sequence. Deviations may occur in some instances.

Identification Components

(1) Group Name and Group Symbol

Description Components

(2) Consistency (Fine-Grained) or Apparent Density (Coarse-Grained)
(3) Color (*note, the term "to" may be used to indicate a gradational change*)
(4) Soil Moisture
(5) Matrix Soil Constituents (Gravel, Sand, Fines)
  └► Proportion (*by weight*), particle size, plasticity of fines, angularity, etc.
(6) Non-Matrix Soil Materials and Proportions (*by volume*)
(7) Other Descriptive Information (Unusual Odor, Structure, Texture, etc.)
(8) [Geologic Formation Name or Soil Survey Unit]

SPT N-VALUE CORRELATIONS

Consistency	SPT N-Value	Apparent Density	SPT N-Value
Very soft	0 - 2	Very loose	0 - 5
Soft	2 - 4	Loose	5 - 10
Medium stiff	4 - 8	Medium dense	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very stiff	15 - 30	Very dense	> 50
Hard	> 30		

SOIL MOISTURE

Dry..... Apparent absence of moisture; dry to the touch.
Moist..... Damp but no visible water.
Wet..... Visible free water; saturated.

PROPORTIONS / PERCENTAGES

Proportions of gravel, sand, and fines (excluding cobbles, boulders, and other constituents) are stated in the following terms indicating a range of percentages by weight (to nearest 5%) of the minus 3-in. soil fraction and add up to 100%.

Mostly ..... 50% - 100%
Some ..... 30% - 45%
Little ..... 15% - 25%
Few ..... 5% - 10%
Trace..... Less than 5%

Proportions of cobbles, boulders, and other non-matrix soil materials including artificial debris, roots, plant fibers, etc. are stated in the following terms indicating a range of percentages by volume (to the nearest 5%) of the total soil.

Numerous ..... 40% - 50%
Common ..... 25% - 35%
Occasional ..... 10% - 20%
Trace..... Less than 5%

PLASTICITY (FINES ONLY)

Non-plastic.....Dry specimen ball falls apart easily. Cannot be rolled into thread at any moisture content.
Low.....Dry specimen ball easily crushed with fingers. Can be rolled into 1/8-in. thread with some difficulty.
Medium.....Difficult to crush dry specimen ball with fingers. Easily rolled into 1/8-in. thread.
High.....Cannot crush dry specimen ball with fingers. Easily rolled and re-rolled into 1/8-in. thread.

COBBLES AND BOULDERS

Cobbles - Particles of rock that will pass a 12-in. square opening and be retained on a 3-in. sieve.

Boulders - Particles of rock that will not pass a 12-in. square opening.

Note: Where the percentage (by volume) of cobbles and/or boulders cannot be accurately or reliably estimated, the terms "with cobbles", "with boulders", or "with cobbles and boulders" may be used to indicate observed or inferred presence.

GUIDE TO SUBSURFACE EXPLORATION LOGS

Weston & Sampson℠

INDEX SHEET 3
ROCK DESCRIPTION

ROCK DEFINITION

Where reported on an exploration log, *rock* is defined as any naturally formed aggregate of mineral matter occurring in larges masses or fragments. This definition of rock should not be taken as a replacement for any definitions relating to rock and/or rock excavation defined in construction documents. Intensely weathered or decomposed rock that is friable and can be reduced to gravel size particles or smaller by normal hand pressure is identified and described as soil. Poorly indurated formational materials which display both rock-like and soil-like properties are identified and described as rock followed by the soil description. In such cases, the term "poorly indurated" or "weakly cemented" is added to the rock name (e.g. weakly cemented sandstone).

ROCK IDENTIFICATION

Rock is identified by a combination of *rock type* (igneous, metamorphic, or sedimentary) followed by the the *rock name* (e.g. granite, schist, sandstone).

ROCK DESCRIPTION

Rock descriptions are presented in the following general sequence. The detail of description is dictated by the complexity and objectives of the project.

Identification Components

(1) Rock Type and Name

Description Components

(2) Rock Grain Size (*for clastic sedimentary rock*)
(3) Crystal Size (*for igneous and metamorphic rock*)
(4) Bedding Spacing (*for sedimentary rock*)
(5) Color
(6) Hardness and Weathering Descriptors
(7) Fracture Density
(8) [Geologic Formation Name]

ROCK QUALITY DESIGNATION

$$\text{RQD (\%)} = \frac{\Sigma \text{ Length of intact core pieces} \geq 4 \text{ inches}}{\text{Total length of core run (inches)}} \times 100$$

The RQD should correlate with the fracture density in most cases. Higher RDQ values generally indicate fewer joints and fractures.

GRAIN / CRYSTAL SIZE

Grain Size for Clastic Sedimentary Rock

The names of clastic sedimentary rocks are generally based on their predominant clast or grain size (e.g. fine sandstone, medium sandstone, coarse gravel conglomerate, cobble conglomerate, siltstone, claystone).

Crystal Size for Igneous and Metamorphic Rock

Grain Size Description	Average Crystal Size (in.)
Very coarse grained (pegmatitic)	Greater than or equal to 3/8
Coarse-grained	Between 3/16 and 3/8
Medium-grained	Between 1/32 and 3/16
Fine-grained	Between 1/250 and 1/32
Aphanitic	Less than or equal to 1/250

BEDDING SPACING

Bedding Description	Thickness / Spacing
Massive	Less than 10 ft.
Very thickly bedded	3 ft. to 10 ft.
Thickly bedded	1 ft. to 3 ft.
Moderately bedded	4 in. to 1 ft.
Thinly bedded	1 in. to 4 in.
Very thinly bedded	1/4 in. to 1 in.
Laminated	Less than 1/4 in.

Note: Bedding is generally only applicable to sedimentary or bedded volcanic rocks.

HARDNESS

Hardness	Criteria
Extremely hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows.
Very hard	Cannot be scratched with a pocketknife or sharp pick with difficulty. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with with a pocketknife or sharp pick with difficulty. Breaks with heavy hammer blows.
Moderately hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows.
Moderately soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick. Breaks with light to moderate manual pressure.
Very soft	Can be readily indented, grooved, or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

WEATHERING (INTACT ROCK)

Weathering Description	Discoloration and/or Oxidation	General Characteristics
Fresh	Body of rock and fracture surfaces are not discolored or oxidized.	Rock texture unchanged. Hammer rings when crystalline rocks are struck.
Slightly weathered	Discoloration or oxidation limited to surface of, or short distance from, fractures. Most surfaces exhibit minor to complete discoloration.	Rock texture preserved. Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately weathered	Discoloration or oxidation extends usually throughout. Fe-Mg minerals appear rusty. All fracture surfaces are discolored or oxidized.	Rock texture generally preserved. Hammer does not ring when rock is struck. Body of rock slightly weakened.
Intensely weathered	Discoloration or oxidation throughout. Feldspar and Fe-Mg minerals altered to clay to some extent. All fracture surfaces are discolored or oxidized and friable.	Rock texture altered by chemical disintegration. Can usually be broken with moderate to heavy manual pressure or by light hammer blow . Body of rock is significantly weakened.
Decomposed	Discoloration or oxidation throughout but resistant minerals such as quartz may be unaltered. All feldspar and Fe-Mg minerals are completely altered to clay.	Resembles a soil; partial or complete remnant rock structure may be preserved. Can be granulated by hand. Resistant minerals may present as stringers or dikes.

FRACTURE DENSITY

Description	Observed Fracture Density
Unfractured	No fractures
Very slightly fractured	Core lengths greater than 3 ft.
Slightly fractured	Core lengths mostly from 1 ft. to 3 ft.
Moderately fractured	Core lengths mostly from 4 in. to 1 ft.
Intensely fractured	Core lengths mostly from 1 in. to 4 in.
Very intensely fractured	Mostly chips and fragments

Note: Fracture density is based on the fracture spacing in recovered core, measured along the core axis (excluding mechanical breaks).

Attachment B
Geotechnical Laboratory Test Results

THIELSCH ENGINEERING

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thielsch.com
Let's Build a Solid Foundation

Client Information:
Weston & Sampson
Foxborough, MA
PM: Matthew Zanchi
Assigned By: Matthew Zanchi
Collected By: Client

Project Information:
Morses Pond Beach and Bath House
Morses Pond Access Road, Wellesley, MA 02482
W&S Project Number: ENG21-0701
Summary Page: 1 of 1
Report Date: 10.18.2021

LABORATORY TESTING DATA SHEET, Report No.: 7421-K-B009

Boring No.	Sample No.	Depth (ft)	Laboratory No.	Identification Tests								Proctor / CBR / Permeability Tests								Laboratory Log and Soil Description
				As Received Moisture Content %	LL %	PL %	Gravel %	Sand %	Fines %	Org. %	G_s	Dry unit wt. pcf	Test Moisture Content %	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) (Corr.)	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec	
				D2216	D4318		D6913/D422			D2974	D854			D1557						
B-1	S-3	4-6	21-S-B280				9.4	74.0	16.6											Light Brown silty sand
B-5	S-4	6-8	21-S-B281	29.9						6.6										Organic Content Only

Date Received: 10.08.2021

Reviewed By: Ronald L. Thielsch

Date Reviewed: 10.18.2021

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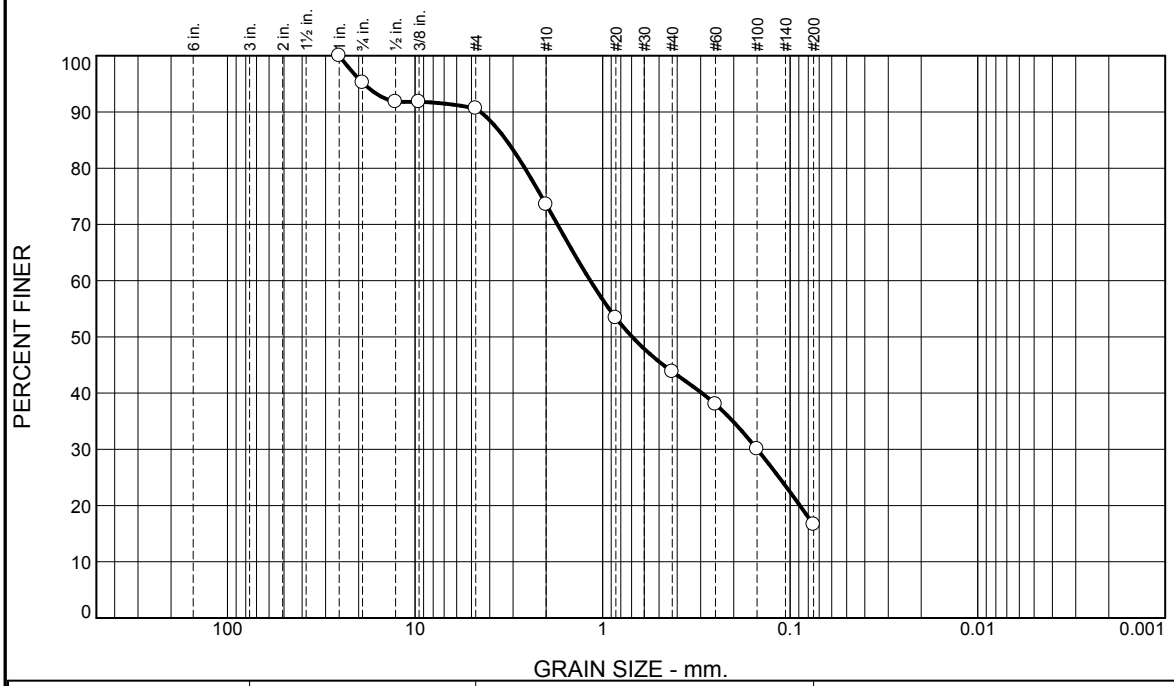
This report shall not be reproduced, except in full, without prior written approval from the Agency, as defined in ASTM E329.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.8	4.6	17.0	29.8	27.2	16.6	

Test Results (D6913 & ASTM D 1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
3/4"	95.2		
1/2"	91.8		
3/8"	91.8		
#4	90.6		
#10	73.6		
#20	53.4		
#40	43.8		
#60	38.0		
#100	30.0		
#200	16.6		

* (no specification provided)

Material Description

Light Brown silty sand

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= SM **AASHTO (M 145)=** A-1-b

Coefficients

D_{90}= 4.4663 D_{85}= 3.2627 D_{60}= 1.1624
D_{50}= 0.6960 D_{30}= 0.1497 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 10.08.2021 **Date Tested:** 10.13.2021

Tested By: RL / DN

Checked By: Ronelle LeBlanc, E.I.T.

Title: Laboratory Coordinator

Source of Sample: B-1 **Depth:** 4-6
Sample Number: S-3 **Date Sampled:**

Thielsch Engineering Inc.

Cranston, RI

Client: Weston & Sampson

Project: Morses Pond Beach and Bath House
Morses Pond Access Rd, Wellesley, MA 02482

Project No: ENG21-0701 **Figure** 21-S-B280

Attachment C
Important Information about this
Geotechnical-Engineering Report

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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Appendix D: Wetlands Delineation Report

Weston & Sampson

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tel: 978.532.1900

Wetland Delineation Report

August 2021

Wellesley, Massachusetts
Project # ENG21-0701

Morses Pond Beach
Wellesley, MA

Wetland Delineation Conducted By:
Devin Batchelder, CWS on 8/27/2021

TABLE OF CONTENTS

Page

1.0 SITE DESCRIPTION....1-1

2.0 DELINEATION OF WETLAND RESOURCES....2-1
2.1 Site Observations....2-1
2.2 Wetland Delineation Methodology....2-1
2.3 Isolated Vegetated Wetland (IW)....2-2
2.4 Bank....2-3
2.5 Other Protected Areas....2-4

3.0 SUMMARY....3-1

4.0 REFERENCES....4-1

FIGURES

Figure 1....Wetlands Field Map
Figure 2....USGS Topographic Map
Figure 3....FEMA FIRM Map
Figure 4....Environmental Resources Map

APPENDICES

Appendix A ....ACOE Wetland Determination Data Forms
Appendix B ....Site Photographs

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1.0 SITE DESCRIPTION

On August 27th, 2021, the presence of wetland resources was investigated near Morses Pond in Wellesley, MA. This investigation area is located off Morses Pond Access Road with undeveloped woodlands and recreational walking paths. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland resource areas including, an isolated vegetated wetland and lake banks, were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is trained in the wetland delineation process using the Massachusetts Department of Environmental Protection (MassDEP) and the US Army Corps of Engineers methodology. A further description of these wetland resource areas is presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

The Weston & Sampson wetland scientist, trained in the ACOE Wetland Delineation Manual and Massachusetts Department of Environmental Protection (MassDEP) Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetland Protection Act guidance document, observed the following protected wetland resources at the site:

- Isolated Vegetated Wetland (IW)
- Banks – Lake

Field data were recorded on US Army Corps of Engineers (ACOE) Wetland Determination Data Forms. See Appendix A for completed data forms and Appendix B for site photographs.

2.2 Wetland Delineation Methodology

A wetland delineation assessment was conducted in accordance with the Massachusetts Wetland Protection Act Regulations (310 CMR 10.55(2)(c)), Massachusetts Department of Environmental Protection (MassDEP) Delineating Bordering Vegetated Wetlands Under the Massachusetts Protection Act (March 1995), and ACOE Wetland Manual (Technical Report Y-87-1).

The bordering vegetated wetlands (BVW) delineation methodology included the characterization of vegetation, soil any hydrologic conditions in both wetland and upland areas to identify the transitional area, which was used as the wetland limit. Pink flags with distinct flag numbers are left in the field to show wetland resource area limits.

Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations, the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when

ranked in descending order of abundance and cumulatively totaled) that immediately exceeds 50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, water-stained leaves.

2.3 Isolated Vegetated Wetland (IW)

A single Isolated Vegetated Wetland (IW) series was delineated at the site. The limit of the IW resource area was determined by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions consistent with the BVW delineation methodology. Wetland flags left in the field included:

- Wet A1 through Wet A9 (Wet “A” Series)

Dominant vegetation within the IW included red maple (*Acer rubrum*), coastal pepperbush (*Clethra alnifolia*), and poison ivy (*Toxicodendron radicans*), these species commonly thrives in hydric conditions. The soils were composed of fine sandy loam with 5% redoximorphic features appearing 8 inches below the soil surface. Wetland hydrology was evident having a high-water table, surface water, saturation present, and water-stained leaves.

The adjacent upland vegetation was dominated by American hop-hornbeam (*Ostrya virginiana*), red oak (*Quercus rubra*), and wild sarsaparilla (*Aralia nudicaulis*). Soils were composed of fine sandy loam. No indicators of wetland hydrology were observed.

The Massachusetts Wetland Protection Act does not protect isolated vegetated wetlands however, certain individual communities have chosen to extend protections to these isolated wetlands within their local bylaws. The town of Wellesley places protection on isolated wetlands per the Town of Wellesley Wetlands Protection Bylaw: Article 44 of Town Bylaw section 2 states isolated wetlands are considered jurisdictional as long as they cover 2,500 square feet of surface area. This isolated wetland on site is approximately 5,360 square feet in size, therefore is considered to be jurisdictional.

Under the Town of Wellesley Wetland bylaws isolated wetlands are subject to a 100-foot buffer.

2.4 Bank

Water bodies, including perennial streams, intermittent streams, ponds and lakes, have banks which are protected by the Massachusetts Wetland Protection Act. Bank is a wetland resource area defined by 310 CMR 10.54(2)(a) as "the portion of land surface which normally abuts and confines a water body. It occurs between a waterbody and a vegetated bordering wetland and adjacent floodplain, or, in absence of these, it occurs between a waterbody and an upland." Vegetated banks provide valuable functions such as flood control, stormwater prevention, fisheries protection, and water quality protection. The limit of this resource area is identified by Top of Bank (TOB) which is located at the first observable break in slope or the Mean Annual Flood Level (MAFL), whichever is lower. TOB is easily identified in the field so that indicator was utilized for this wetland delineation.

Lake Bank

Morses Pond and adjacent un-named adjacent extension of the pond are located in Wellesley, MA. Both ponds are connected to form a joined water body. The waterbody is 100 acres in size, based on the Towns of Wellesley history page on this pond. Due to its size, Morses Pond and un-named pond are classified as a lake. According to the Massachusetts Wetland Protection Act a lake is defined as "any open body of fresh water with a surface area of ten acres or more and shall include great ponds." (310 CMR 10.04). Great Ponds are defined in 310 CMR 9.02 as "any pond which contained more than ten acres in its natural state … prior to any alteration by damming or other human activity". Although Morses

Pond is greater than ten acres in size, it is not listed on the Massachusetts List of Great Ponds. Both banks of the lake were flagged. Wetland flags left in the field included:

- TOB-A1 through TOB-A84 Stop (Lake Bank "A" Series)

The Lake Bank A Series begins near the Morses Pond boat ramp. Flags were not left within the beach area due to public safety and usage however the locations were identified using GPS. The flag line continues to include the un-named lake extension due to a hydrologic connection being present running under a walking bridge. Fewer flags were hung on the western side of the unnamed lake extension due to the presence of a fence. The flag line otherwise continues to wrap around the entire lake system.

Banks are subject to a 100-foot buffer under the Massachusetts Wetland Protection Act per 310 CMR 10.02(2)(b).

2.5 Other Protected Areas

Weston & Sampson created environmental resources maps (see Figure 4) of the site to determine the presence of other protected areas. The data source of these map layers was the Massachusetts Geographic Information System (MassGIS). These areas included:

- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Certified and Potential Vernal Pools
- Areas of Critical Environmental Concern (ACEC)
- Outstanding Resource Waters (ORW)
- Cold Water Fisheries

Wetland resources identified in the field were also added to these maps. These maps showed no other environmental resource areas are located on this site other than the wetland resource areas previously identified in this report.

FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site. See Figure 3 for FIRM map. Based on the information provided

by the FIRM map a portion of the investigation area located within a Zone AE. FEMA defines a Zone AE as “areas subject to inundation by the 1-percent-annual-chance flood event”. The 1-percent-annual-chance flood event is the same as the 100-year event. As a result, portions of the investigation area are located within the 100-year flood zone.

3.0 SUMMARY

On August 27th, 2021, the presence of wetland resources was investigated near Morses Pond in Wellesley, MA. A single isolated vegetated wetland and lake banks were identified and flagged at the site.

Additional environmental mapping was conducted using MassGIS data layers and FEMA FIRM mapping. This additional mapping indicates that the site location is found in the 100-year flood zone.

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Path: \\wse03.local\WSE\Projects\MA\Wellesley MA\Morses Pond Beach Feasibility Study (2)\Permitting\Wetland Delineation Wellsley\GIS\Maps\Wetland Flags.mxd **User:** Page.Hailey **Saved:** 9/2/2021 1:46:59 PM **Opened:** 9/2/2021 1:47:10 PM

N
W E
S

100 50 0 100
Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

Legend

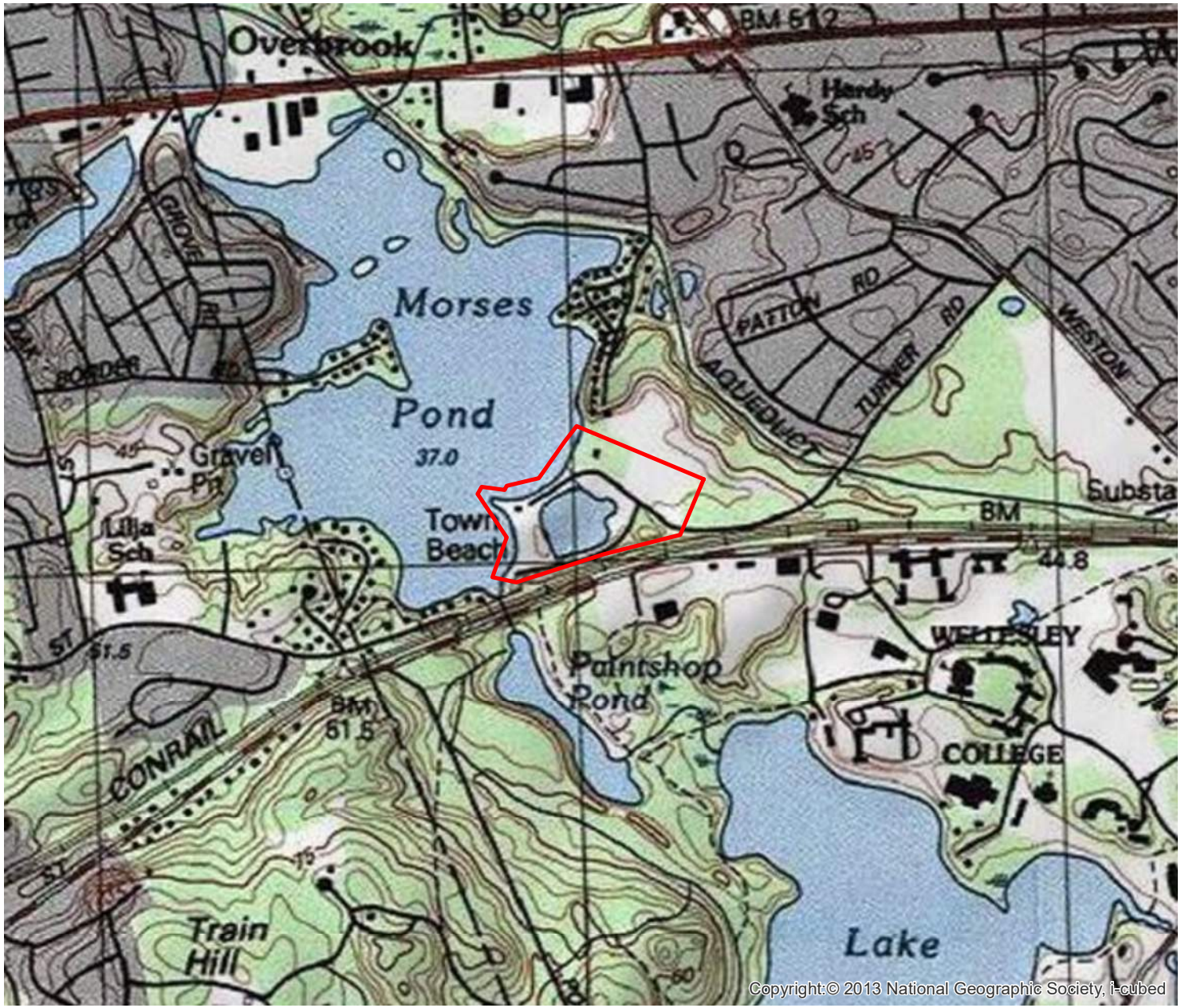
- Area of Interest
- Isolated Wetland
- Bank- Lake

FIGURE 1

Morses Pond Beach
Wellesley, MA

Wetland Field Map

Weston & Sampson



N
W E
S

1,000 500 0 1,000
Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

Legend

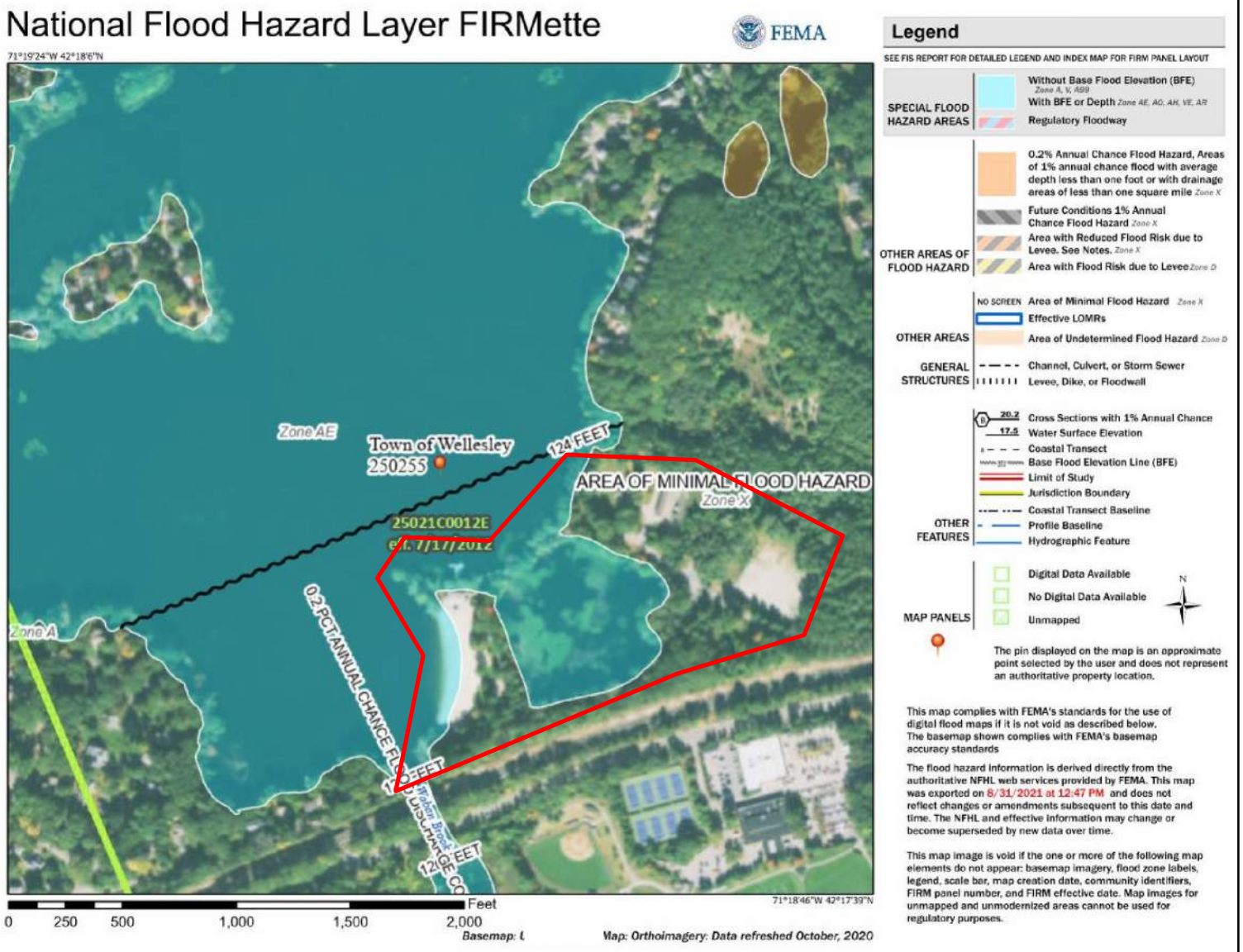
Area of Interest

FIGURE 2

Morses Pond Beach
Wellesley,MA

USGS Topographic Map

Weston & Sampson



Legend

Area of Interest

FIGURE 3

Morses Pond Beach
Wellesley,MA

FEMA Map

Weston & Sampson

N
W E
S

200 100 0 200
Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs

Legend

- Isolated Wetland
- Bank- Lake
- Area of Interest
- Perennial Stream
- Intermittent Stream
- Marsh/Bog
- Wooded marsh
- Cranberry Bog
- Salt Marsh
- Open Water
- Reservoir (with PWSID)
- Tidal Flats
- Beach/Dune
- Public Way
- Marsh Boundary - landward
- Landlocked Tidelands
- Jurisdiction
- Historic High Water
- Marsh Boundary - seaward
- Contemporary High Water
- Inferred Contemporary High Water
- Inferred Historic High Water
- <all other values>

HABITAT

- American Oyster
- Blue Mussel
- Bay Scallop
- European Oyster
- Ocean Quahog
- Quahog
- Razor Clam
- Surf Clam
- Sea Scallop
- Soft-Shelled Clam

ACECs

- ACECs
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Priority Habitats of Rare Species
- NHESP Certified Vernal Pools
- NHESP Potential Vernal Pools
- Cold Water Fisheries

Outstanding Resource Waters

- Public Water Supply Contributor
- ORW for ACEC
- ORW for both Water Supply and Other

FIGURE 4

Morses Pond Beach
Wellesley,MA

Environmental Resources Map

Weston & Sampson

APPENDIX A

ACOE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Morses Pond City/County: Wellesley Sampling Date: 8/27/2021

Applicant/Owner: _____ State: MA Sampling Point: Wet-A UP

Investigator(s): Devin Batchelder Section, Township, Range: _____

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): 0-8% Lat: 42°17'46.81"N Long: 71°18'53.48"W Datum: _____

Soil Map Unit Name: Hinckley loamy sand NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** **Yes** _____ **No** X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wet-A UP

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. American Hop-hornbeam(*Ostrya virginiana*)	25	Yes	FACU
2. Red Oak (*Quercus rubra*)	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	35	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. American Hop-hornbeam(*Ostrya virginiana*)	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	
Herb Stratum (Plot size: 5')			
1. Wild Sarsaparilla(*Aralia nudicaulis*)	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	50 (A)		200 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: Wet-A UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR2/1	100					FSL	
10-20	10YR3/5	100					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Morses Pond City/County: Wellesley Sampling Date: 8/27/2021

Applicant/Owner: Borrego Solar State: MA Sampling Point: Wet-A WET

Investigator(s): Devin Batchelder Section, Township, Range: _____

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): 0-8% Lat: 42°17'46.81"N Long: 71°18'53.48"W Datum: _____

Soil Map Unit Name: Hinckley loamy sand NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes X	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0"
Water Table Present?	Yes X	No _____	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: BVW-A8 WET

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Red Maple (*Acer Rubrum*)	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Coastal Pepperbush(*Clethra alnifolia*)	25	Yes	FAC
2. White Ash(*Fraxinus americana*)	5	No	FACU
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Poison ivy (*Toxicodendron radicans*)	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. Virginia Creeper(*Parthenocissus quinquefolia*)	1	No	FACU
2.			
3.			
4.			
	1 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: BVW-A8 WET

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR2/1	100					FSL	
8-20	2.5Y5/2	95	10YR4/6	5			FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

APPENDIX B

Site Photographs

Photo 1: Morses Pond

Photo 2: Connecting Bridge of Un-named adjacent extension to Morses Pond

Photo 3: Un-named extension adjacent Pond to Morses

Photo 4: Isolated Wetland

Appendix E: Electrical System Narrative

Morses Pond Bathhouse & Administration Building
Wellesley, MA
J#791 010 00.00
L#79933/Page 1/April 1, 2022

ELECTRICAL SYSTEMS

NARRATIVE REPORT

The following is the Electrical Systems narrative, which defines the scope of work and capacities of the Power and Lighting system, as well as the Basis of Design.

1. CODES

All work installed under Section 260000 shall comply with the Massachusetts State Building Code and all state, county, and federal codes, laws, statutes, and authorities having jurisdiction.

2. DESIGN INTENT

All work is new and consists of furnishing all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operating installation of the electrical work and all items incidental thereto, including commissioning and testing.

A. Power Distribution:

1. Electrical power will be brought into the site via underground secondary cables. Service entrance equipment will be located in the utility room, along with lighting and power panels. The service capacity will be sized for 200 amperes at 120/208V, 3Ø, 4 wire.

2. The emergency lighting system will consist of battery backup integral to the LED light fixtures.

B. Interior Lighting System:

1. General offices lighting fixtures will consist of recessed 2'x2' LED luminaries with dimming drivers. The fixtures will be wired for automatic dimming where natural day light is available and also for multi-level switching.

2. Toilet Rooms will consist of LED wall mounted valance fixtures and wet location LED recessed downlights.

3. Storage, mechanical, etc. will be provided with LED industrial wraparound fixtures with acrylic lens.

4. Exit signs will be of the energy efficient, long life LED type with battery back-up.

5. Each area will be locally switched and designed for multi-level controls. Each office space and toilet room will have an occupancy sensor to turn lights off when unoccupied. In general, lighting power density will be 30-40% less than IECC 2018.

C. Site Lighting System:

1. Building perimeter fixtures will be wall mounted LED luminaries over exterior doors.

2. Covered canopy lighting will consist of marine grade LED cylinders with dimming drivers.

3. All fixtures will be of the dark sky compliant, cut-off type.

D. Wiring Devices:

1. Offices will generally have one (1) duplex outlet per wall. At each workstation a double duplex receptacle will be provided.

2. Exterior weatherproof receptacles will be installed at exterior doors.

3. Receptacles in Toilet Rooms will be GFI type mounted at 48 inches above floor.

E. Fire Alarm System:

1. A fire alarm and detection system will be provided with battery back-up. The system will be of the addressable type where each device will be identified at the control panel and remote annunciator by device type and location to facilitate search for origin of alarms.

2. Heat detectors will be provided in all spaces.

3. The alarm transmission method will be via an AES radio box with antenna via the multi-tap cabinet.

F. Security System:

1. An addressable security intrusion system will be provided.

2. Position switches will be provided at all exterior doors.

G. Lightning Protection System:

1. A system of lightning protection will be provided. The system will be installed in compliance with the provisions of the latest “Code for Protection Against Lightning” for buildings as adopted by the National Fire Protection Association and the Underwriters’ Laboratories, Inc. for UL Master Label System.

2. The lightning protection equipment will include air terminals, conductors, conduits, fasteners, connectors, ground rods, etc.

3. The lightning protection system will be installed for the new facility.

3. TESTING REQUIREMENTS

A. The Electrical Contractor shall provide testing of the following systems with the Owner and Owner's Representative present:

1. Lighting and power panels for correct phase balance.
2. Emergency Lighting
3. Lighting control system
4. Fire alarm system.
5. Security systems.
6. Lightning Protection System

B. Testing reports shall be submitted to the Engineer for review and approval before providing to the Owner.

4. OPERATION MANUALS AND MAINTENANCE MANUALS:

A. When the project is completed, the Electrical Contractor shall provide operation and maintenance manuals to the Owner.

5. RECORD DRAWINGS AND CONTROL DOCUMENTS:

A. When the project is completed, an as-built set of drawings, showing all lighting and power requirements from contract and addendum items will be provided to the Owner.

Appendix F: HVAC System Narrative

Morses Pond Bathhouse & Administration Building
Wellesley, MA
J#791 010 00.00
L#79932/Page 1/April 1, 2022

HVAC SYSTEMS

NARRATIVE REPORT

The following is the HVAC system narrative, which defines the scope of work and capacities of the HVAC system as well as the Basis of Design.

1. CODES

   All work installed under Section 23 00 00 shall comply with the Massachusetts State Building Code and all local, county, and federal codes, laws, statutes, and authorities having jurisdiction.

2. DESIGN INTENT

   The work of Section 23 00 00 shall be new and consists of furnishing all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operating installation of the Heating, Ventilating and Air Conditioning work and all items incidental thereto, including commissioning and testing.

   Capacities of systems and equipment are as specified:

   1. Electric radiant heaters: (6) 375 watt electric radiant heaters
   2. One (1) inline exhaust fan; 1,335 CFM
   3. Electric duct re-heat coil: (1) 3.8 kW electric duct heater
   4. One (1) 3-ton VRF air-cooled heat pump condenser serving 5 VRF indoor heat pump fan coil units
   5. One (1) 1.6-ton duct-mounted heat pump DX coil & associated outdoor-mounted heat pump condenser
   6. One (1) indoor-mounted energy recovery unit with an air handling capacity of approximately 400 cfm
   7. Grilles, registers and diffusers.
   8. Copper refrigerant piping and elastomeric cellular piping insulation
   9. Copper condensate drain piping
   10. Galvanized ductwork
   11. 2” & 3” thick duct insulation wrap
   12. Vibration isolation and seismic restraints.
   13. Testing and balancing of systems.

14. Four (4) exhaust/ intake louvers with gravity damper.

3. BASIS OF DESIGN: (MASS CODE)

Weather values are listed herein based on the local weather values as determined from ASHRAE Weather data tables.

Outside: 5°F winer, Summer 88°F DB 74°F WB

Inside: 70° F +/- 2 deg F. for heating. Unoccupied temperature setback will be provided.

Generally outside air is provided at the rate of 20 cfm/person in all office and restroom spaces. In all cases ASHRAE guide 62-2013 and IMC 2015 Mechanical Code will be met as a minimum. All occupied areas will be designed to maintain 1,000 PPM carbon dioxide maximum.

4. SYSTEM DESCRIPTION

A. Bath House – HVAC System:

1. A central inline exhaust fan shall be ducted to all regularly occupiable spaces to provide code-required ventilation. Make-up air for the exhaust system shall be provided through the use of operable windows and/or louvered intakes.

B. Office Building – HVAC System:

1. A central inline energy recovery ventilator would be ducted to outdoor air intake and exhaust louvers to provide fresh air to the building and remove code required exhaust air. A duct-mounted DX coil in series with a duct-mounted electric resistance heating coil would provide tempered and de-humidified air to the building occupiable areas.

2. A Variable Refrigerant Flow (VRF) heat pump system shall provide heating and cooling to the regularly occupied areas of the building; a combination of wall and ceiling mounted indoor fan coil units would be installed within the spaces to be served and connected to an outdoor-mounted heat pump condenser unit.

3. Electric radiant ceiling/wall panels shall be provided to heat the non-occupied building spaces (storage/ toilet/ concessions) that are not provided with VRF indoor units.

4. All condensate would be piped to drain to a mop sink or to a splash block outdoors.

5. Supply and exhaust air shall be conveyed to and from the spaces served by ceiling or wall-mounted return air registers and supply diffusers.

Appendix G: Plumbing System Narrative

Morses Pond Bathhouse & Administration Building
Wellesley, MA
J#791 010 00.00
L#79931/Page 1/April 1, 2022

PLUMBING SYSTEMS

NARRATIVE REPORT

The following is the Plumbing system narrative, which defines the scope of work and capacities of the Plumbing system as well as the Basis of Design.

1. CODES

   A. All work installed under Section 220000 shall comply with the MA Building Code, MA Plumbing Code and all state, county, and federal codes, laws, statutes, and authorities having jurisdiction.

2. DESIGN INTENT

   A. All work is new and consists of furnishing all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operating installation of the Plumbing work and all items incidental thereto, including commissioning and testing.

3. GENERAL

   A. The Plumbing Systems that will serve the project are cold water, hot water and sanitary waste and vent system.

   B. The Building will be serviced by Municipal water and Municipal sewer system.

   C. All Plumbing in the building will conform to Accessibility Codes and to Water Conserving sections of the Plumbing Code.

4. DRAINAGE SYSTEM

   A. Soil, Waste, and Vent piping system is provided to connect to all fixtures and equipment. System runs from 10 feet outside building and terminates with stack vents through the roof.

   B. Drainage system piping will be service weight cast iron piping; hub and spigot with gaskets for below grade; no hub with gaskets, bands and clamps for above grade 2 in. and larger. Waste and vent piping 1-1/2 in. and smaller will be type ‘L’ copper.

5. WATER SYSTEM

   A. New 2-inch domestic water service from the municipal water system will be provided. A meter and backflow preventer, if required, will be provided.

   B. Cold water distribution main is provided. Non-freeze wall hydrants with integral back flow preventers are provided along the exterior of the building.

   C. Domestic hot water heating for bathroom lavatories and sinks shall be provided with instantaneous electric point of use water heaters.

   D. Water piping will be type ‘L’ copper with wrot copper sweat fittings, silver solder or press-fit system. All piping will be insulated with 1 in. thick high density fiberglass.

6. FIXTURES

A. Furnish and install all fixtures, including supports, connections, fittings, and any incidentals to make a complete installation.

B. Fixtures shall bear the manufacturer's guaranteed label trademark indicating first quality. All acid resisting enameled ware shall bear the manufacturer's symbol signifying acid resisting material.

C. Vitreous china and acid resisting enameled fixtures, including stops, supplies and traps shall be of one manufacturer by Kohler, American Standard, or Eljer, or equal. Supports shall be Zurn, Smith, Josam, or equal. All fixtures shall be white. Faucets shall be Speakman, Chicago, or equal.

D. Fixtures shall be as scheduled on drawings.

1. Water Closet: High efficiency toilet, 1.28 gallon per flush, wall hung, vitreous china, siphon jet. Manually operated 1.28 gallon per flush-flush valve.

2. Urinal: High efficiency 0.13 gallon per flush urinal, wall hung, vitreous china. Manually operated 0.13 gallon per flush-flush valve.

3. Lavatory: Wall hung/countertop ADA lavatory with 0.35 GPM metering mixing faucet.

4. Sink: MAAB/ADA stainless steel countertop sink with gooseneck faucet and 0.5 GPM aerator.

5. Drinking Fountain: Barrier free hi-low wall mounted electric water cooler, stainless steel basin with bottle filling stations.

6. Janitor Sink: 24 x 24 x 10 Terrazo mop receptor Stern-Williams or equal.

7. DRAINS

A. Drains are cast iron, caulked outlets, nickaloy strainers, and in waterproofed areas and roofs shall have galvanized iron clamping rings with 6 lb. lead flashings to bond 9 in. in all directions. Drains shall be Smith, Zurn, Josam, or equal.

8. VALVES

A. Locate all valves so as to isolate all parts of the system. Shutoff valves 3 in. and smaller shall be ball valves, solder end or screwed, Apollo, or equal.

9. INSULATION

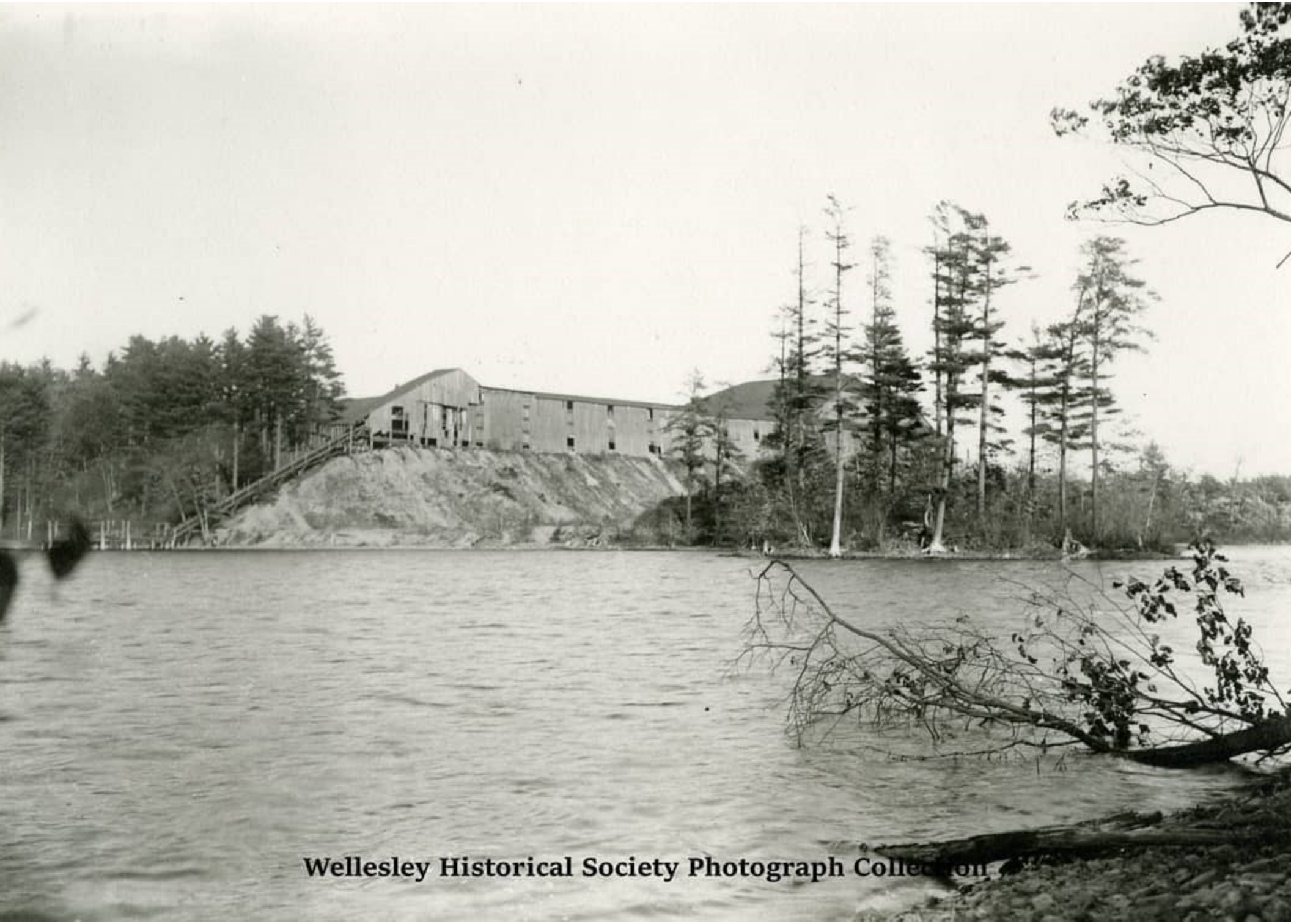
A. All water piping shall be insulated with snap-on fiberglass insulation Type ASJ-SSL, equal to Johns Manville Micro-Lok HP.

10. CLEANOUTS

A. Cleanouts shall be full size up to 4 in. threaded bronze plugs located as indicated on the drawings and/or where required in soil and waste pipes.

11. ACCESS DOORS

A. Furnish access doors for access to all concealed parts of the plumbing system that require accessibility. Coordinate types and locations with the Architect.


Wellesley Historical Society Photograph Collection

Wellesley Historical Society Photograph Collection

Appendix K:

Other Environmental Records

Environmental Strategies & Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

MASSACHUSETTS CONTINGENCY PLAN
PHASE IV FINAL INSPECTION REPORT AND COMPLETION STATEMENT
AND RESPONSE ACTION OUTCOME STATEMENT

MORSE'S POND CULVERT SITE
WELLESLEY, MA

MASSDEP RTN 3-11653

April 25, 2014

Prepared for:

American Premier Underwriters, Inc.
One East Fourth Street
Cincinnati, Ohio 45202

Prepared by:

Environmental Strategies & Management, Inc.
273 West Main St
Norton, MA 02766
(508) 226-1800

ES&M Project No. 2011-037

CONTENTS

1.0 INTRODUCTION 1

1.1 Purpose 1
1.2 Background 1

2.0 PHASE IV FINAL INSPECTION REPORT AND COMPLETION STATEMENT 2

2.1 Purpose 2
2.2 Federal, State and Local Permits 3
2.3 Phase IV Remedy Implementation 3
2.3.1 Pre-Excavation and Mobilization 3
2.3.2 Excavation Activities 4
2.3.3 Post-Excavation and Site Restoration 5
2.4 Summary 5
2.5 Final Inspection Activities 5
2.6 Phase IV Completion Statement 6

3.0 RESPONSE ACTION OUTCOME 6

3.1 Area 1 (Private Residence at One Bacon Street) Overview 6
3.1.1 Physical Characteristics 7
3.1.2 Extent of Release 7
3.1.3 Potential Human Receptors 8
3.1.4 Potential Environmental Receptors 8
3.1.5 Characterization of Hexavalent Chromium, Nickel and Lead 8
3.1.6 Site Activities and Uses 9
3.1.7 Exposure Points, Exposure Pathways and EPCs 9
3.1.8 Method 1 Approach 11
3.1.9 Substantial Hazard Evaluation 12
3.1.10 Risk of Harm to Safety 40.0960 12
3.1.11 Conclusion of Risk Characterization 12
3.2 Area 2 – Southern Cove Morse's Pond 13
3.2.1 Physical Characteristics 14
3.2.2 Extent of Release 14
3.2.3 Potential Human Receptors 15
3.2.4 Potential Environmental Receptors 15
3.2.5 Characterization of Chromium, Lead and Nickel 15
3.2.6 Site Activities and Uses 16
3.2.7 Exposure Points, Exposure Pathways and EPCs 16
3.2.8 Method 3 Approach 17
3.2.9 Substantial Hazard Evaluation 18
3.2.10 Risk of Harm to Safety 40.0960 18
3.2.11 Conclusion of Risk Characterization 19
3.3 Area 3 – Culvert Wing Walls and Upland Area 19
3.3.1 Physical Characteristics 22
3.3.2 Extent of Release 22
3.3.3 Potential Human Receptors 23
3.3.4 Potential Environmental Receptors 23
3.3.5 Characterization of Chromium, Nickel and Lead 24
3.3.6 Site Activities and Uses 24

3.3.7 Exposure Points, Exposure Pathways and EPCs 24
3.3.8 Method 1 Approach 25
3.3.9 Substantial Hazard Evaluation 25
3.3.10 Risk of Harm to Safety 40.0960 26
3.3.11 Conclusion of Risk Characterization 26

4.0 FEASIBILITY EVALUATION 26

4.1 Summary of Current Site Conditions 27
4.2 Feasibility Evaluation 27
4.2.1 Area 1 27
4.3.2 Area 2 29
4.3.3 Area 3 29

5.0 DATA USABILITY EVALUATION 30

5.2 Representativeness Evaluation 31
5.2.1 Conceptual Site Model 31
5.2.2 Work Plan, Data Quality Objectives and Data Collection Approach 32
5.2.3 Use of Field/Screening Data 33
5.2.4 Selection of Sampling Locations and Depths 33
5.2.5 Number and Spatial Distribution of Sampling Locations 33
5.2.6 Temporal Distribution of Samples 33
5.2.7 Critical Samples 33
5.2.8 Completeness 34
5.2.9 Uncertainty and Inconsistency 34

6.0 REQUIRED ELEMENTS OF RESPONSE ACTION OUTCOMES 34

6.1 Area 1 34
6.1.1 General Provisions 34
6.1.2 Content of RAO Statement 35
6.2 Area 2 36
6.2.1 General Provisions 36
6.2.2 Content of RAO Statement 37
6.3 Area 3 39
6.3.1 General Provisions 39
6.3.2 Content of RAO Statement 39

7.0 MCP PUBLIC INVOLVEMENT 41

8.0 LIMITATIONS OF WORK PRODUCT 41

FIGURE

1 Site Map
2 Excavation Area and Depth Intervals
3 Post Excavation Sample Locations

TABLE

1 Summary of Soil Analytical Results – Area 1
2 Summary of Soil EPCs (EPC-1)
3 Summary of Soil EPCs (EPC-2)
4 Summary of Groundwater EPCs

APPENDIX

A Wellesley Conservation Commission Order of Conditions
B Laboratory Analytical Reports – Soil
C Bill of Lading
D Public Involvement Letters and BWSC Form 123

1.0 INTRODUCTION

This Phase IV Final Inspection Report (FIR) and Completion Statement, and Response Action Outcome (RAO) Statement have been prepared in accordance with the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000 by Environmental Strategies & Management, Inc. (ES&M) on behalf of American Premier Underwriters, Inc. (APU). This report addresses the Morse's Pond Culvert site in Wellesley, MA, herein after referred to as "the Site." The Site comprises three areas: Area 1, 2 and 3, as shown on Figure 1. Area 2 is the Morse's Pond Cove located at the southern outlet of Morse's Pond, where it discharges to Paintshop Pond. Area 3 is the upland area around and downgradient of Morse's Pond culvert. Area 1 is the western portion of the Site and includes One Bacon Street, a private residence. Massachusetts Bay Transportation Authority (MBTA) railroad tracks are located south of the culvert and property owned by the Town of Wellesley is located east of the culvert.

1.1 Purpose

The purpose of this report is to document the results of a soil removal program conducted at the One Bacon Street residential property, which was described in the Phase IV Remedy Implementation Plan submitted to the Massachusetts Department of Environmental Protection (MassDEP) and dated March 21, 2013. With the completion of this soil excavation program, Response Action Outcomes can be submitted for the three areas of this site. This report will document that a permanent solution has been achieved for Area 2 (Morse's Pond cove) and temporary solutions have been achieved for Area 1 (One Bacon Street residential property) and Area 3 (the upland area around and downgradient of Morse's Pond culvert).

1.2 Background

It is believed that paint wastes containing heavy metals from the Henry Wood's Sons Paint Factory (formerly located on the banks of Paintshop Pond to the south, on property now owned by Wellesley College) were placed around the culvert at the southern end of Morse's Pond more than 100 years ago. It is not known who placed the paint wastes around the culvert or why. In 2002, APU received a Notice of Responsibility (NOR) from the Massachusetts Department of Environmental Protection (MassDEP) to conduct response actions under the MCP at this site. APU elected to proceed with response actions despite the lack of evidence that any affiliated entity of theirs (i.e., Boston & Albany Railroad) was responsible for the placement of the paint wastes. As such, APU does not deem itself a "Potentially Responsible Party" as defined under M.G.L. Chapter 21E, Section 5.

The Site was the subject of assessment activities conducted by MassDEP in the late 1990s, and was also the subject of a Time Critical Removal Action (TCRA) performed by the US Environmental Protection Agency (EPA) in 2001 and 2002. Since the TCRA did not document the attainment of a permanent solution under the MCP, additional

assessment activities were completed by APU to determine what actions were necessary to document a permanent or temporary solution.

A combined MCP Phase II Comprehensive Site Assessment Report and Phase III Remedial Action Plan (Phase II/III Report) was submitted to MassDEP on June 7, 2011. This report detailed the findings of the Phase II field investigation, and included a Method 1 Risk Characterization and Method 3, Stage 1 environmental screening. To better describe the various portions of the Site, three Areas were established (also shown on Figure 1):

Area 1 consists of the residential property at One Bacon Street. This report will document the removal of metals-impacted soil in order to address two hot spots identified in the Phase II report. Although the soil removal program was successful at achieving residential standards in soil, concentrations of metals in groundwater remain above applicable Method 1, GW-1 standards. Hence, a temporary solution has been achieved.

Area 2 encompasses the portion of Morse's Pond in the cove near the outlet culvert to Paintshop Pond. In Area 2, the Time Critical Removal Action performed by EPA removed the source of metals to Morse's Pond sediment (paint waste around the culvert) and also removed metals-impacted sediment. This sediment was replaced with clean gravel that has eliminated any future exposure pathways. Therefore, this portion of the Site will be the subject of a Class A-2 RAO (partial) as documented in Section 6, below.

Area 3 consists of land around the culvert at the southern end of Morse's Pond, where the soil excavation performed under EPA's TCRA was terminated before all paint wastes could be removed to avoid possible damage to the railroad tracks. A plume of metals-impacted groundwater extends from the culvert area to the southeast beneath the MBTA property and Central Street. A Phase IV Remedy Implementation Plan Addendum was submitted to MassDEP on December 27, 2013, to describe a limited in-situ chemical reduction program for the culvert area. It had been proposed that the in-situ chemical reduction program be implemented as a definitive and enterprising step to improve site conditions. Based on recent groundwater sampling results, concentrations of metals in groundwater have improved substantially since completion of the TCRA, likely due to a combination of factors.

2.0 PHASE IV FINAL INSPECTION REPORT AND COMPLETION STATEMENT

2.1 Purpose

The purpose of the Final Inspection Report is to describe the excavation of metals-impacted soils from the One Bacon Street property, and to document that the excavation was completed in accordance with the PIV RIP. The excavation was conducted to

remove two areas identified as hot spots in the Phase II report. The RAO report documents the attainment of a permanent solution in one portion of the Site and temporary solutions in the remaining portions of the Site.

2.2 Federal, State and Local Permits

The soil excavation program was implemented in accordance with the requirements of the MCP. Because the work area on the One Bacon Street residence is within a resource area, a Notice of Intent was filed with the Wellesley Conservation Commission in April 2013. The Commission issued an Order of Conditions, a copy of which is included in Appendix A. All conditions specified in the Order were complied with.

2.3 Phase IV Remedy Implementation

2.3.1 Pre-Excavation and Mobilization

The excavation work that was described in the Phase IV RIP was expected to be highly disruptive to the One Bacon Street residents. In order to access the work area, the wooden deck on the rear of the home (facing the pond) needed to be removed. To accommodate the home owners and allow them to enjoy their water front property during the good weather, the excavation work was conducted in the late fall of 2013.

On September 30, 2013, ES&M conducted a site inspection to document pre-excavation conditions of the One Bacon Street property. A video was recorded to detail the condition of the property before any site work commenced. Care was taken to detail any cracks or damage to the driveway, foundation, brick patios and walkways, yard ornaments and decorations, as well as to document the general condition of the home.

On October 7, ES&M and ENPRO Services, Inc. mobilized crews and equipment to the Site. A comprehensive safety meeting was conducted and the site health and safety plan was reviewed. Crews began installing silt fencing and clearing the property of any homeowner belongings that were in the path of the excavation. A survey crew was also on site to survey the location of the deck prior to demolition, as required by the Town of Wellesley Building Inspector.

On October 9, ES&M collected pre-excavation soil samples from the excavation area for waste profile characterization. The samples were properly preserved and transported to Absolute Resource Associates in Portsmouth, NH, under a chain of custody. The laboratory report is included in Appendix B. These test results showed that the impacted soil met the acceptance requirements for the ESMI facility in Loudon, NH. A letter documenting ESMI's acceptance of the soil is included in Appendix C.

From October 21 to 23, ES&M and ENPRO demolished the deck at the property under a Town of Wellesley demolition permit. ENPRO began mobilizing their excavation and soil management equipment to the site. A sand and plywood cover was installed over the brick patio to prevent damage while equipment traveled across the area.

2.3.2 Excavation Activities

Soil Excavation and Disposal

The excavation work at the One Bacon Street property, as shown on Figure 2, was conducted between October 28 and November 11, 2013. Originally, the excavation work was divided into two areas based upon the hot spot evaluation described in the Phase II report. However, based on field observations during the excavation, additional impacted soil was removed which connected the north and south excavation areas into one. The excavation work to connect the two areas was slowed by a propane line that was uncovered at a depth of three feet. The line delivered propane to the home for cooking from an above-ground tank located behind the shed.

The work process to remove soil and place it in a roll-off container for off-site transport was slow and tedious because of limited access between the work and the roll-off container and to comply with the Order of Conditions. Each day of excavation, an empty roll-off container was delivered to the property and placed in the driveway near Bacon Street. A mini excavator was used to remove soil, which was placed in the bucket of a skid steer. The skid steer (which could hold less than one cubic yard at a time) then was driven around the north side of the house across where the deck had been removed, and then the soil was placed into the roll-off. To comply with the Order, the excavation was backfilled at the end of each work day. Hence, this clean fill had to be removed each morning and stockpiled before additional impacted soil could be removed.

Using this work process, a total of 213.55 tons of metals-impacted soil was excavated and transported under a MassDEP Bill of Lading (BOL) to Environmental Soil Management, Inc., of Loudon, NH, for disposal. Copies of the completed Bills of Lading are in Appendix C.

Soil Sampling

Soil samples were collected from the sidewalls and the bottom of the excavation as the removal action progressed as shown on Figure 3. Eight samples were labeled with an "N" (to designate that they had been collected from the north excavation, e.g. N-01 West Wall). Similarly, ten samples with the prefix "S" were collected in the southern excavation. Samples were also collected from three test pits completed near the excavation area to insure that no other source areas were present. All samples were composite samples of soil from multiple locations within the general area. For example, sample N-01 West Wall was the first sample collected from the north excavation, and it characterizes conditions along that wall of the excavation. Note that samples N-01, S-05 and S-06 are sidewall samples along the MBTA property; therefore, these samples characterize residual concentrations on the MBTA property and not the One Bacon Street property.

The soil sampling results are summarized in Table 1 and the complete laboratory reports are included in Appendix B. These sample results are combined with results of soil samples collected previously beyond the limits of the excavation to calculate exposure point concentrations (EPC's), as discussed in Section 3.1.7.

Air Monitoring
Prior to the start of excavation and soil movement/loading each day, a dust monitor was setup at a location downwind of the day's activities. The monitor was observed once per hour and the dust concentrations were recorded. Elevated dust concentrations were not observed at a level that would have triggered dust suppression activities such as misting.

2.3.3 Post-Excavation and Site Restoration

Site restoration activities commenced directly following the excavation, lasting from November 12 to December 11, 2013. Activities conducted include:

- Backfilling of all excavated areas with clean fill
- Grading of all disturbed areas to restore drainage flow to pre-excavation conditions
- Spreading loam over areas excavated and back-filled
- Placing erosion control mats over the areas where vegetation had been disturbed
- Replanting shrubs and trees
- Reconstructing the rock wall along the flower garden
- General cleanup
- Reconstruction of the wood deck at the rear of the house
- Fixing or replacing portions of the brick patio and walkways that were removed or damaged during the work
- Returning yard furniture and decorations to their original locations

Future activities will include planting of grass in disturbed areas and the reconstruction of a brick stairway that leads to the pond on the east side of the house. These activities will be completed in the spring of 2014.

2.4 Summary

The excavation of metals-impacted soil was performed in general accordance with the Phase IV RIP. The excavations were extended slightly to remove paint wastes between the north and south excavations. The goal of the project - to remove accessible soils at this residential home impacted by hexavalent chromium, lead and nickel – was met. The EPCs for this property were revised using the post-excavation data, as described in Section 3 of this report.

2.5 Final Inspection Activities

The MCP states that a final inspection of the Comprehensive Remedial Action shall be conducted by the LSP providing the opinion under 310 CMR 40.0878 regarding the construction and implementation of the CRA. Mr. Douglas Heely, the LSP of Record, personally oversaw the excavation on several occasions, and completed a final inspection of the CRA on November 22, 2013. Mr. Heely reviewed field notes from the excavation and the results of all post-excavation sampling, and confirmed that all work

was performed in accordance with the Phase IV RIP. Since the remedial action was completed in general conformance with the RIP, an As-Built report is not required.

2.6 Phase IV Completion Statement

In accordance with 310 CMR 40.0879, a Phase IV Completion Statement is being submitted along with the Final Inspection Report. The Phase IV Completion Statement contains the LSP Opinion and certification required by 310 CMR 40.0009.

The LSP for the Site, Mr. Douglas Heely, opines that the construction and implementation of the comprehensive remedial action has been completed in accordance with all applicable requirements of the MCP, specifically 310 CMR 40.0870, and the Phase IV performance standards described in 310 CMR 40.0872.

3.0 RESPONSE ACTION OUTCOME

With the completion of the TCRA in Areas 1, 2 and 3, and the completion of the Phase IV soil removal program in Area 1, the Site is eligible for an RAO. Because each of the three areas has different characteristics and exposure potentials, each area is subject to its own RAO (partial) as outlined below

3.1 Area 1 (Private Residence at One Bacon Street) Overview

USEPA and their contractor completed a soil removal program on the subject property as a Time Critical Removal Action in 2001 with some restoration activities extending in to calendar year 2002. The goals of the program were:

> "to achieve the MCP S-1 soil standard of 200 milligrams/kilogram (mg/kg) for hexavalent chromium and 1,000 mg/kg for total chromium within three to four feet of the restored ground surface" (TCRA Design Report, IT Corp., May 17, 2001).

The USEPA After Action Report (Weston Solutions, 2002) documents the following:

> "Upland excavation activities began in the area of the residence at One Bacon Street. ERRS excavated contaminated material from the southern portion of the residence first. Excavation activities on sloped areas were conducted in sections, with each section being backfilled and compacted before excavation began in another section. START personnel conducted personal, area, and perimeter air sampling for chromium using low-flow pumps, and particulate sampling using a mini RAM throughout upland excavation activities. Upon completion of excavation along the embankment, the level areas were excavated, sampled, and backfilled. Post-excavation soil samples from the floor, walls, and the perimeter of the excavated areas were collected and sent to NERL for XRF analysis."

Presumably the TCRA excavation removed all soil and paint waste located within three feet of ground surface on the subject property such that the residual concentrations of

chromium, lead and nickel were below the Method 1 S-1 soil standards[1]. As part of the Phase I investigation completed by ES&M in April 2010, three soil borings (ESM-08, ESM-09, and ESMB-14) were completed on the subject property to verify these results. The borings were completed to a depth of 28 to 30 feet bgs and continuous soil cores were collected and submitted for laboratory analyses. Following the collection of soil samples, borings ESM-08 and ESM-09 were completed as monitoring wells. In 2011, ES&M completed eight additional soil borings (ESMB-41 through ESMB-48). Six of the eight soil borings were advanced to a depth of seven feet bgs, while soil borings ESMB-41 and ESMB-44 were advanced to depths of 22 and 26 feet, respectively. Cores were collected from each boring continuously using clear acetate sleeve liners.

Soil samples were collected from the 0-1, 1-3, 3-5, and 5-7 foot depth intervals of each boring for laboratory analysis. Additional samples were collected from the terminus of ESMB-41 and ESMB-44. Borings ESMB-41 and ESMB-44 were completed as groundwater monitoring wells, named ESM-15 and ESM-16, respectively. Soil samples were analyzed for nickel, lead, and total chromium. Samples with a total chromium concentration that exceeded the Method 1 standard for hexavalent chromium (30 mg/kg at that time) were also analyzed for hexavalent chromium.

Laboratory analysis of the soil and groundwater samples collected from the above described borings were used to understand the nature and extent of paint wastes and associated metals in soil and groundwater. These results were presented in the Phase II report prepared by ES&M and dated June 7, 2011. As described above, these sampling results were used to define the excavation area that was outlined in the Phase IV.

3.1.1 Physical Characteristics

The One Bacon Street property is bounded to the north by Morse's Pond, a manmade lake of approximately 108 acres with an average depth of seven feet and a maximum depth of 23 feet. A residential property is located to the west, and to the east is property owned by the Town of Wellesley and the MBTA.

The elevation of the land decreases rapidly toward the north between the residential structure on the property and the pond. This area is mostly wooded. The land elevation increases sharply toward the south and east, up an embankment to the railroad tracks. The level area immediately east of the house is the only area that contains grass. A retaining wall and chain link fence separate the property from the steep incline to the east and south.

3.1.2 Extent of Release

Visual observations of soil samples collected during completion of borings and the soil excavation program have been used to define the nature and extent of paint waste and associated metals in soil. Laboratory analysis of groundwater samples collected from

[1] At the time the TCRA was completed the S-1 standard for hexavalent chromium was 200 mg/kg. In 2008 it was changed to 30 mg/kg and has since changed (April 2014) to 100 mg/kg.

the four groundwater monitoring wells have been used to evaluate the distribution and migration of metals dissolved in groundwater.

3.1.2.1 Soil

There are no records that document how paint wastes came to be located on the One Bacon Street property. The common belief is that the area was filled in the late 1800's or early 1900's to widen the rail bed and that some of the fill material contained paint wastes from the former Henry Wood's Sons Paint Factory. Because paint waste and metals have been found on the One Bacon Street property, it is possible that fill was placed on this property during the time when the fill was placed to widen the railroad bed.

3.1.2.2 Groundwater

Chromium (primarily in the more soluble hexavalent oxidation state) has leached from soils into groundwater. The dissolved chromium plume is primarily associated with Area 3 but also extends onto the eastern portion of the One Bacon Street property. Elevated concentrations of chromium have been detected in groundwater samples collected from well ESM-16 located at the eastern property boundary near the west wing wall. Lower concentrations of dissolved metals have been detected in groundwater samples collected from well ESM-08 located on the southeastern portion of the property, adjacent to Bacon Street. Dissolved metals have not been detected in samples collected from wells ESM-09 and ESM-15, thereby defining the western limit of the plume.

3.1.3 Potential Human Receptors

The primary potential human receptors in this portion of the Site are the residents of the One Bacon Street property as well as visitors and occasional workers such as landscapers, painters, carpenters, etc.

3.1.4 Potential Environmental Receptors

The primary potential environmental receptor is Morse's Pond, which is located immediately north of the property. The primary migration pathway would be erosion of soil containing metals and paint waste, or discharge of groundwater into the pond.

3.1.5 Characterization of Hexavalent Chromium, Nickel and Lead

Concentrations of chromium, lead, and nickel greater than Method 1 S-1/GW-1 standards were reported in soil samples collected primarily east of the One Bacon Street residence. The data suggested that paint wastes and associated metals extended to a depth of approximately five to seven feet below ground surface in two limited areas of the property.

As described in Section 2.3.2 of this report, a soil excavation program was completed during the last quarter of 2013. Approximately 213 tons of soil were removed from areas north and east of the residence for off-site disposal. Clean fill was used to restore the excavations to original grade. During the excavation, soil samples from the bottom

and sidewalls of the excavation(s) were visually inspected for the presence of paint waste. When the excavation supervisor determined that paint wastes had been removed, soil samples were collected for laboratory analysis. If the sample results indicated that the excavation goals had not been met, the excavation continued and new sidewall/bottom samples were collected.

Exposure point concentrations for trivalent chromium, hexavalent chromium, lead, and nickel were calculated for soil located within 3 feet of ground surface and soil located between 3 and 15 feet of ground surface. Each exposure point concentration was developed using the results of the side wall and bottom samples and the results of soil samples collected from borings beyond the limits of the excavation(s).

3.1.6 Site Activities and Uses

The property is currently used as a private residence and presumably will be for the foreseeable future. Because the use of the property is not restricted, all soil within 15 feet of ground surface is considered accessible or potentially accessible. The intensity of use may be high and children may be present. The exposure point concentrations developed for soils will be compared to the Method 1 Standards for S-1 soils. Specifically, the S-1/GW-1 and S-1/GW-3 standards will be used to determine if a condition of no significant risk can be documented for soil.

The GW-1, GW-2, and GW-3 classifications apply to groundwater in Area 1, but since none of the contaminants of concern volatilize from water, GW-2 standards are not applicable. All groundwater EPCs will be compared to the GW-1 and GW-3 standards.

3.1.7 Exposure Points, Exposure Pathways and EPCs

Exposure point concentrations have been developed for soil (two intervals 0-3 feet and 3-15 feet) and for groundwater (separate exposure points for groundwater at ESM-8, ESM-9, ESM-15, and ESM-16). The rationale for the calculations of each exposure point and the calculated values are described below.

3.1.7.1 Soil EPCs

To calculate EPCs for the two soil intervals - 0 to 3 feet and 3 to 15 feet below ground surface - all available soil analytical data has been used in the following manner:

- All results of soil samples collected from the 0 to 3 foot depth interval were tabulated and a figure was prepared (Figure 3) showing the limits of the excavations and the locations of the bottom and sidewall samples.
- Any result that was for soil that was removed during the excavation was eliminated from the table.
- If a sidewall or bottom sample result was elevated and additional soil was removed from that area, the initial value was eliminated and replaced by the new value.

The calculated EPCs are conservative in that they do not include any consideration for the clean fill that was used to backfill the excavation. This clean fill accounts for approximately 3,000 square feet of accessible surface and near surface soil. Figures 2 and 3 show the locations of all samples used to develop the EPCs.

EPC-1 and EPC-2 were calculated using numerous sample results collected at various locations from a relatively small area. The composite and discreet soil collection intervals varied widely because the distribution of paint wastes in the soil was sporadic. It appears that small amounts of paint waste were mixed with the fill that was placed more than a century ago. The distribution of paint wastes was not contiguous, so collection of samples from various locations and intervals was used as a means to better evaluate a particular location or sidewall.

EPC-1 (0 to 3 foot depth interval)
The results of 29 soil samples collected from this interval were used in the calculation of EPC-1. Twenty four of the samples were collected from soil borings advanced during the Phase I and Phase II assessments. These borings were beyond the limits of the Phase IV soil excavation program. The remainder of the soil samples were collected from the soil excavation as described in Section 2.3.2.

The approach for laboratory analysis of soil samples collected during the Phase I and II investigations was to analyze the samples for total chromium and if the results were less than 30 mg/kg (the S-1 standard for hexavalent chromium at the time of the investigation) the sample would not be analyzed further. In cases where total chromium was detected above 30 mg/kg, analysis for hexavalent chromium was performed. Trivalent chromium concentrations were then calculated by subtracting the hexavalent chromium result from the total chromium result.

When an analyte was not detected in a sample, a value ½ of the reporting limit was used in the EPC calculation. The calculated EPC is the arithmetic average of the 29 sample results. The EPCs along with a variability analysis are shown on Table 2.

EPC-2 (3 to 15 foot depth interval)
The results of 49 soil samples collected from this interval were used in the calculation of EPC-2. Thirty one of the samples were collected from soil borings advanced during the Phase I and Phase II assessments. These borings were beyond the limits of the Phase IV soil excavation program. The remainder of the soil samples were collected from the soil excavation as described in Section 2.3.2.

There were 38 samples in the laboratory data set that included speciation of hexavalent chromium. These sample results were used to calculate EPCs for hexavalent chromium and trivalent chromium. When hexavalent chromium was not detected in the sample, a value ½ of the reporting limit was used in the EPC calculation. The calculated EPC is the arithmetic average of all 38 sample results.

All 49 of the soil samples were analyzed for lead and nickel. All results were used to calculate the EPC for lead and nickel.

The EPCs for all compounds along with a variability analysis are shown on Table 3.

3.1.7.2 Groundwater EPCs

There are four groundwater monitoring wells located on the One Bacon Street property, and EPCs have been developed for each well since each is considered its own exposure point. Groundwater samples have been collected from two of the wells - ESM-08 and ESM-09 - on three occasions. The EPCs for these wells is presented as an arithmetic average of the three laboratory results. If the contaminant of concern was not detected, a value of ½ the method reporting limit was used in the EPC calculation. Groundwater samples have been collected from the two other wells only once, so these results were used as the EPCs.

The Exposure Point Concentrations for groundwater in Area 1 are shown on Table 3.

3.1.8 Method 1 Approach

An MCP Method 1 approach was used to compare the soil and groundwater EPCs to the applicable Method 1 S-1/GW-1 and S-1/GW-3 2014 standards for soil and GW-1 and GW-3 standards for groundwater.

3.1.8.1 Comparison of Soil EPCs to Method 1 Standards

Tables 2 and 3 document the calculations for EPC-1 and EPC-2, and show the comparison of the EPCs to the Method 1, S-1/GW-1 and S-1/GW-3 standards. The tables also presents a variability analysis in accordance with 301 CMR 40.09263(b).

The summary of EPC-1 shows that the soils found within three feet of ground surface meet the 2014 Method 1 Standards for total, hexavalent, and trivalent chromium, lead, and nickel.

Evaluation of EPC-2 shows that the 2014 Method 1 Standards for chromium, lead and nickel are met in soils found between three and 15 feet of ground surface.

3.1.8.1 Comparison of Groundwater EPCs to Method 1 Standards

Table 4 shows the calculation of EPCs for groundwater at four individual exposure points (groundwater monitoring wells ESM-08, ESM-09, ESM-15 and ESM-16). The exposure point concentrations for dissolved total chromium, hexavalent chromium, trivalent chromium, lead, and nickel are compared to both the Method 1 GW-1 and GW-3 Standards.

The groundwater EPCs show that a condition of no significant risk cannot be documented for groundwater at exposure points ESM-08 and ESM-16. This conclusion is reached because groundwater across the Site is categorized as GW-1.

3.1.9 Substantial Hazard Evaluation

A substantial hazard evaluation has been conducted pursuant to 310 CMR 40.0956. The outcome of the evaluation is described below:

Human Receptors

- There is no substantial hazard with respect to human exposure to soil because the risk characterization has documented that the concentrations of all contaminants of concern in soil (at two exposure points) are below the Method 1 S-1/GW-1 and S-1/GW-3 standards.
- Groundwater at this property is not used for any purpose; therefore, there is currently no human exposure. Future human exposure is unlikely because there is municipal water supplied to the residence.

Ecological Receptors

- There is no evidence of stressed biota
- There is no tar or non-aqueous phase hazardous material in soil within three feet of ground surface or in sediment
- Contaminated groundwater is not discharging to surface water
- There is no threat of migration of the contaminants of concern to other media or resource areas
- There is no ecological risk of harm. Any ecological threat related to the One Bacon Street property was mitigated by the recently completed soil excavation program.

3.1.10 Risk of Harm to Safety 40.0960

A characterization of the risk of harm to safety has been conducted as described below:

- There are no rusted or corroded drums or containers, open pits, lagoons or other dangerous structures;
- There is no threat of fire or explosion, including the presence of explosive vapors resulting from a release of oil and/or hazardous material; and
- There is no uncontained materials which exhibit the characteristics of corrosively, reactivity or flammability described at 310 CMR 40.0347.

A condition of no significant risk with respect to safety exists at the One Beacon Street property.

3.1.11 Conclusion of Risk Characterization

The conclusion of the risk characterization completed for Area 1, the One Bacon Street property, is that a condition of no significant risk has been documented for the contaminants of concern in soil. A condition of no significant risk cannot be documented for groundwater because concentrations of chromium (primarily hexavalent chromium) are greater than the applicable Method 1 Standards at two exposure points. Since there are no substantial hazards associated with the One Bacon

Street Property, a temporary solution has been achieved. A Class C-1 Partial RAO has been documented for Area 1.

3.2 Area 2 – Southern Cove Morse's Pond

USEPA and their contractor completed an extensive sediment removal program in the southern cove of Morse's Pond and in the culvert that connects Morse's Pond to Paintshop Pond as a Time Critical Removal Action in 2001. The goal of this program was to achieve the Effects Range Median (ERM) concentration of 270 mg/kg for trivalent chromium. According to work plans filed on behalf of USEPA, this ERM concentration provided an acceptable industry standard for sediment impacts and is based upon a national freshwater sediment/toxicity database.

The After Action Report (Weston Solutions 2002) documents that:

Sediment Removal from Culvert

"A bypass pumping system was initialized once the cofferdam was in place. On 6 June 2001, representatives from ERRS contractors Baker Tank (Baker) and North American Industrial Services (NAIS) mobilized to the site to begin installation of the bypass pumping system, which would pump surface water discharge from Morses Pond to Paintshop Pond using four 12-inch pumps and two 24-inch pipes positioned through the culvert. On 13 June 2001, NAIS and Baker completed bypass pump installation, and NAIS began operating the system 24 hours a day. NAIS installed sound shielding sheds around the pumps to minimize pump noise levels. Stop logs were placed in the cofferdam to inhibit surface water flow through the cove and culvert. Two 4-inch pumps connected to the 24-inch lines were used to pump water from the cove and culvert in preparation for culvert sediment removal activities. ERRS built an access road leading to the entrance of the culvert and cleared large debris, including rip-rap and railroad ties, from the culvert entrance. On 27 June 2001, ERRS subcontractor Clean Harbors, Inc. (CH) mobilized to the site to begin removing sediment from the culvert utilizing a vactor truck. Confined space entry procedures as detailed in the site HASP were reviewed prior to, and utilized throughout the duration of, culvert cleaning activities. START TL Butterworth conducted personal and area total chromium and particulate air monitoring using low-flow sampling pumps and a mini-Real Time Aerosol Monitor (miniRAM), respectively. Prefabricated steel shoring was installed according to design specifications by CH with ERRS assistance as the culvert was being cleaned. Sediment removed from the culvert was dumped into a drying bed built into the cove area. The sediment was mixed with corn cob absorbent to assist with solidification for transportation purposes."

Cove Sediment Removal

"Work in the cove area began concurrently with culvert sediment removal activities. ERRS began by excavating the drier sediments along the shoreline. START collected soil samples from the perimeter, from walls greater than 2 feet deep, and from the floor of the excavation area, to be analyzed at EPA New England Regional Laboratory (NERL) for total chromium using XRF throughout the

duration of excavation activities [see Appendix E - Post-Excavation Sample Location Map (Figure 4)2, and Appendix F - Post-Excavation Total Chromium Sample Results]. On 19 July 2001, START subcontractor Earth Exploration, Inc. mobilized to the site to install 24 wells as a part of the cove wellpoint dewatering system. Baker personnel were on site to connect the wells installed along the perimeter of the cove to a header pipe and pumping system. START personnel sampled the dewatering wells prior to activation of the cove dewatering system. The samples were delivered to Accutest Laboratories, located in Marlborough, MA, for metals, hexavalent chromium, and total suspended solids analyses. The dewatering system enabled the removal of the remaining contaminated cove sediments. ERRS prepared the site for the re-mobilization of the crane to be used for the installation of additional sheet piling, which would extend out from either side of the head wall of the culvert along the railroad embankment. On 6 August 2001, Carter began installing the upland sheet piling to provide added stability to the embankment during upland excavation activities. ERRS began to backfill and grade the cove area to original levels with processed gravel."

3.2.1 Physical Characteristics

Area 2 is a shallow cove at the south end of Morse's Pond with an approximate size of 0.2 acres. The section of the cove that was the subject of this report is approximately 100 feet wide (east to west at its widest point) as shown on Figure 1. The cove extends to the south approximately 60 feet before it narrows and enters the culvert. The culvert is approximately 180 feet long and empties into Paint Shop Pond.

Under the Time Critical Removal Action, 1,953 tons of sediment containing elevated concentrations of chromium, lead, and nickel were removed and disposed. Gravel was used as backfill to restore the cove bottom to its pre-excavation elevation. In places, the gravel is up to four feet thick. This gravel backfill forms a substantial barrier between the residual sediment/soil and human/ecological receptors. ES&M tried to collect sediment samples to confirm that metals concentrations in the remaining sediment met the remedial goals. However, it was not possible to advance a sediment sampler through the gravel and into the sediment below. Field observations confirmed that the gravel layer was contiguous throughout the cove.

3.2.2 Extent of Release

USEPA characterized sediment samples and delineated the extent of elevated metals concentrations in the cove sediments. The area that was delineated is shown on Figure 1 and is as described above. Up to four feet of sediment was removed from the cove and the post excavation bottom and perimeters samples show that the extent of the release was limited to the excavation area.

[2] Refers to Figure 4 in After Action Report.

3.2.3 Potential Human Receptors

The primary human receptors at the Site are swimmers and beachgoers that use the Wellesley Public Beach north and east of Area 2.

3.2.4 Potential Environmental Receptors

The cove is part of Morse's Pond, a 100-acre pond with an average depth of 8 and a maximum depth of 23 feet. Fish, freshwater mussels and other aquatic organisms as well as aquatic birds are the primary environmental receptors.

3.2.5 Characterization of Chromium, Lead and Nickel

MassDEP and their contractors and USEPA and their contractors characterized the pond sediment prior to initiation of the TCRA. The results of the sediment characterizations were summarized in a letter report prepared by IT Corporation and addressed to MassDEP. The letter report was dated May 4, 2000.

Tabulated results of more than 60 sediment samples were presented and the results of two background sediment samples were compared to the effects range medium concentrations. Based on these results, IT concluded that the background concentrations in Morse's Pond Sediments are:

- Chromium 26.6 mg/kg
- Lead 135 mg/kg
- Nickel 14 mg/kg

IT reported that the effects range median concentration (ERM) for these metals are:

- Chromium 270 mg/kg
- Lead 99 mg/kg
- Nickel 45 mg/kg

IT evaluated lead concentrations in Morse's Pond sediment and concluded that there was another source of lead not related to the subject site. Therefore, lead results were not used to define the extent of impact to cove sediments. IT reported the results of seven sediment samples collected immediately north of the cove were the concentrations of chromium and nickel were well below the ERM concentrations. This data was presumably used to delineate the limits of the TCRA sediment removal program. Within the limits of the proposed sediment excavation area, the concentrations of chromium, lead, and nickel were significantly higher with highest reported concentrations (results of the SD-98 series sediment samples) of 7,000 mg/kg (Cr), 990 mg/kg (Pb), and 300 mg/kg (Ni).

During the sediment characterization program, two sediment samples were analyzed for chromium speciation. Hexavalent chromium was not detected (with a reporting limit of 16 mg/kg) in samples MP-SS-TB5-SS1-020 and MP-SS-TB6-SS2-024 where the reported

total chromium concentrations were 100 and 76 mg/kg, respectively. No additional hexavalent chromium results were reported, so presumably USEPA and MassDEP were confident that chromium in sediments was primarily in the trivalent oxidation state. This is a reasonable assumption given that low oxygen conditions were likely prevalent in this sediment environment.

3.2.6 Site Activities and Uses

The cove is located at the southern extent of Morse's Pond, which is used during the warmer New England months for recreational activities including kayaking, canoeing, swimming, and fishing.

3.2.7 Exposure Points, Exposure Pathways and EPCs

An EPC for sediment was developed using information available in the After Action Report. On March 16, 2010, ES&M attempted to collect additional sediment samples from the cove to independently evaluate the residual concentrations of chromium, lead and nickel in the sediments. A small boat was used to transport personnel into the cove and a sediment sample collection device at the end of threaded rods was advanced to the cove bottom. The field crew tried to advance the sample device but the gravel backfill prevented any penetration by the sample device. Four attempts were made to advance the device at five locations as shown on Figure 1; however, sediment could not be collected at any location. The only material collected was some small rocks, decaying leaves and twigs from location SD-10. Since no samples were submitted for laboratory analysis, the only data that can be used to characterize the metals concentrations in sediment (below the substantial gravel barrier) are the results reported by Weston on behalf of USEPA in the After Action Report.

3.2.7.1 Sediment EPC

Weston under contract to USEPA reported in the After Action Report that 51 sediment samples had been analyzed by XRF to evaluate if the ERM concentrations in the sediment had been achieved. Seventeen sediment samples were collected for laboratory analysis and the chromium concentrations detected in those samples were reported. The substantial gravel layer placed over the sediment precludes any additional sediment sample collection from Area 2. An EPC, calculated using the results of the laboratory analyses, is presented below:

- Number of samples 17
- Highest reported chromium concentration 114 mg/kg
- Lowest reported concentration 8.5 mg/kg
- EPC 50 mg/kg

This EPC is well below the ERM that USEPA and MassDEP determined was appropriate for this site.

3.2.8 Method 3 Approach

A Method 3 approach has been used to document that a condition of no significant risk exists with respect to Area 2 cove sediments. The chromium EPC has been compared to effects range medium, effects range low, and sediment screening criteria. Comparing the chromium concentration in sediment to these risk-derived values is useful to demonstrate that the TCRA sediment removal program was effective, leaving relatively low concentrations of chromium in residual sediments. The concentration reductions were adequate to achieve a condition of no significant risk to ecological and human receptors; however, the exposure pathway for both human and ecological receptors was also eliminated by placement of up to four feet of gravel over the residual sediment to restore the cove to pre-excavation elevations. The gravel prevents aquatic and human receptors from contacting the sediment below. The integrity of the gravel layer was confirmed in 2011 when ES&M attempted to collect sediment samples.

3.2.8.1 Comparison of Sediment EPCs to Risk-Based Evaluation Criteria

Comparison of Chromium EPC in Sediment To Risk-Based Sediment Quality Guidelines (all concentrations in mg/kg)			
Exposure Point Concentration	Effects Range Low Concentration	Effects Range Medium Concentration	Sediment Screening Value
50	81	270	110

The effects range low (ERL) value was obtained from a NOAA paper titled "Sediment Quality Guidelines" developed for the National Status and Trends Program, and is dated June 12, 1999. The effects range medium concentration was obtained from the TCRA project documentation including the IT design report and the After Action Report. The sediment screening value was taken from Table 1 of the "Stage I Freshwater Sediment Screening Criteria for Metals" (revised July 2005) as published in a MassDEP technical update.

The calculated exposure point concentration for chromium is lower than the ERL, ERM, and sediment screening value. This indicates that adverse toxic effects are not expected due to the residual chromium in sediments, and that a Stage II Ecological Risk Characterization is not required.

3.2.8.2 Comparison of Sediment EPCs to Method 1 Soil Standard

It is understood that the sediment located under the gravel cover is not considered soil, and that the pathway for even very short term human exposure has been eliminated. However, to illustrate that a condition of no significant risk exists even if there was prolonged human exposure to the sediment containing some residual chromium, the sediment EPC has been compared to the Method 1 S-1/GW-1 and S-1/GW-3 standards for soil. This evaluation assumes (as EPA and their contractors and MassDEP and their contractors did) that chromium in sediments is in the trivalent oxidation state.

Comparison of Chromium Concentration in Sediment To Method 1 Soil Standards (all concentrations in mg/kg)		
Exposure Point Concentration	Method 1 Soil Standard S-1/GW-1	Method 1 Soil Standard S-1/GW-3
50	1,000	1,000

This exercise illustrates that even if there was an exposure pathway enabling human contact with chromium in sediment, no significant risk would result from the exposure.

3.2.9 Substantial Hazard Evaluation

A substantial hazard evaluation has been conducted pursuant to 310 CMR 40.0956. The outcome of the evaluation is described below:

Human Receptors

- There is no substantial hazard with respect to human exposure to sediment because the pathway that could allow human contact has been eliminated by the gravel backfill.

Ecological Receptors

- There is no evidence of stressed biota
- There is no tar or non-aqueous phase hazardous material in soil within three feet of ground surface or in sediment
- Contaminated groundwater is not discharging to surface water
- There is no threat of migration of the contaminants of concern to other media or resource areas
- There is no ecological risk of harm. An ecological threat related to the chromium in sediments was mitigated by the TCRA sediment excavation program and the restoration of the cove bottom with gravel.

3.2.10 Risk of Harm to Safety 40.0960

A characterization of the risk of harm to safety has been conducted as described below:

- There are no rusted or corroded drums or containers, open pits, lagoons or other dangerous structures;
- There is no threat of fire or explosion, including the presence of explosive vapors resulting from a release of oil and/or hazardous material; and
- There is no uncontained materials which exhibit the characteristics of corrosively, reactivity or flammability described at 310 CMR 40.0347.

A condition of no significant risk with respect to safety exists at Area 2.

3.2.11 Conclusion of Risk Characterization

The conclusions of the risk characterization, which was included in the Phase II Comprehensive Site Assessment Report for Area 2, were:

> "In Area 2, the TCRA successfully removed metals-impacted sediments and replaced those sediments with gravel. There is no continuing migration of metals into the pond, and the placement of gravel on the pond bottom has eliminated future exposure potential. Therefore a condition of no significant risk to humans and the environment has been achieved in Area 2. Documentation in support of a Class A-2 Response Action Outcome will be prepared in the near future for this portion of the Site."

An audit of the Phase II/III report was completed by MassDEP and a notice of Audit Findings Letter dated June 7, 2011, was issued. While MassDEP required additional evaluation of remedial technologies for Area 3, they offer the following statement with respect to the findings of the Phase II/III:

> "MassDEP has concluded, based on the information available at this time, that the 2011 Phase II Comprehensive Site Assessment for the Morse's Pond Culvert disposal site meets the performance standards of the Massachusetts Contingency Plan or MCP (310 CMR 40.0000). The Phase III Remedial Action Plan (RAP) for site Areas 1 and 2 also meets applicable MCP requirements."

The outcome of the risk characterization is that a condition of no significant risk of harm has been achieved for Area 2 of the Morse's Pond site. Not only has the potential exposure pathway been eliminated via the substantial gravel backfill, but the TCRA sediment removal program reduced the chromium concentrations such that risk-based sediment guidelines and screening values were met. This portion of the Site is eligible for a Class A-2 RAO Partial.

3.3 Area 3 – Culvert Wing Walls and Upland Area

USEPA and their contractor completed an in-situ chemical reduction and soil removal program in Area 3. The goals of these programs were as follows:

> "The goal for soil removal is to achieve the MCP S-1 standards of 200 milligrams/kilogram (mg/kg) for hexavalent chromium, and 1,000 mg/kg for total chromium within three to four ft. of the restored ground surface. The project will not remove soil at deeper depths. Chemical fixation of contaminants is proposed to reduce contaminant mobility and risk."

The After Action Report (Weston Solutions 2002) summarizes the work that was completed:

> "Upland excavation activities began in the area of the residence at One Bacon Street. ERRS excavated contaminated material from the southern portion of the residence

first. Excavation activities on sloped areas were conducted in sections, with each section being backfilled and compacted before excavation began in another section. START personnel conducted personal, area, and perimeter air sampling for chromium using low-flow pumps, and particulate sampling using a miniRAM throughout upland excavation activities. Upon completion of excavation along the embankment, the level areas were excavated, sampled, and backfilled. Post-excavation soil samples from the floor, walls, and the perimeter of the excavated areas were collected and sent to NERL for XRF analysis.

ERRS subcontractor GZA GeoEnvironmental, Inc. (GZA) mobilized to the site to install injection wells and to collect pre-treatment boring samples along the eastern and western embankments. On 10 and 11 September 2001, eight soil borings were collected from the eastern and western embankments at depths ranging from 8 to 20 feet to be analyzed at NERL for total chromium and lead, and field screened for hexavalent chromium using HACH test kits. The soil borings were recorded using GPS equipment, allowing the locations to be re-located and resampled after the in-situ treatment to evaluate the effectiveness of the treatment

On 12 September 2001, GZA began the installation of injection well points along the embankments for the in-situ treatment. Well points were installed 10 feet apart allowing for a 5-foot radial distribution of reagent from each well. In-situ treatment of the hexavalent chromium-impacted soil along the embankments was conducted starting with the western embankment. Approximately 56,800 gallons of the calcium polysulfide reagent was pumped into the wells to depths ranging from 5 to 19 feet. Upon completion of the in-situ treatment along the western embankment, GZA collected post-treatment soil borings from the locations of the previous pre-treatment soil boring samples; the post-treatment soil borings were to be analyzed at NERL for total chromium and lead, and field screened for hexavalent chromium using HACH test kits.

On 10 October 2001, excavation activities along the western embankment were initiated. The soils on the embankment were excavated to a depth of 4 feet as dictated in the design specifications. Post-excavation samples of the floor, walls, and the perimeter of the excavation area were collected and sent to NERL for XRF analysis. Field screening for hexavalent chromium was conducted on post-excavation samples from the residence to ensure action levels were achieved. Contaminated soil excavated from the embankment was stockpiled at the base of the eastern embankment extending north.

A cap was constructed over the excavation area on the western embankment and consisted of a warning layer placed directly on top of the excavation, low permeability fill material compacted in lifts, a 6-inch loam layer, and an erosion control mat covered with an additional layer of loam. Compaction testing was conducted on the low permeability fill layer to ensure proper compaction. Upland sheet piling was torch-cut at ground level with the subsurface portions left in the ground for stability purposes. Once the western embankment was completed, the

stop logs were removed and the cove was flooded to normal conditions. Beginning on 2 November 2001, the bypass pumping system was taken off-line and dismantled.

On 17 October 2001, in-situ treatment along the eastern embankment was completed. Post-treatment soil borings were collected by GZA from the locations of the previous pre-treatment soil borings; the post-treatment soil borings were to be analyzed at NERL for total chromium and lead, and field screened for hexavalent chromium using HACH test kits. ERRS secured the site for temporary demobilization while awaiting procurement of transportation and disposal services.

Beginning on 12 December 2001, ERRS remobilized to the site and began excavation work along the eastern embankment. The soils on the embankment were excavated to a depth of 4 feet as dictated in the design specifications. Post-excavation samples of the floor, walls, and the perimeter of the excavation area were collected and sent to NERL for XRF analysis. Contaminated soil was stockpiled for load-out. A cap identical to the one constructed on the western embankment was installed by ERRS along the eastern embankment."

The TCRA soil excavation program was effective at reducing the potential for human and ecological contact with the soils containing paint waste and related metals. The soil cap placed over the excavated portion around the culvert wing walls mitigated the erosion of soils containing paint wastes into the cove (Area 2). To evaluate and define the nature and extent of paint waste and metals in soil and dissolved in groundwater, numerous soil and groundwater samples were collected for field and laboratory analyses during the Phase I Initial Site Characterization and the Phase II Comprehensive Site Assessments.

Phase I Initial Characterization of Area 3

Environmental Strategies & Management completed environmental investigations which included visual inspection, and collection and laboratory analysis of soil and groundwater samples in 2007, 2009, and 2010.

To evaluate the migration of metals-impacted groundwater from the culvert area, eleven transect soil borings were completed on the north and south sides of Central Street. These boring were advanced to a maximum depth of 70 feet with soil cores collected across the entire depth interval. Soil samples were inspected for paint wastes and classified by the drilling supervisor. Each five-foot long sample core was composited and a representative sample was collected for laboratory analysis. After each transect boring was completed a second boring was advanced adjacent to the first using a retractable screen device to allow collection of groundwater samples. Once the sample device encountered groundwater, the screen was retracted and groundwater was pumped through a flow cell at the well head. Indicator parameters were monitored and a groundwater sample was collected for laboratory analysis when the stabilization criteria were met.

Using information from the transect program, permanent groundwater monitoring wells were installed and screened in specific aquifer zones of interest. This work included installation of two couplet wells and three individual wells, to supplement several wells that were previously installed by others.

Soil borings, monitoring wells and hand borings were also completed around the culvert wing walls to better understand concentrations of metals in soil and groundwater remaining after the TCRA. Many of these borings revealed evidence of paint wastes below the soil cap (about three to five feet below current ground surface).

Phase II Comprehensive Site Assessment
Six additional hand borings were completed to better define the limits of paint wastes in the east and west wing wall soils. Soil and groundwater samples were collected for laboratory analysis, and aquifer slug tests were performed to evaluate hydrologic characteristics of the aquifer.

The data generated from the Phase I and II investigations was assembled such that a risk characterization could be performed. The conclusion of the risk characterization was that a temporary solution had been achieved for Area 3, but that a permanent solution was infeasible.

3.3.1 Physical Characteristics

Area 3 is shown on Figure 1 and includes the land extending from the south shore of Morse's Pond adjacent to the culvert, extending southeast up the steep embankment to the railroad tracks. The land surface slopes steeply down to Central Street where it becomes relatively level.

3.3.2 Extent of Release

Numerous soil and groundwater samples have been collected from Area 3 to determine the lateral and vertical extent of paint wastes in the source area (around the culvert). A plume of metals-impacted groundwater has migrated towards the southeast away from the source area.

3.3.2.1 Soil

There are no records documenting how paint wastes came to be located in Area 3. It is possible that fill material containing paint wastes from the former Henry Wood's Sons Paint Factory (formerly located on Wellesley College property) was used around the culvert when it was extended more than 100 years ago.

The Phase I and Phase II site assessments confirmed that residual paint wastes in soil are limited to the east and west wing walls. The southeastern limit of the paint waste and associated metals extends to borings ESMB-8 and ESMB -13 but does not extend further south to ESMB-07, ESMB-09, ESMB-10, and ESMB-11 (top of the culvert headwall). To the west, Area 3 extends to the beginning of the One Bacon Street property (i.e., the

beginning of Area 1). The soil data set includes more than 50 samples collected from the shallow (accessible) soil interval and nearly 100 samples collected from the deeper (inaccessible) soil interval.

3.3.2.2 Groundwater

Chromium (primarily in the more soluble hexavalent oxidation state) has leached from soil and migrated vertically into groundwater. Elevated concentrations of chromium have been detected in groundwater samples collected from wells ESM-07 and MP-MW-03 in the east wing wall area. A narrow plume of impacted groundwater has migrated southeast beneath the railroad tracks and Central Street. Groundwater samples collected from wells along Central Street have indicated substantial concentration reductions since the TCRA was completed, likely related to both the soil removal program and the in-situ chemical reduction program. Impressive dissolved chromium concentration reductions have also occurred in groundwater beneath the east wing wall (ESM-07) but dissolved chromium concentrations remain elevated in groundwater beneath the west wing wall (MP-MW-03).

3.3.3 Potential Human Receptors

In the northern portion of Area 3 (the east and west wing walls north of the chain link fence), human receptors are limited to trespassers that walk across the wing walls. Despite "No Trespassing" signage, there is a path worn across the flat portion of the east wing wall, up and over the culvert and down again to the flat portion of the west wing wall. These trespassers are likely accessing the area for fishing. The soil cap installed under the TCRA has remained intact, thereby preventing exposure to residual paint wastes.

In the central portion of Area 3 (on either side of the railroad tracks, down to Central Street) human receptors are limited to railroad workers and possibly infrequent trespassers. No paint wastes have been found in this portion of the Site.

The southern portion of Area 3 (Central Street and possibly including a limited sliver of Wellesley College property) is more accessible than other portions of Area 3, and therefore experiences more frequent human use. Motorists, cyclists, and pedestrians use Central Street, and a paved walking path extends from the south side of Central Street onto the college property.

3.3.4 Potential Environmental Receptors

The primary potential environmental receptor in Area 3 is Morse's Pond. The southern cove of Morse's Pond (Area 2) is immediately north of Area 3. Groundwater from Area 3 flows toward the southeast away from the pond. Monitoring data shows that the plume of impacted groundwater does not migrate towards or into Paintshop Pond but instead attenuates near the northern portion of the Wellesley College property.

3.3.5 Characterization of Chromium, Nickel and Lead

Area 3 has been the subject of extensive environmental assessments. ES&M's database includes laboratory analysis of more than 200 soil samples and laboratory analysis of groundwater samples collected from transect wells and more than 20 groundwater monitoring wells across the Site. This extensive database shows that the contaminants of concern are limited to chromium, lead, and nickel.

Exposure point concentrations for trivalent chromium, hexavalent chromium, lead, and nickel were calculated for soil located in the immediate vicinity of the wing walls. These EPCs characterize the fill material used by USEPA to construct the cap, as well as soil with residual paint wastes below the cap. Note that soil containing paint wastes below the cap could not be excavated by USEPA due to concerns of undermining the railroad beds.

3.3.6 Site Activities and Uses

The northern portion of Area 3 includes the culvert entrance and headwall. This land is owned by MBTA and is not used for any stated purpose. The central portion includes an active rail bed with two sets of parallel tracks. The southern portion of Area 3 extends under Central Street (Route 135) and onto Wellesley College property.

3.3.7 Exposure Points, Exposure Pathways and EPCs

The exposure points and pathways for Area 3 were discussed in detail in the Phase II/III report. Since the risk characterization was completed, no additional soil samples have been collected from Area 3. As discussed previously, the fill material installed by USEPA has successfully capped the area and eliminated exposure to humans and runoff of impacted soil to the pond. ES&M inspected the cap in December 2013 and found that it was in good condition with established vegetation (and root structure) to hold the cap in place with minimal erosion.

3.3.7.1 Soil EPCs

The soil EPCs calculated previously are summarized below. Tables supporting the calculations were included in the risk characterization included in the Phase II report.

EPC A3-1 (0-3 feet, wing walls, cap soils)

Total Chromium	24 mg/kg
Hexavalent chromium	1.2 mg/kg
Trivalent chromium	81 mg/kg
Lead	46 mg/kg
Nickel	15 mg/kg

EPC A3-2 (3-15 feet, wing walls)

Total Chromium	23 mg/kg
Hexavalent chromium	1880 mg/kg
Trivalent chromium	3010 mg/kg
Lead	651 mg/kg

Nickel	99 mg/kg

EPC A3-3 (0-15 feet, accessible soil south of wing walls)

Total Chromium	17 mg/kg
Hexavalent chromium	11 mg/kg
Trivalent chromium	111 mg/kg
Lead	59 mg/kg
Nickel	10 mg/kg

EPC A3-4 (>15 feet, inaccessible soil south of wing walls)

Total Chromium	16 mg/kg
Hexavalent chromium	5.0 mg/kg
Trivalent chromium	165 mg/kg
Lead	6.4 mg/kg
Nickel	11 mg/kg

3.3.7.2 Groundwater EPCs

A detailed presentation of exposure point concentrations in groundwater was presented in the Phase II/III. Subsequent to the submission of the PII/III, additional groundwater samples were collected from select Area 3 groundwater monitoring wells in 2013. The results were discussed in detail in the revised Phase III report prepared for Area 3 and submitted to MassDEP on June 13, 2013. The 2013 groundwater data indicates that the TCRA removal actions have resulted in significant hexavalent chromium concentration reductions. In fact, these results show that GW-1 groundwater standards were met in samples from all wells except ESM-07 (east wing wall) and MP-MW-03 (west wing wall).

The EPCs have not been updated at this time since they do not change the outcome of the risk assessment. As more data is collected to document that the concentration reductions are permanent and sustained, the EPC's may be updated to support a permanent solution (partial) to reduce the areal extent of Area 3.

3.3.8 Method 1 Approach

A Method 1 approach was used in the Phase II to compare soil and groundwater EPCs to the default Method 1 S-1/GW-1 and S-1/GW-3 standards for soil and GW-1 and GW-3 standards for groundwater. The conclusions are that the concentrations of chromium (both hexavalent and trivalent), lead and nickel are greater than applicable standards. The Phase III concluded that a permanent solution was not feasible but that enterprising steps could be implemented to further reduce concentrations of hexavalent chromium in groundwater.

3.3.9 Substantial Hazard Evaluation

A substantial hazard evaluation has been conducted pursuant to 310 CMR 40.0956. The outcome of the evaluation is described below:

Human Receptors

- There are no substantial hazards with respect to human exposure to soil because the soil cap has effectively eliminated any exposure potential. In addition, the risk characterization has documented that concentrations of metals in accessible soil are below Method 1 S-1/GW-1 and S-1/GW-3 standards.
- Groundwater in Area 3 (and Area 1) is not used for any purpose. Future human exposure is unlikely because municipal water is available.

Ecological Receptors

- There is no evidence of stressed biota
- There is no tar or non-aqueous phase hazardous material in soil within three feet of ground surface or in sediment
- Contaminated groundwater is not discharging to surface water
- There is no threat of migration of the contaminants of concern to other media or resource areas
- There is no ecological risk of harm. Any ecological threat related to the Area 3 was mitigated by the TCRA soil excavation program and the substantial cap that prevents any additional erosion of paint waste and associated metals from Area 3 into the south cove of Morse's Pond.

3.3.10 Risk of Harm to Safety 40.0960

A characterization of the risk of harm to safety has been conducted as described below:

- There are no rusted or corroded drums or containers, open pits, lagoons or other dangerous structures;
- There is no threat of fire or explosion, including the presence of explosive vapors resulting from a release of oil and/or hazardous material; and
- There are no uncontained materials which exhibit the characteristics of corrosively, reactivity or flammability described at 310 CMR 40.0347.

A condition of no significant risk with respect to safety exists at the One Beacon Street property.

3.3.11 Conclusion of Risk Characterization

The conclusion of the risk characterization completed for Area 3 is that a condition of no significant risk cannot be documented at this time. Since there are no substantial hazards associated with Area 3, a temporary solution has been achieved. A Class C-1 RAO Partial is appropriate for Area 3.

4.0 FEASIBILITY EVALUATION

A feasibility evaluation was conducted to determine whether further response actions would be appropriate in order to achieve a permanent solution across all areas of the Site.

4.1 Summary of Current Site Conditions

Area 1

Following the removal of soil from two areas identified as hot spots, a condition of no significant risk was attained for this residential property with regards to soil. However, concentrations of metals in groundwater are above MCP GW-1 groundwater standards in samples from two of four monitoring wells, and will likely remain elevated for some period of time. Therefore, a condition of no significant risk for groundwater cannot be documented.

Area 2

Sediment with chromium concentrations greater than applicable guidelines was removed from the cove area during the USEPA-led TCRA. Laboratory analysis of 17 post-excavation sediment samples documented that the sediment removal program was successful at attaining applicable ecological-based guidelines. In addition, gravel was placed over the excavation area to eliminate any future exposure pathways to residual sediment below the gravel. The soil cap installed in Area 3 has eliminated the migration pathway between Area 3 source soils and the cove. Therefore, a permanent solution has been reached for this portion of the Site, and no further response actions are necessary.

Area 3

The TCRA included removal of surface soils containing paint wastes, as well as a chemical injection program to treat paint wastes that could not be excavated. A soil cap was placed over the residual paint waste-impacted soils to eliminate future contact and migration of residual paint wastes into the pond. On December 27, 2013, a Phase IV Remedy Implementation Plan Addendum was submitted to MassDEP to describe a limited in-situ chemical reduction program. If approved by MassDEP, this program would include installation of injection wells around the east and west wing walls, with limited injections of a remedial additive to reduce hexavalent chromium to the largely immobile and less harmful trivalent oxidation state. A permanent solution will not be achieved in Area 3, but this definitive and enterprising step should result in further decreases in dissolved chromium concentrations in groundwater.

4.2 Feasibility Evaluation

The procedure described in 310 CMR 40.0860 has been used to evaluate the feasibility of achieving a permanent solution, reducing metals concentrations to background levels, reducing concentrations to levels at or below the upper concentration limits, and eliminating or mitigating critical exposure pathways. The feasibility evaluation has been completed separately for each of the three areas.

4.2.1 Area 1

The soil excavation program completed in late 2013 removed virtually all of the soil containing paint wastes and associated metals, and EPCs for soil now meet Method 1 S-1/GW-1 and S-1/GW-3 soil standards. However, concentrations of metals in soil were

not reduced to background, and concentrations of dissolved chromium are above GW-1 standards at two groundwater exposure points.

Feasibility of Implementing a Permanent Solution

It is infeasible to implement a permanent solution for groundwater in Area 1 because additional source material remains in adjacent Area 3. This source material will likely continue to leach chromium into groundwater for some period of time. While definitive and enterprising steps are planned for Area 3, these actions will not likely reach a permanent solution, as documented in the Phase IV Addendum (ES&M, December 27, 2013). It is possible that over time, natural attenuation processes will further reduce chromium concentrations in groundwater in Area 1.

Feasibility of Achieving Background

Although the soil excavation program successfully removed accessible paint wastes, additional excavation on the residential property to reach background levels was not possible because:

- The northern limits of the excavation had reached the steep slope to Morse's Pond and additional excavation was not possible;
- the eastern limits of the excavation extended to the MBTA property boundary, and access to this property was not sought;
- the western limits of the excavation were close to the private residential structure and additional soil removal was not considered safe; and
- the southern limits of the excavation were approaching the retaining wall that separates the residential property from the MBTA property.

Based on the above, it is not feasible to achieve background levels in Area 1. Even if the residential structure (and all related utilities and appurtenances) could be removed to allow access by large earth moving machines, it is not likely that background could be achieved in soil and definitely could not be achieved in groundwater unless all of the paint waste and metals could be removed from Area 3. A detailed evaluation of remedial options was completed in 2013 for Area 3 and the conclusion was that a permanent solution could not be achieved. Soils containing paint wastes cannot be safely removed from Area 3 and there will continue to be some flux of metals from soil into groundwater. Since the west wing wall is adjacent to Area 1, it is unreasonable to expect that metals concentrations in groundwater will achieve background in Area 1.

Feasibility of Reducing COCs to less than UCLs

The concentrations of chromium, lead, and nickel in soils are not greater than the upper concentration limits. The concentration of hexavalent chromium in the groundwater sample collected from ESM-16 (adjacent to the west wing wall) was greater than the UCL. It is expected that the soil removal program and the proposed in-situ chemical reduction program in Area 3 will result in chromium concentration reductions in groundwater in the vicinity of ESM-16.

Feasibility of Eliminating or Mitigating Critical Exposure Pathways

Based on the successful conclusion of the soil removal program, there is no Critical Exposure Pathway (CEP) in Area 1. The residual metals in soil and groundwater are not volatile, so a critical exposure pathway does not exist with respect to indoor air at the One Bacon Street residence. Although concentrations of hexavalent chromium are elevated in groundwater around well ESM-16, groundwater is not used for drinking water (or any other purpose).

4.3.2 Area 2

The sediment excavation program completed under the TCRA reduced concentrations of chromium in sediments to meet the ERM, ERL, and MassDEP sediment screening values. Any potential exposure pathway to residual chromium in the sediments was effectively eliminated via the gravel backfill.

Feasibility of Implementing a Permanent Solution
As documented in Section 3.2 of this report, a Permanent Solution has been achieved for Area 2.

Feasibility of Achieving Background
USEPA and their contractors constructed a coffer dam and dewatered the cove to allow excavation of the sediments containing elevated concentrations of chromium. Studies of the pond sediments prior to the excavation, as reported by IT in the TCRA Design Report, indicated that the background chromium concentration in Morse's Pond sediments was 26.5 mg/kg. The average post excavation concentration of chromium in cove sediments was 50 mg/kg. The background concentration was not met but was "approached." It is clearly infeasible to excavate additional sediment, which would require draining the Pond or at least dewatering the cove even more extensively than was done during the TCRA. There would be essentially no benefit and great cost to attempt to further reduce concentrations to background.

Feasibility of Reducing COCs to less than UCLs
There are no upper concentration limits for chromium sediment. The EPC concentration is well below MassDEP's sediment screening values and well below the upper concentration limit for soil.

Feasibility of Eliminating or Mitigating Critical Exposure Pathways
As documented throughout this report, a critical exposure pathway does not exist.

4.3.3 Area 3

The soil excavation program completed under the TCRA removed all of the soil containing paint wastes that could be safely removed without creating a public safety hazard by undermining the elevated rail bed. The concentrations of metals in soil were not reduced to background and the concentrations of chromium are above GW-1 and GW-3 standards at two groundwater exposure points.

A detailed evaluation of remedial options was completed in 2013 for Area 3 and the conclusion was that a permanent solution could not be achieved. Soil with elevated concentrations of paint wastes and related metals cannot be safely removed from Area 3 and therefore, there will continue to be some flux of metals from soil into groundwater. In-situ chemical reduction is proposed as a definitive and enterprising step to further improve groundwater quality.

Feasibility of Implementing a Permanent Solution
A detailed evaluation of remedial options was completed in 2013 for Area 3 and the conclusion was that a permanent solution could not be achieved. Soil with elevated concentrations of paint waste and related metals cannot be safely removed from Area 3 and there will continue to be some flux of metals from soil into groundwater. In-situ chemical reduction is proposed as a definitive and enterprising step to further improve groundwater quality.

Feasibility of Achieving Background
It is not feasible to achieve background levels in Area 3.

Feasibility of Reducing COCs to less than UCLs
While the average concentrations of chromium, lead, and nickel in soils are not greater than the upper concentration limits, there are several individual sample results with metals concentrations greater than the UCLs. In addition, the concentration of hexavalent chromium in the groundwater sample collected from MP-MW-03 (west wing wall) is greater than the UCL. It was well documented in the June 2013 Phase III addendum that it is not feasible to excavate additional soils from the wing walls and there is no technology (proven or innovative) that can effectively remove metals from soil. The proposed in-situ chemical reduction program may help to change the chromium oxidation state from hexavalent to trivalent, and therefore it is possible that over time hexavalent chromium concentrations will be reduced below the UCLs. However, concentrations of trivalent chromium and lead will remain above the UCLs in soils below the cap and around the wing walls of the culvert.

Feasibility of Eliminating or Mitigating Critical Exposure Pathways
There are no critical exposure pathways.

5.0 DATA USABILITY EVALUATION

In accordance with 310 CMR 40.0017, any person undertaking response actions under the MCP shall ensure that analytical and environmental monitoring data used in support of LSP Opinions with respect to assessment, removal, or containment actions is scientifically valid and defensible, and of a level of precision and accuracy commensurate with its stated or intended use. Furthermore, 40.0017 (3)(i) also provides that all response action submittals include details on any known conditions or findings which may affect the validity of analytical data, including unsatisfactory results obtained on QA/QC blank, duplicate, surrogate, or spiked samples.

MassDEP has provided guidance on the particular components of a recommended QA/QC and data reporting program that may be electively used by parties conducting response actions. This guidance, entitled Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the MCP (BWSC-CAM) summarizes these data quality requirements necessary to achieve a level of "presumptive certainty" regarding environmental monitoring and analytical data collected in support of MCP decisions.

The soil data gathered during the soil removal program in Area 1 and described herein were collected, analyzed, and reported in accordance with the BWSC-CAM. Data used in support of the risk characterization and RAO for Area 1 were reported in fifteen laboratory reports. Each of these reports is categorized as CAM-compliant. Laboratory prepared Data Certification Summaries have been included in the laboratory analytical reports, which have been submitted to MassDEP in previous submittals. The eight laboratory reports for data collected just prior to and during the removal action are included in Appendix B of this report.

In addition, ES&M conducted quality assurance and quality control reviews of all laboratory reports. Any project specific method modifications, non-conformances, and/or observations are detailed in the Project Narrative section of the laboratory reports. Laboratory narratives either indicated that the required QA/QC standards were met, or sufficiently explained any non-conformances. Any non-conformances were evaluated to determine if they could negatively impact the value of the data. Site history, release history, and observations made during sampling are consistent with the nature and level of contamination identified in the analytical data. ES&M QA/QC logs are included with each laboratory report.

5.2 Representativeness Evaluation

A representativeness evaluation has been performed to evaluate the adequacy of the spatial and temporal data sets to support the risk characterization and RAO for Area 1. In summary, sufficient spatial and temporal data are available to render conclusions on potential risks to the identified receptors, on current and future non-health risks, and to support this assessment. The following components of the representativeness evaluation support that there is sufficient spatial and temporal data to characterize the nature and extent of contamination at the Site, and to estimate the potential risk to health, safety, public welfare and the environment.

5.2.1 Conceptual Site Model

Sometime during the late 1800's or early 1900's fill material was placed in the vicinity of the east and west wing walls of the Morse's Pond Culvert and further west onto the private property at One Bacon Street. The fill was likely used to stabilize the steep slope rising from Morse's Pond to the elevated rail bed. Apparently, this was done about the time when the culvert was extended and additional railroad tracks were added. Paint wastes likely from the Henry Woods paint factory, formerly located on land now

occupied by Wellesley College, were apparently mixed with the soil. The paint waste contains elevated concentrations of chromium (in both the hexavalent and trivalent oxidation state), lead, and nickel.

Soil containing metals eroded from the wing walls into the cove at the southern end of Morse's Pond. In addition, precipitation percolated through the upland soils containing paint wastes for many years, allowing primarily chromium to leach into groundwater. This resulted in a plume of dissolved chromium which extends from the south shore of Morse's Pond towards Central Street.

5.2.2 Work Plan, Data Quality Objectives and Data Collection Approach

5.2.2.1 Summary of Work Completed

In 2001, EPA completed a TCRA that consisted of excavation of chromium-impacted sediments from the cove and the culvert, excavation of soil containing elevated concentrations of metals from the wing walls and the One Bacon Street property, and completion of an in-situ chemical reduction program around the east and west wing walls to address paint wastes that could not be excavated.

ES&M completed an extensive Phase I Initial Site Characterization and a Phase II Comprehensive Site Assessment. A Phase III Remedy Evaluation was completed and later amended to provide a more detailed evaluation of remediation alternatives for Area 3. The Phase II and Phase III (including the amendment) were audited and accepted by MassDEP.

A soil excavation program was completed on the One Bacon Street property in late 2013. Post-excavation soil samples were collected for laboratory analysis to document the success of this program. The excavation program removed metals-impacted soils such that exposure point concentrations for soil meet the conditions for a permanent solution under the MCP. Because source soils in Area 3 remain, concentrations of metals in groundwater are unable to meet applicable GW-1 standards in both Area 1 and Area 3.

5.2.2.2 Data Quality Objectives

The data quality objective was to obtain CAM Compliant data that would satisfy the data quality requirements of the MCP at 310 CMR 40.0017 and 310 CMR 40.0191. The data used to support the RAO for Area 1 is scientifically valid and defensible, and of a level of precision and accuracy commensurate with its intended use. For Area 2, data was collected by USEPA prior to implementation of the CAM program. Nonetheless, ES&M opines that this data is useable for the purposes of documenting a permanent solution for this portion of the Site. In Area 3, data usability evaluations were provided in the Phase II report to demonstrate that this data is valid and useable to document the attainment of a temporary solution.

5.2.2.3 Data Collection Approach

The Phase I and Phase II reports and this Phase IV Completion report and Response Action Outcome statement describe a variety of methods that were used to characterize the distribution of metals in soil and groundwater across this entire site. The soil

collection techniques included hand borings, soil borings using rotary and vibratory drill rigs, and collection of bottom and sidewall samples during the soil excavation remedy. Some samples were discreet samples and others were composited over a specific interval to more accurately characterize the exposure point.

Groundwater samples have been collected from standard groundwater monitoring wells and from a transect survey using a retractable groundwater sample collection device advanced by a vibratory rig. During collection of groundwater samples, indicator parameters were monitored and when the stabilization criteria were met the groundwater samples were collected.

5.2.3 Use of Field/Screening Data

USEPA and their contractors used XRF field analysis techniques during the sediment and soil removal programs. Soil and sediment samples were also collected for laboratory analysis. The XRF data was not used in support of the risk characterizations.

5.2.4 Selection of Sampling Locations and Depths

Soil and groundwater samples have been collected up to 70 feet below grade to define the nature and extent of metals in soil and groundwater. The depth intervals were adequate to define the vertical extent of metals in soil and the monitoring well array (supplemented with the information gained during the transect survey) defines the vertical and horizontal extend of dissolved metals in groundwater. The only limitation is that certain hand borings on the steep slope of the wing walls, inaccessible to motorized equipment, could only be advanced to eight feet below ground surface.

5.2.5 Number and Spatial Distribution of Sampling Locations

Numerous soil and groundwater samples have been collected to characterize the nature and extent of metals in soil. More than 50 soil borings were advanced and more than 200 soil samples have been collected. The groundwater monitoring well array consists of more than 20 wells. The locations and screened intervals of the down gradient wells were based on the results of the detailed transect survey.

5.2.6 Temporal Distribution of Samples

Post excavation sediment samples were collected by USEPA and their contractors in 2001. All soil and groundwater samples collected by ES&M and used in the Phase I, Phase II, Phase III, Phase IV and RAO reports weren collected between 2007 and 2013.

5.2.7 Critical Samples

A critical sample is a sample for which a usable result is necessary to support a conclusion that the response action objectives have been met (i.e., absent a usable result for such sample, it cannot otherwise be demonstrated that the objective has been achieved). There is no particular data point or data set that is considered more

important than any other data set. All data sets used to support this RAO have been evaluated and deemed useable.

5.2.8 Completeness

The Site has been thoroughly investigated, and soil conditions have been sufficiently characterized. The data set was adequate to define the areas requiring soil removal, and to demonstrate that the remedial goals were met.

5.2.9 Uncertainty and Inconsistency

The only area of uncertainty is the gap in soil and groundwater information between the wing walls and Central Street. It is impossible to install soil borings or wells on the steep slope on either side of the rail bed and permission was not granted to drill near the active railroad tracks. Since groundwater is about 40 feet below the rail bed and is not used for any purpose, this data gap is not important to our understanding of site conditions and the potential risks posed by the Site. Based on our understanding of this site, it is not believed that paint wastes are present beyond the limits of the TCRA excavation program illustrated on Figure 1.

6.0 REQUIRED ELEMENTS OF RESPONSE ACTION OUTCOMES

As described in 310 CMR 40.1003 and 40.1056, the general provisions and contents of the RAO statement are described below.

6.1 Area 1

The Class C-1 RAO Partial for Area 1, the private residence at One Bacon Street, is described below.

6.1.1 General Provisions

40.1003(1) – A level of no significant risk has been achieved for soil but not with respect to groundwater.

40.1003(2) – APU has expeditiously completed all MCP response actions and has documented an RAO Class C-1 Partial for Area 1. MassDEP has issued two Interim Deadlines requiring early submission of MCP reports, and APU has complied with both.

40.1003(3) and **(4)** – This RAO applies to a portion of the Site defined by MassDEP RTN 3-11653. The boundaries of this RAO-P, which coincide with the One Bacon Street property boundaries, as shown on Figure 1.

40.1003(5) – A Class C-1 RAO-P can be achieved for this portion of the Site because remedial actions were taken, and to the extent possible soil containing paint wastes and associated metals has been removed. No substantial hazards exist. In addition:

- There are no leaking storage tanks, vessels, drums, or containers identified at the property;
- No drywells or out of compliance wastewater disposal systems are known to exist at the property; and
- Non-aqueous phase liquids have not been observed.

6.1.2 Content of RAO Statement

This RAO Statement, along with the supporting reports previously submitted, fully complies with 40.1056 – Content of RAO Statements, as described below:

40.1056(1)(a) – Site name/address: Morse's Pond Culvert
Wellesley, MA
RTN 3-11653

40.1056(1)(b) – The class of RAO applicable for this portion of the site is C-1. A Class C-1 is appropriate since:

- A temporary solution has been achieved; and
- Remedial actions to achieve a permanent solution are not feasible.

40.1056(1)(c) – A Method 1 Risk Characterization was used to assess the risk of harm to health, public welfare and the environment.

40.1056(1)(d) – This RAO Partial documents the attainment of a temporary solution for Area 1. There are no previously submitted RAOs pertaining to the Site. RAO Partials are being simultaneously submitted for Area 2 (Class A-2 RAO-P) and Area 3 (Class C-1 RAO-P).

40.1056(1)(e) – A Permanent Solution is not feasible because soil containing paint waste cannot be excavated from the west wing wall located adjacent to the One Bacon Street property. It is expected that dissolved chromium will persist in groundwater in the vicinity of well ESM-16 for some time. Enterprising steps, consisting of in-situ chemical reduction, have been proposed for Area 3. Groundwater will be monitored periodically in Area 1 but no active remediation is planned for groundwater.

40.1056(1)(f) – This RAO does not require an activity use limitation (AUL). The excavations completed by APU/ES&M and by USEPA and their contractors have resulted in a condition of no significant risk with respect to metals in soil.

40.1056(1)(g) – The Licensed Site Professional (Douglas A. Heely, #9632) has opined that all requirements for a Class C-1 RAO-P have been met for Area 1.

40.1056(1)(h) – All certifications for this RAO Statement are included on the transmittal form (BWSC-104) included with this report.

40.1056(1)(i) – Concentrations of metals remaining in soil are well below the applicable UCLs. The concentration of dissolved chromium in groundwater at well ESM-16 is greater than the UCL.

40.1056(1)(j) – All analytical data used to support this RAO was generated pursuant to the Department's Compendium of Analytical Methods.

40.1056(2)(a) – All required documentation for this RAO, including a site map showing the approximate location of the RAO boundary, is included in this document.

40.1056(2)(b) – There are no uncontrolled sources of metals or other OHM at the portion of the Site (Area 1) that is the subject of this RAO-P.

40.1056(2)(c) – Not applicable.

40.1056(2)(d) – A substantial hazard evaluation was conducted and is described in Section 3.1.9 of this report. The conclusion was that a condition of substantial hazard does not exist.

40.1056(2)(e) – As described in Section 4.3.1 of this RAO (and in great detail in the Supplemental Phase III Remedial Action Plan submitted in June 2013), it is not possible to achieve background levels in soil or groundwater.

40.1056(2)(f) – Not applicable, since this RAO Statement is not a Class A-4 or B-3 RAO.

40.1056(2)(g) and **(h)** – Not applicable.

40.1056(2)(i) – Groundwater samples will be collected annually to monitoring the concentrations of hexavalent and trivalent chromium in groundwater over time.

40.1056(2)(j) – The definitive and enterprising step that, if approved by MassDEP, will likely result in decreases in dissolved chromium concentrations in Area 1 and Area 3 groundwater will be described in the RAO-P for Area 3. In Area 1, monitored natural attenuation of groundwater will be conducted.

40.1056(2)(k) – A Data Usability Assessment documenting that the data relied upon is scientifically valid and defensible is included in Section 5 of this report.

6.2 Area 2

The Class A-2 RAO Partial for Area 2, the cove at the south end of Morse's Pond, is described below.

6.2.1 General Provisions

40.1003(1) – A level of no significant risk has been documented.

40.1003(2) – APU has expeditiously completed all MCP response actions and has documented an RAO Class C-1 Partial for Area 1. MassDEP has issued two Interim Deadlines requiring early submission of MCP reports, and APU has complied with both.

40.1003(3) and **(4)** – This RAO applies to a portion of the Site defined by MassDEP RTN 3-11653. The boundaries of this RAO-P for Area 2 are shown on Figure 1.

40.1003(5) – A Class A-2 RAO-P can be achieved for this portion of the site because remedial actions were taken, and to the extent possible, sediment containing chromium has been removed. No substantial hazards exist. In addition:

- There are no leaking storage tanks, vessels, drums, or containers identified at the property
- No drywells or out of compliance wastewater disposal systems are known to exist at the property;
- Non-aqueous phase liquids have not been observed.

6.2.2 Content of RAO Statement

This RAO Statement, along with the supporting reports previously submitted, fully complies with 40.1056 – Content of RAO Statements, as described below:

40.1056(1)(a) – Site name/address: Morse's Pond Culvert
Wellesley, MA
RTN 3-11653

40.1056(1)(b) – The class of RAO applicable for this portion of the site defined by RTN 3-11653 is A-2. A Class A-2 RAO-P is appropriate since:

- A permanent solution has been achieved;
- The level of oil and hazardous material has not been reduced to background.

40.1056(1)(c) – A Method 3 Risk Characterization was used to assess the risk of harm to health, public welfare and the environment.

40.1056(1)(d) – This RAO Partial documents the attainment of a permanent solution for Area 2. There are no previously submitted RAOs pertaining to the Site. RAO Partials are being simultaneously submitted for Area 1 (Class C-1 RAO-P) and Area 3 (Class C-1 RAO-P).

40.1056(1)(e) – A Permanent Solution has been documented by showing that the EPCs for chromium in sediment are below MassDEP sediment screening values such that a Stage II Ecological Risk Characterization is not required. In addition, the potential ecological (and human) exposure pathway was eliminated by placing a substantial gravel layer over residual sediments to restore the cove bottom to pre-excavation elevations.

40.1056(1)(f) – This RAO does not require an activity use limitation.

40.1056(1)(g) – The Licensed Site Professional (Douglas A. Heely, #9632) has opined that all requirements for a Class A-2 RAO-P have been met for Area 2.

40.1056(1)(h) – All certifications for this RAO Statement are included on the transmittal form (BWSC-104) included with this report.

40.1056(1)(i) – There are no upper concentration limits for sediment. For comparative purposes, concentrations of chromium in sediment are well below the soil UCLs.

40.1056(1)(j) – Data collected by USEPA and its contractors as reported in the After Action Report was used in the risk characterization. ES&M tried to collect sediment samples to independently verify the results and to ensure that the laboratory reports were CAM compliant; however, the substantial gravel backfill prevented collection of sediment samples.

40.1056(2)(a) – All required documentation for this RAO, including a site map showing the approximate location of the RAO boundary, is included in this document.

40.1056(2)(b) – There are no uncontrolled sources of metals or other OHM at this portion of the Site.

40.1056(2)(c) – Information supporting the conclusion that a condition of no significant risk exist was presented in the Phase II CSA and is summarized in Section 3.2 of this report.

40.1056(2)(d) – Not applicable.

40.1056(2)(e) – An evaluation of the feasibility of reducing concentrations of chromium in sediment to background is described in Section 4.3.2. In summary, it is not feasible to dewater the cove and remove additional sediments, and the incremental benefits, if any, would be far outweighed by the exorbitantly high costs.

40.1056(2)(f) – Not applicable, since this RAO Statement is not a Class A-4 or B-3 RAO.

40.1056(2)(g) and **(h)** – Not applicable.

40.1056(2)(i) – No additional monitoring or response actions are required in Area 2. Annual cap inspections will be performed in Area 3 to ensure that metals-impacted soil will not erode from Area 3 into Area 2.

40.1056(2)(j) – Not applicable.

40.1056(2)(k) – A Data Usability Assessment documenting that the data relied upon for this RAO is scientifically valid and defensible is included in Section 5 of this report.

6.3 Area 3

The Class C-1 RAO Partial for Area 3, the east and west wing walls and land located to the south, is documented below.

6.3.1 General Provisions

40.1003(1) – A level of no significant risk has not been achieved with respect to soil or groundwater in Area 3.

40.1003(2) – APU has expeditiously completed all MCP response actions and has documented an RAO Class C-1 Partial for Area 1. MassDEP has issued two Interim Deadlines requiring early submission of MCP reports, and APU has complied with both.

40.1003(3) and **(4)** – This RAO applies to a portion of the Site defined by MassDEP RTN 3-11653. The boundaries of this RAO-P for Area 3 are shown on Figure 1.

40.1003(5) – A Class C-1 RAO-P can be achieved for this portion of the site because remedial actions were taken, and to the extent possible, soils containing paint wastes and associated metals were removed. No substantial hazards exist. In addition:

- There are no leaking storage tanks, vessels, drums, or containers identified at the property;
- No drywells or out of compliance wastewater disposal systems are known to exist at the property; and
- Non-aqueous phase liquids have not been observed.

6.3.2 Content of RAO Statement

This RAO Statement, along with the supporting reports previously submitted, fully complies with 40.1056 – Content of RAO Statements, as described below:

40.1056(1)(a) – Site name/address: Morse's Pond Culvert
Wellesley, MA
RTN 3-11653

40.1056(1)(b) – The class of RAO applicable for this portion of the site is C-1. A Class C-1 is appropriate since:

- A temporary solution has been achieved; and
- Remedial actions to achieve a permanent solution are not feasible.

40.1056(1)(c) – A Method 1 Risk Characterization was used to assess the risk of harm to health, public welfare and the environment.

40.1056(1)(d) – This RAO Partial documents the attainment of a temporary solution for Area 3. There are no previously submitted RAOs for this Site. RAO Partials are being simultaneously submitted for Area 1 (Class C-1 RAO-P) and Area 2 (Class A-2 RAO-P).

40.1056(1)(e) – A Permanent Solution is not feasible because soil containing paint wastes cannot be excavated from the wing walls without destabilizing the elevated rail bed. It is expected that dissolved chromium will persist in groundwater in the vicinity of the wing walls for some time. Enterprising steps, consisting of an in-situ chemical reduction program, are proposed for Area 3. In addition, groundwater will be monitored periodically in Area 3.

40.1056(1)(f) – This RAO does not require an activity use limitation.

40.1056(1)(g) – The Licensed Site Professional (Douglas A. Heely, #9632) has opined that all requirements for a Class C-1 RAO-P have been met for Area 3.

40.1056(1)(h) – All certifications for this RAO Statement are included on the transmittal form (BWSC-104) included with this report.

40.1056(1)(i) – Concentrations of metals remaining in soil and in groundwater exceed UCLs.

40.1056(1)(j) – All analytical data used to support this RAO was generated pursuant to the Department's Compendium of Analytical Methods.

40.1056(2)(a) – All required documentation for this RAO, including a site map showing the approximate location of the RAO boundary, is included in this document.

40.1056(2)(b) – Because surface soils containing paint wastes were removed and a cap was constructed, there are no uncontrolled sources of metals in Area 3.

40.1056(2)(c) – Not applicable.

40.1056(2)(d) – A substantial hazard evaluation was conducted and is described in Section 3.3.9 of this report. The conclusion was that a substantial hazard does not exist.

40.1056(2)(e) – As described in Section 4 of this RAO (and in great detail in the Phase III Addendum submitted in June 2013), it is not possible to achieve background in soil or groundwater. Additional excavation is not possible and no other technology is capable to reducing metals concentrations in soil.

40.1056(2)(f) – Not applicable, since this RAO Statement is not a Class A-4 or B-3 RAO.

40.1056(2)(g) and **(h)** – Not applicable.

40.1056(2)(i) – Groundwater samples will be collected annually under this Class C RAO, and as part of the chemical reduction program, to document concentrations of chromium in groundwater over time. In addition, the USEPA-installed cap over the east and west wing walls will be inspected annually.

40.1056(2)(j) – The Phase IV RIP submitted to MassDEP on December 27, 2013, included a detailed plan to conduct in-situ chemical reduction using poly sulfide. Injection of a remedial additive in Area 3 requires MassDEP approval. If approved by the Department, in-situ chemical reduction will be completed as a definitive and enterprising step.

40.1056(2)(k) – A Data Usability Assessment documenting that the data relied upon is scientifically valid and defensible is included in Section 5 of this report.

7.0 MCP PUBLIC INVOLVEMENT

As required by the MCP, 310 CMR 40.1403 (3), the Chief Municipal Officer and the Board of Health have been notified in writing of the submittal of this RAO. In addition, notification of the sampling results was provided to the One Bacon Street property owners. Copies of these letters are included in Appendix D.

8.0 LIMITATIONS OF WORK PRODUCT

1. In providing site assessment services at the Site, ES&M endeavored to perform these services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

2. This report was prepared for the client. Third parties may use this report as a general guide of site conditions. However, third party "reliance" on this report is subject to ES&M's Standard Terms and Conditions.

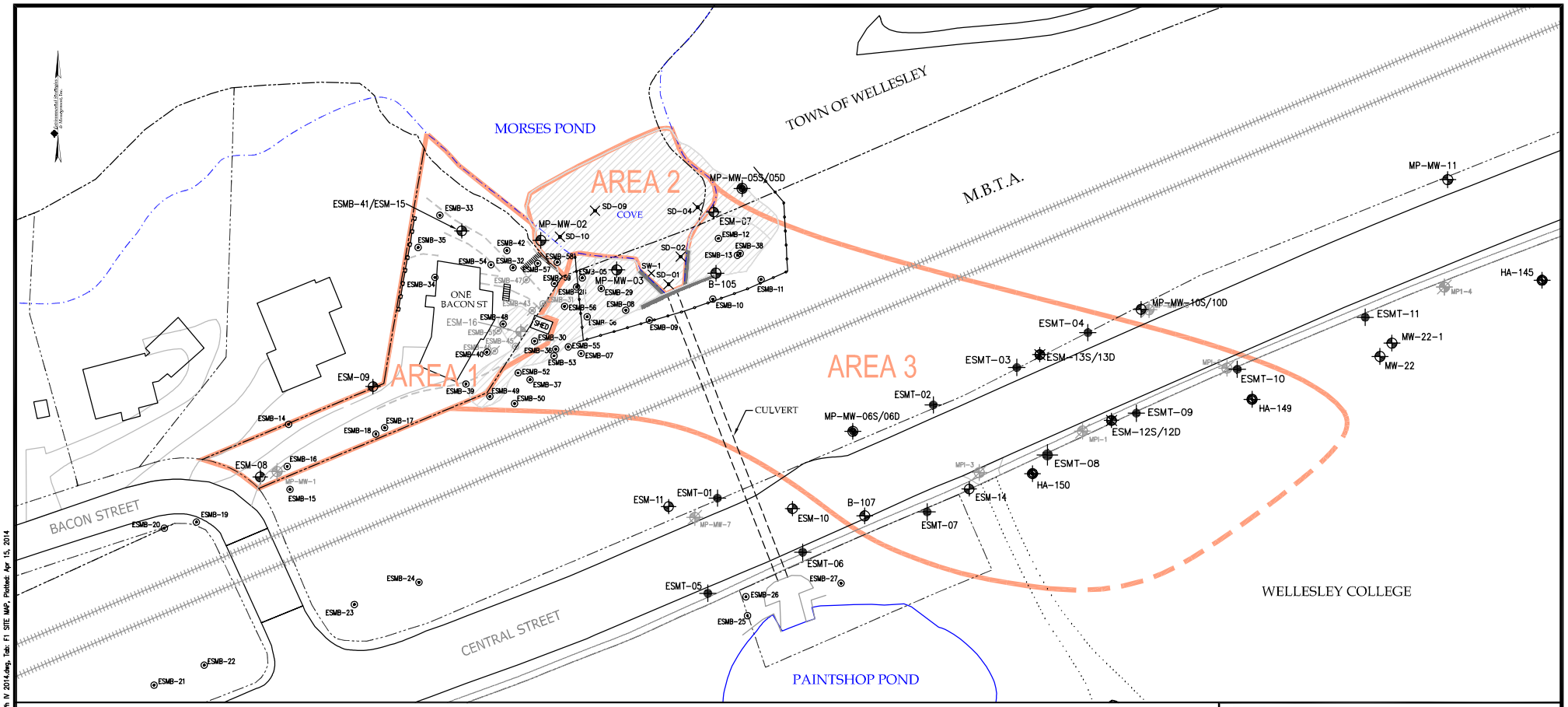
3. Certain information provided by state and local officials, as well as other parties herein referenced, was used to develop this report. The accuracy or completeness of the information provided by these sources was not independently verified.

4. This report assessed the physical characteristics of the subject site with respect to the presence of hazardous material or oil. Compliance of present or past owners or operators with any federal, state, or local laws and regulations is not addressed in this report.

5. The conclusions and recommendations contained in this report are based in part, where noted, upon the data obtained from the stated number of soil and/or groundwater samples obtained from subsurface explorations. Additionally, variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal

practices, the passage of time, and other factors. ES&M reserves the right to modify the conclusions of this report should further information become available.

6. As noted within the text of the report, quantitative laboratory testing was performed as part of the environmental assessment. Where such analyses have been conducted by an outside laboratory, ES&M has relied upon the data provided and has not conducted an independent evaluation of the reliability of these data.



MP-MW-1 MONITORING WELL / SOIL BORING LOCATION
MP-MW-6 MONITORING WELL COUPLET
HA-147 MONITORING WELL TRIPLET
ESM ESM MONITORING WELL LOCATION
ESMT ESM TRANSECT WELL LOCATION
ESMB ESM SOIL BORING LOCATION
DESTROYED BORING/WELL
SW ESM SURFACE WATER GAUGE POINT
SD ESM SEDMIENT SAMPLE LOCATION
SITE BOUNDARY/SPECIFIC WORK AREA
PROPERTY LINE
RAILROAD TRACK
RETAINING WALL
CHAIN LINK FENCE

0 60 120
SCALE FEET

Environmental Strategies & Management
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info@esm-inc.com

GAUGING DATE:	DRAWING DATE:	ACAD FILE:
N/A	4/15/14	APU Ph IV 2014

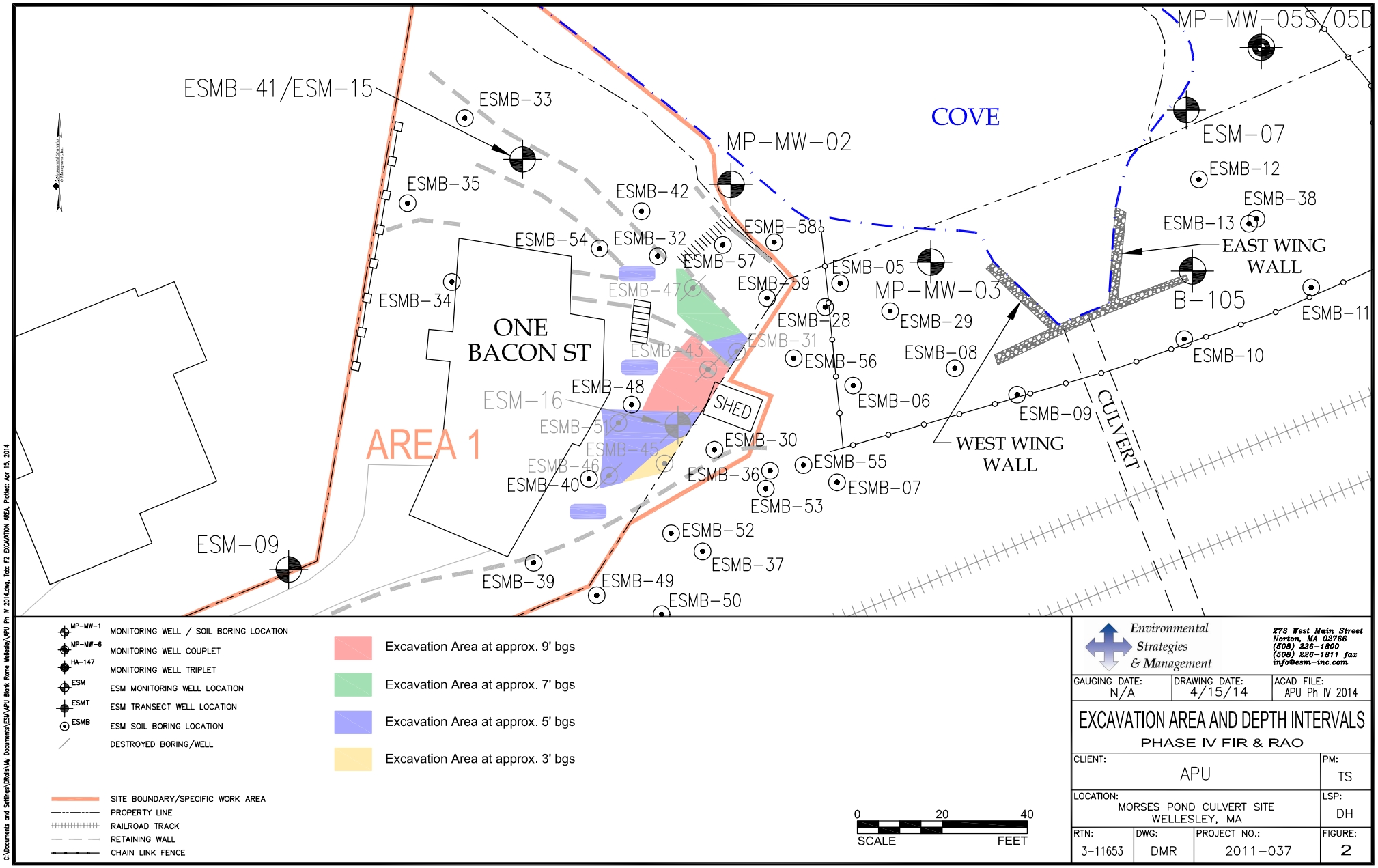
SITE MAP

PHASE IV FIR & RAO

CLIENT:	PM:
APU	TS
LOCATION: MORSES POND CULVERT SITE WELLESLEY, MA	LSP: DH

RTN:	DWG:	PROJECT NO.:	FIGURE:
3-11653	DMR	2011-037	1

C:\Documents and Settings\JRoth\My Documents\ESM\APU Blank Rome Wellesley\APU Ph IV 2014.dwg, Tab: F1 SITE MAP, Plotted: Apr 15, 2014



MP-MW-1 MONITORING WELL / SOIL BORING LOCATION
MP-MW-6 MONITORING WELL COUPLET
HA-147 MONITORING WELL TRIPLET
ESM ESM MONITORING WELL LOCATION
ESMT ESM TRANSECT WELL LOCATION
ESMB ESM SOIL BORING LOCATION
DESTROYED BORING/WELL

Excavation Area at approx. 9' bgs
Excavation Area at approx. 7' bgs
Excavation Area at approx. 5' bgs
Excavation Area at approx. 3' bgs

SITE BOUNDARY/SPECIFIC WORK AREA
PROPERTY LINE
RAILROAD TRACK
RETAINING WALL
CHAIN LINK FENCE

0 20 40
SCALE FEET

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GAUGING DATE:	DRAWING DATE:	ACAD FILE:
N/A	4/15/14	APU Ph IV 2014

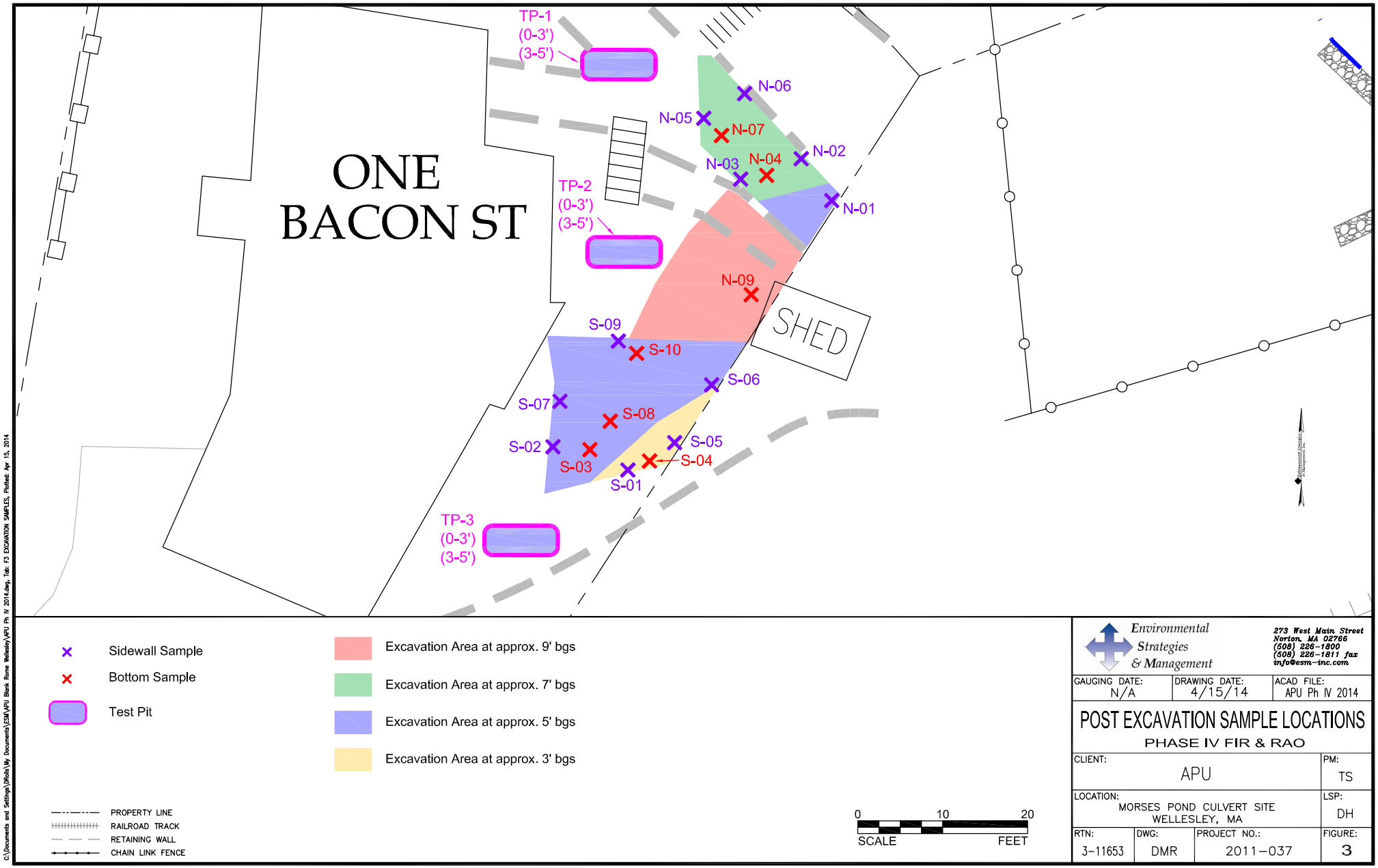
EXCAVATION AREA AND DEPTH INTERVALS

PHASE IV FIR & RAO

CLIENT:	PM:
APU	TS
LOCATION: MORSES POND CULVERT SITE WELLESLEY, MA	LSP: DH

RTN:	DWG:	PROJECT NO.:	FIGURE:
3-11653	DMR	2011-037	2

C:\Documents and Settings\JRoale\My Documents\ESM\APU Blank Rome Wellesley\APU Ph IV 2014.dwg, Tab: F2 EXCAVATION AREA, Plotted: Apr 15, 2014



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(508) 226-1811 fax
info@esm-inc.com

GAUGING DATE:	DRAWING DATE:	ACAD FILE:
N/A	4/15/14	APU Ph IV 2014

POST EXCAVATION SAMPLE LOCATIONS

PHASE IV FIR & RAO

CLIENT:	PM:
APU	TS
LOCATION: MORSES POND CULVERT SITE WELLESLEY, MA	LSP: DH

RTN:	DWG:	PROJECT NO.:	FIGURE:
3-11653	DMR	2011-037	3

C:\Documents and Settings\JRoth\My Documents\ESM\APU Blank Rome Wellesley\APU Ph IV 2014.dwg, Tab: F3 EXCAVATION SAMPLES, Plotted: Apr 15, 2014

TABLE 1
SUMMARY OF
SOIL ANALYTICAL RESULTS - AREA 1
METALS
Morses Pond Culvert Site
Wellesley, MA
(results in mg/kg)

Sample ID	Date	ORP	Chromium VI	Calculated Chromium III	Lead	Nickel	Corrosivity as pH
N-01 West Wall	11/1/2013	360	250	1750	300	58	7.8
N-02 North Wall	11/1/2013	360	12	77	26	9	7.4
N-03 South Wall	11/1/2013	330	84	866	60	56	7.9
N-04 Bottom 7'	11/1/2013	300	560	3240	300	150	7.8
N-05 Eastwall	11/5/2013	380	42	358	120	26	6.8
N-06 Northwall	11/5/2013	380	34	1366	180	75	7.9
N-07 Bottom 7'	11/5/2013	370	25	275	29	15	7.5
N-09 Bottom 5'	11/11/2013	440	17	56	31	22	7.8
S-01 Sidewall South	10/28/2013	470	1.5	34.5	4.9	9	7.7
S-02 Sidewall East	10/28/2013	420	5.1	65.9	4.4	11	7.6
S-03 Bottom 5'	10/28/2013	410	4.4	75.6	4.2	10	7.6
S-04 Bottom 3'	10/28/2013	390	17	253	4.6	9	7.3
S-05 Sidewall West	10/28/2013	390	14	226	5.1	9	7.2
S-06 3' Sidewall West	10/29/2013	370	28	532	5.9	9	7.5
S-07 Sidwall North	10/29/2013	370	< 0.87	62	8.6	15	7.4
S-08 Bottom 5'	11/4/2013	440	6.4	90.6	7.1	14	7.5
S-09 Sidewall North 5'	10/30/2013	330	71	659	120	51	7.8
S-10 Bottom North 5'	10/30/2013	350	85	755	52	19	8.0
TP-01 (0'-3')	11/11/2013	430	< 4.4	42	95	8	6.9
TP-01 (3'-5')	11/11/2013	410	< 4.4	35	230	10	7.6
TP-02 (0'-3')	11/11/2013	400	16	284	83	24	7.9
TP-02 (3'-5')	11/11/2013	400	95	885	570	50	7.8
TP-03 (0'-3')	11/11/2013	390	23	397	33	22	8.0
TP-03 (3'-5')	11/11/2013	380	15	385	35	25	8.2

2014 Soil Standards	S1-GW1	100	1000	200	600
	S3-GW1	200	5000	600	1000
	UCL	2000	10000	6000	10000

Notes: UCL - Upper Concentration Limit
Cr - Chromium, Cr+6 - Hexavalent Chromium, Cr+3 - Trivalent Chromium
* Cr+3 calculated by subtracting Cr+6 from Total Chromium. Cr+3 standards apply.

Environmental Strategies & Management

TABLE 2
SUMMARY OF
SOIL EXPOSURE POINT CONCENTRATIONS
EPC-1
MORSES POND CULVERT SITE
WELLESLEY, MA
(results in mg/kg)

EPC	Sample ID	Depth (feet)	Date	Total Chromium	Hexavalent Chromium	Calculated Trivalent Chromium	Total Lead	Total Nickel
Area 1 - 0-3'								
	ESMB-30	0-1	3/18/10		5	130	20	21
	ESMB-32	0-1	3/17/10		5	320	44	22
	ESMB-33	0-1	3/17/10		5	66	47	13
	ESMB-34	0-1	3/17/10		5	210	49	17
	ESMB-35	0-1	3/17/10	28			25	11
	ESMB-39	0-1	3/17/10		5	97	12	9.2
	ESMB-40	0-1	3/28/11		5	380	72	20
	ESMB-41	0-1	3/28/11		0.2	120	76	15
	ESMB-42	0-1	3/28/11		0.2	100	26	12
	ESMB-54	0-1	5/5/11		3.5	396.5	160	21
	ESMB-57	0-1	2/9/12		39	721	52	55
	ESMB-58	0-1	2/9/12	13			6.8	2.5
	ESMB-59	0-1	2/9/12		0.25	130	41	14
	ESMB-16	0-3	11/13/07		5	41	110	6
	ESMB-17	0-3	4/9/09	18			41	13
	ESMB-18	0-3	11/13/07		5	32	90	6
	ESMB-41	1-3	3/28/11		0.2	31	15	11
	ESMB-42	1-3	3/28/11		2.9	177.1	47	13
	ESMB-48	0-1	3/29/11		0.2	490	120	23
	ESMB-48	1-3	3/29/11		19	1581	16	12
	ESMB-54	1-3	5/5/11		3.4	416.6	31	15
	ESMB-57	1-3	2/9/12		51	649	120	39
	ESMB-58	1-2.5	2/9/12	27			8.3	15
	ESMB-59	1-3	2/9/12		0.25	200	38	15
	S-4	3	10/28/13		17	253	4.6	9
	S-6	0-3	10/29/13		28	532	5.9	9
	TP-01	0-3	11/11/13		2.2	39.8	95	8
	TP-02	0-3	11/11/13		16	284	83	24
	TP-03	0-3	11/11/13		23	397	33	22
Max				**28**	**51**	**1581**	**160**	**55**
Area 1 - Accessible Soil EPC				**21.5**	**9.9**	**311.8**	**51.3**	**16.3**
Method S-1 GW-1				100*	100*	1000	200*	600*
Exceeds Standard?				**no**	**no**	**no**	**no**	**no**
75% data below standard?				yes	yes	yes	yes	yes
Any concentration >10x standard?				no	no	no	no	no

* - Method 1 standards revised April 2014

TABLE 3
SUMMARY OF
SOIL EXPOSURE POINT CONCENTRATIONS
EPC-2
MORSES POND CULVERT SITE
WELLESLEY, MA
(results in mg/kg)

EPC	Sample ID	Depth (feet)	Date	Total Chromium	Hexavalent Chromium	Calculated Trivalent Chromium	Total Lead	Total Nickel
Area 1 - 3-15'								
	ESM-08	0-5	11/12/07		5	440	220	24
	ESM-09	0-5	11/12/07	14			5.5	5.5
	ESMB-14	0-5	11/12/07	13			39	17
	S-1	0-5	10/28/13		1.5	34.5	4.9	9
	S-2	0-5	10/28/13		5.1	65.9	4.4	11
	S-3	5	10/28/13		4.4	75.6	4.2	10
	S-5	0-5	10/28/13		14	226	5.1	9
	S-7	0-5	10/29/13		0.43	61.5	8.6	15
	S-8	0-5	11/4/13		6.4	90.6	7.1	14
	S-9	0-5	10/30/13		71	659	120	51
	S-10	5	10/30/13		85	755	52	19
	N-02	0-7	11/1/13		12	77	26	9
	N-03	0-7	11/1/13		84	866	60	56
	N-05	0-7	11/5/13		42	358	120	26
	N-06	0-7	11/5/13		34	1366	180	75
	N-07	0-7	11/5/13		25	275	29	15
	N-08	5	11/4/13		6.4	90.6	7.1	14
	N-09	5	11/11/13		17	56	31	22
	ESMB-30	3-5.25	3/18/10		5	290	10	35
	ESMB-32	3-4.75	3/17/10		5	120	51	14
	ESMB-33	3-4.5	3/17/10		5	40	24	11
	ESMB-34	3-5	3/17/10		5	30	29	12
	ESMB-35	3-4.5	3/17/10	14			34	9
	ESMB-39	3-4	3/17/10		5	30	5.3	14
	ESMB-40	3-4.5	3/28/11		5	37	8	17
	ESMB-41	3-5	3/28/11	28			26	10
	ESMB-42	3-5	3/28/11		0.2	38	8.3	12
	ESMB-54	3-5	5/5/11		1.8	238.2	54	14
	ESMB-16	3-8	11/13/07		5	200	58	17
	ESMB-17	3-8	4/9/09	28			15	10
	ESMB-18	3-8	11/13/07	25			5.5	12
	ESMB-41	5-7	3/28/11	19			6.5	11
	ESMB-42	5-7	3/28/11		0.2	38	7.5	11
	ESMB-44	5-7	3/28/11		22	1178	2.9	12
	ESMB-45	5-7	3/29/11		0.2	58	2.5	12
	ESMB-46	5-7	3/29/11		2.6	347.4	35	14
	ESMB-48	3-5	3/29/11		6.9	193.1	2.7	7.6
	ESMB-48	5-7	3/29/11		6	134	2.7	11
	ESMB-51	5-7	5/5/11		9	1291	110	72
	ESMB-54	5-7	5/5/11		0.2	92	28	13
	ESM-08	5-10	11/12/07		5	480	52	22
	ESM-09	5-10	11/12/07	15			5	11
	ESMB-14	5-10	11/12/07	19			11	20
	ESM-08	10-15	11/12/07		5	77	5	14
	ESM-09	10-15	11/12/07	23			5	12
	ESMB-14	10-15	11/12/07	21			5.5	16
	TP-01	3-5'	11/11/13		2.2	32.8	230	10
	TP-02	3-5'	11/11/13		95	885	570	50
	TP-03	3-5'	11/11/13		15	385	35	25
Max				**28**	**95**	**1366**	**570**	**75**
Area 1 - Potentially Accessible Soil EPC				**19.9**	**16.3**	**308.2**	**48.3**	**19.0**
Method S-1 GW-1				100*	100*	1000	200*	600*
Exceeds Standard?				**no**	**no**	**no**	**no**	**no**
75% data below standard?				yes	yes	yes	yes	yes
Any concentration >10x standard?				no	no	no	no	no

* - Method 1 standards revised April 2014

TABLE 4
SUMMARY OF
GROUNDWATER EXPOSURE POINT CONCENTRATIONS
MORSES POND CULVERT SITE
WELLESLEY, MA
(results in ug/L)

Area 1 Wells

Sample ID	Date	Dissolved Chromium	Hexavalent Chromium	Calculated Trivalent Chromium	Dissolved Lead	Dissolved Nickel
ESM-8	5/18/09	140	130	10	4	25
ESM-8	8/11/09	80	60	20	4	25
ESM-8	4/27/11	470	460	10	2.5	20
Max		470	460	20	4	25
ESM-8 EPC		**230**	**216.7**	**13.3**	**3.5**	**23.3**
Method 1 GW-1		100	100	100	15	100
Method 1 GW-3		300	300	600	10	200
Exceeds Standard?		**yes - GW-1**	**yes - GW-1**	**no**	**no**	**no**
75% data below GW-1 standard?		no	no	yes	yes	yes
75% data below GW-3 standard?		no	no	yes	yes	yes
Any concentration >10x GW-1 standard?		no	no	no	no	no
Any concentration >10x GW-3 standard?		no	no	no	no	no

Sample ID	Date	Dissolved Chromium	Hexavalent Chromium	Calculated Trivalent Chromium	Dissolved Lead	Dissolved Nickel
ESM-9	5/18/09	25		25	4	25
ESM-9	8/11/09	25	5	20	4	25
ESM-9	4/27/11	5	5	0	2.5	20
Max		25	5	25	4	25
ESM-9 EPC		**18**	**5.0**	**15.0**	**3.5**	**23.3**
Method 1 GW-1		100	100	100	15	100
Method 1 GW-3		300	300	600	10	200
Exceeds Standard?		**no**	**no**	**no**	**no**	**no**
75% data below GW-1 standard?		yes	yes	yes	yes	yes
75% data below GW-3 standard?		yes	yes	yes	yes	yes
Any concentration >10x GW-1 standard?		no	no	no	no	no
Any concentration >10x GW-3 standard?		no	no	no	no	no

Sample ID	Date	Dissolved Chromium	Hexavalent Chromium	Calculated Trivalent Chromium	Dissolved Lead	Dissolved Nickel
ESM-15	4/27/11	5	5	5	2.5	20
Max		5	5	5	2.5	20
ESM-15		**5**	**5**	**5**	**2.5**	**20**
Method 1 GW-1		100	100	100	15	100
Method 1 GW-3		300	300	600	10	200
Exceeds Standard?		**no**	**no**	**no**	**no**	**no**
75% data below GW-1 standard?		yes	yes	yes	yes	yes
75% data below GW-3 standard?		yes	yes	yes	yes	yes
Any concentration >10x GW-1 standard?		no	no	no	no	no
Any concentration >10x GW-3 standard?		no	no	no	no	no

Sample ID	Date	Dissolved Chromium	Hexavalent Chromium	Calculated Trivalent Chromium	Dissolved Lead	Dissolved Nickel
ESM-16	4/27/11	7600	4800	2800	2.5	20
Max		7600	4800	2800	2.5	20
ESM-16		**7600**	**4800**	**2800**	**2.5**	**20.0**
Method 1 GW-1		100	100	100	15	100
Method 1 GW-3		300	300	600	10	200
Exceeds Standard?		**yes - both**	**yes - both**	**yes - both**	**no**	**no**
75% data below GW-1 standard?		no	no	no	yes	yes
75% data below GW-3 standard?		no	no	no	yes	yes
Any concentration >10x GW-1 standard?		yes	yes	yes	no	no
Any concentration >10x GW-3 standard?		yes	yes	no	no	no

TOWN OF WELLESLEY MASSACHUSETTS
WETLANDS PROTECTION COMMITTEE
525 WASHINGTON STREET, WELLESLEY, MASSACHUSETTS 02482-5992

Robert Collins, Chair
J. Stanley Waugh
Jay C. Hammemess

Diane Torres, Assistant NRC Director
Email: dtorres@wellesleyma.gov
Telephone: (781) 431-1019 x2292
Fax: (781) 237-6495

Via Certified Mail

June 10, 2013

Environmental Strategies & Management, Inc.
c/o Angela Boyd
273 West Main Street
Norton, MA 02766

Re: Order of Conditions - MassDEP #324-710 – 1 Bacon Street, Wellesley, MA

Dear Ms. Boyd:

Please find enclosed the **ORIGINAL** signed Order of Conditions for the above referenced project. This document must be recorded at the Norfolk County Registry of Deeds and evidence of the recording must be submitted to the Wetlands Protection Committee. Note that there is a 10-day legal appeal period associated with all Orders during which work on the project cannot begin. Please read the document carefully as there are a number of conditions that must be adhered to before, during and after work on your project.

If you have any questions, please feel free to contact me.

For the Committee,

Diane E. Torres

Diane E. Torres
Assistant NRC Director

Cc: MA Department of Environmental Protection, Northeast Regional Office (eDEP)
American Premier Underwriters, Inc., c/o Earl Imhoff, 1 East Fourth Street, Cincinnati, OH 45202
Jaime Marotta, Bacon Street Realty Trust, 1 Bacon Street, Wellesley, MA 02482
File

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 - Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:324-0710
eDEP Transaction #:569784
City/Town:WELLESLEY

A. General Information

1. Conservation Commission: WELLESLEY
2. Issuance: a. ☑ OOC b. ☐ Amended OOC
3. Applicant Details

a. First Name	EARL	b. Last Name	IMHOFF
c. Organization	AMERICAN PREMIER UNDERWRITERS, INC.		
d. Mailing Address	1 EAST FOURTH STREET		
e. City/Town	CINCINNATI	f. State OH	g. Zip Code

4. Property Owner

a. First Name	JAIME	b. Last Name	MAROTTA		
c. Organization	BACON STREET REALTY TRUST				
d. Mailing Address	1 BACON STREET				
e. City/Town	WELLESLEY	f. State	MA	g. Zip Code	02482

5. Project Location

a.Street Address	1 BACON STREET		
b.City/Town	WELLESLEY	c. Zip Code	02482
d. Assessors Map/Plat#	194	e. Parcel/Lot#	16
f. Latitude	42.29502N	g. Longitude	71.31875W

6. Property recorded at the Registry of Deed for:

a. County	b. Certificate	c. Book	d. Page
NORFOLK		13259	546

7.Dates

a. Date NOI Filed : 4/2/2013 b. Date Public Hearing Closed: 5/30/2013 c. Date Of Issuance: 6/10/2013

8.Final Approved Plans and Other Documents

a. Plan Title:	b. Plan Prepared by:	c. Plan Signed/Stamped by:	d. Revised Final Date:	e. Scale:
SEE ATTACHED "EXHIBIT A" FOR LIST OF PLANS AND OTHER DOCUMENTS				

B. Findings

1.Findings pursuant to the Massachusetts Wetlands Protection Act

Following the review of the the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act.

Check all that apply:

a. ☑ Public Water Supply	b. ☐ Land Containing Shellfish	c. ☑ Prevention of Pollution
d. ☑ Private Water Supply	e. ☑ Fisheries	f. ☑ Protection of Wildlife Habitat
g. ☑ Ground Water Supply	h. ☑ Storm Damage Prevention	i. ☑ Flood Control

2. Commission hereby finds the project, as proposed, is:

Approved subject to:

a. ☑ The following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

Denied because:

b. ☐ The proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ The information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the interests of the Act , and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

3. ☑ Buffer Zone Impacts:Shortest distance between limit of project disturbance and the wetland resource area specified in 310CMR10.02(1)(a). 35 a. linear feet

Inland Resource Area Impacts:(For Approvals Only):

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☐ Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. ☐ Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. ☐ Land under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet

	e. c/y dredged	f. c/y dredged		
7. ☐ Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. ☐ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

Coastal Resource Area Impacts:

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		

19. ☐ Land Containing Shellfish

_____ _____ _____ _____
a. square feet b. square feet c. square feet d. square feet

20. ☐ Fish Runs

Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above

_____ _____
c. c/y dredged d. c/y dredged

21. ☐ Land Subject to Coastal Storm Flowage

_____ _____
a. square feet b. square feet

22.

☐ Restoration/Enhancement (For Approvals Only)

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c & d or B.17.c & d above, please entered the additional amount here.

_____ _____
a. square feet of BVW b. square feet of Salt Marsh

23.

☐ Streams Crossing(s)

If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

_____ _____
a. number of new stream crossings b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. the work is a maintenance dredging project as provided for in the Act; or
   b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not exceed the issuance date of the original Final Order of Conditions.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken,

until all proceedings before the Department have been completed.

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work..
10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,
" Massachusetts Department of Environmental Protection"
[or 'MassDEP"]
File Number :"324-0710"
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before Mass DEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. The work associated with this Order(the "Project") is (1) ☐ is not (2) ☑ subject to the Massachusetts Stormwater Standards. If the work is subject to Stormwater Standards, then the project is subject to the following conditions;
   a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollutant Discharge Elimination System Construction General Permit as required by Stormwater Standard 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
   b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that: *i.* all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater

Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures; *ii.*. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized; *iii.* any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10; *iv.* all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition; *v.* any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 19(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollutant Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 19(f) through 19(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 19(f) through 19(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.

g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around

stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions:

SEE ATTACHED "EXHIBIT A" FOR SPECIAL CONDITIONS ISSUED BY THE WELLESLEY WETLANDS PROTECTION COMMITTEE UNDER THE MA WETLANDS PROTECTION ACT AND THE TOWN OF WELLESLEY WETLANDS PROTECTION BYLAW.

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☑ Yes ☐ No

2. The Conservation Commission hereby(check one that applies):

   a. ☐ DENIES the proposed work which cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

      1. Municipal Ordinance or Bylaw _____ 2. Citation _____

      Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order or Conditions is issued. Which are necessary to comply with a municipal ordinance or bylaw:

   b. ☑ APPROVES the proposed work, subject to the following additional conditions.

      1. Municipal Ordinance or Bylaw WELLESLEY WETLANDS PROTECTION BYLAW 2. Citation ARTICLE 44

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows:
SEE ATTACHED "EXHIBIT A" FOR SPECIAL CONDITIONS ISSUED BY THE WELLESLEY WETLANDS PROTECTION COMMITTEE UNDER THE MA WETLANDS PROTECTION ACT AND THE TOWN OF WELLESLEY WETLANDS PROTECTION BYLAW.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
324-710
MassDEP File #
569784
eDEP Transaction #
Wellesley
City/Town

E. Signatures

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

6/10/13
1. Date of Issuance

Please indicate the number of members who will sign this form.
This Order must be signed by a majority of the Conservation Commission.

2
2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy must be mailed, hand delivered or filed electronically at the same time with the appropriate MassDEP Regional Office.

Signatures:

Robert Collins

~~Jay Hammarlund~~
J. Stanley Waugh

☐ by hand delivery on

Date

☑ by certified mail, return receipt requested, on

6/10/13
Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

WELLESLEY
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

WELLESLEY
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

1 BACON STREET
Project Location

324-0710
MassDEP File Number

Has been recorded at the Registry of Deeds of:

County Book Page

for: Jaime Marotta 6/13/13
Property Owner JAIME MAROTTA

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

Rev. 4/1/2010

EXHIBIT A

Project: This work is being done under the MA Contingency Plan (MCP) and is approved as a limited project under 10.53(3)(q), remediation of a release of hazardous material in accordance with 310 CMR 40.00. Metal-impacted soil will be excavated from a residential property and removed off site. An existing porch will be removed to allow access to the work area and then rebuilt. Excavated areas will be backfilled with clean fill to original grade.

Wetland Resource Areas on the Site:

- Buffer Zone (Bylaw only)

Applicant:
American Premier Underwriters
c/o Earl Imhoff
1 East Fourth Street
Cincinnati, OH 45202

Property Owner:
Bacon Street Realty Trust
c/o Jaime Marotta
1 Bacon Street
Wellesley, MA 02482

Date of Issuance: June 10, 2013

Documents of Record:

- Notice of Intent and attached documents stamped received in the NRC Office on 4/2/13;
- cover letter dated 4/3/13 from Angela Boyd of Environmental Strategies & Management;
- Bylaw Notice of Intent submitted with the NOI;
- attached plan: "Excavation Plan, Notice of Intent" prepared by Environmental Strategies & Management, Scale: 1" = 20', dated 2/18/13, not signed or stamped;
- cover letter dated 3/11/13 from Angela Boyd of Environmental Strategies & Management accompanying draft MA Contingency Plan (MCP) Phase IV Report;
- MCP Phase IV – Remedy Implementation Plan dated 3/21/13 prepared by Environmental Strategies & Management, Inc., stamped received in the NRC Office on 4/4/13;
- emails dated 4/1/13 through 4/2/13 between Angela Boyd of Environmental Strategies & Management (with attached additional information) and Diane Torres;
- Project Review/Evaluation – NOI;
- Plan for Adverse Weather Conditions stamped received in the NRC Office on 5/1/13;
- draft OOC Exhibit A(1) and OOC Exhibit A(2);

EXHIBIT A

- emails between Angela Boyd of Environmental Strategies & Management and Diane Torres dated 4/1/13, 4/29/13 and 5/7/13; and
- email dated 5/30/13 from Gary Bogue of MassDEP to Angela Boyd of Environmental Strategies & Management saying he had no comments on the filing.

Findings:

Existing Conditions:

According to the MA Contingency Plan, Phase IV – Remedy Implementation Plan, it is believed that paint wastes containing heavy metals from the Henry Wood's Sons Paint Factory were placed around the culvert at the south end of Morses Pond more than 100 years ago. In 2002, APU received a Notice of Responsibility (NOR) from MassDEP to conduct response actions under the MA Contingency Plan (MCP) at this site. APU elected to proceed with response actions even though APU does not deem itself to be a "Potentially Responsible Party" as defined under MGL Chapter 21E, Section 5. The site was the subject of assessment activities conducted by MassDEP in the late 1990's and was also the subject of a Time Critical Removal Action (TCRA) performed by the EPA in 2001 and 2002. The TCRA did not document the attainment of a permanent solution under the MCP. A combined MCP Phase II Comprehensive Site Assessment Report and Phase III Remedial Action Plan (Phase II/III Report) was submitted to MassDEP on June 7, 2011. This proposed work is under the MA Contingency Plan, Phase IV – Remedy Implementation Plan.

The project site is in the yard on a residential lot that borders on Morses Pond. There is an existing retaining wall and a deck along with the single family house. The EPA knew of a larger contamination problem in this area and performed some critical action but did not clean up as much as the state requires. The site is not within Estimated Habitat.

Proposed Conditions:

This work is being done under the MA Contingency Plan (MCP), Phase IV – Remedy Implementation Plan and is approved as a Limited Project under 10.53(3)(q). It is believed that the metals from paint waste are more likely to harm the resource areas than these planned response actions. The proposal involves excavation to remove contaminated soil in excess of risk-based standards in the 75' Limited Disturbance Zone mostly near the ground surface. A monitoring well(s) was used to define the worst possible contamination limit at the site. A retaining wall and grading will require removal of the back deck to access the site. The deck will be rebuilt after the work is completed. The removed material will be directly placed into roll-off containers using a mini excavator or a caterpillar and disposed of offsite. Five to seven feet of soil are expected to be removed. Clean fill will replace the removed material to the same grade, a jute mat will be put in place and the area will be reseeded with grass.

The excavation is expected to take six to eight days and will be scheduled for a time when heavy rain (in excess of .5" per hour) is not predicted.

EXHIBIT A

Wetland Delineation:

The wetland resource area delineation was completed by creating a base map using drawings and information available from the City of Wellesley and confirmed/modified using publicly available aerial photos and satellite imagery. The Buffer Zone was then added by measuring 25' and 100' from the Bank of Morses Pond.

The Committee finds that the delineation of wetland resource areas is accurate as shown on the NOI plans. Under the Massachusetts Wetlands Protection Act, Buffer Zone is not a resource area but is a regulated wetland area and is located within 100-feet of an area specified in 310 CMR 10.02(1)(a).

NOI under the Wellesley Wetlands Protection Bylaw:

A Notice of Intent under the Wetlands Protection Bylaw (Article 44) has been submitted with this filing for work in the Buffer Zone.

Compliance with Applicable Performance Standards by Resource Area:

General Conclusion:

The Town of Wellesley Wetlands Protection Committee has determined that the proposed project can be conditioned to comply with the applicable performance standards of the Massachusetts Wetlands Protection Act and the Town of Wellesley Wetlands Protection Bylaw as described within this document. As such, this Order of Conditions is issued under both the Act and the Bylaw.

- Buffer Zone (Bylaw) -- 25' No Disturbance Zone: Work in the 25' No-Disturbance Zone "shall not be permitted" but project proponents may seek a waiver from this regulation. No work is proposed in the 25' No Disturbance Zone.

- Buffer Zone (Bylaw) -- 75' Limited Disturbance Zone: Work in the 75' Limited Disturbance Zone must meet a not "more likely than not to harm or eventually harm" jurisdictional Bylaw resource area performance standard. The Committee finds that the proposed work fulfills this performance standard for work in the Limited Disturbance Zone. Erosion control barriers will be properly placed, disturbed areas in the Buffer Zone will be restored at the conclusion of the project and the work will create an improvement to the site.

With the conditions set forth within this Order of Conditions, the project will not yield any long term negative impact to the buffer and its ability to serve the interests of the Act and Bylaw; The Committee finds that the overall project will maintain the ability of the buffer zone and wetland resource areas to serve and protect the interests of the Act and the Bylaw, as well as, enhance the health and function of resource areas and buffer zones.

EXHIBIT A

The Committee reserves the right to place additional conditions on the activities or to set more restrictive criteria for their use if in its judgment, based on yearly reports and other evidence, such conditions are needed to protect the interests of the Wetlands Protection Act and the Wellesley Wetlands Protection Bylaw.

Special Conditions:

GENERAL:

1. Except where modified by the following Conditions, all work shall be performed in accordance with the plans and the Notice of Intent referenced above. Where a conflict exists between the referenced plans and these Conditions, the Conditions will govern.

2. The Wellesley Wetlands Protection Committee reserves the right to enter upon the premises to inspect the work for compliance with the Order of Conditions.

3. If the applicant intends to make any change in the work permitted hereunder, the applicant must submit a written request to the Committee with plans or a description that reflects the proposed changes. Upon review of said request, the Committee may require the applicant to submit a request for an Amendment to the Order of Conditions. No changes may be made before said written request is presented to the Committee and approval thereof is given in writing by the Committee. Changes needing approval include, but are not limited to additional decks, patios, and landscaped areas, changes in elevation of structures, alteration of vegetation, alteration of approved construction sequence, regrading, and all other alterations within resource areas and buffer zones.

4. If any change is made, or plans altered or revised without prior approval of the Committee, additional conditions and/or enforcement actions may be imposed to protect the interests of the Wetlands Protection Act and the Wellesley Wetlands Protection Bylaw.

5. The Committee reserves the right to amend this Order of Conditions after a legally advertised public hearing if plans or circumstances are changed or if new conditions or information so warrant.

6. The term "applicant" as used in this Order of Conditions shall refer to the owner, any successor in interest or successor in control of the property referenced in the Notice of Intent, supporting documentation and this Order. The Committee shall be notified in writing within 30 days of all transfers of title of any portion of the property that take place prior to the issuance of the Certificate of Compliance.

7. The applicant shall, in accordance with 310 CMR 10.05(4)(e), obtain all permits, variances and approvals required by the Bylaws of the Town of Wellesley.

EXHIBIT A

8. It is the responsibility of the applicant to complete any review required by all agencies with jurisdiction over the activity that is the subject of this Order of Conditions, and to procure all required permits or approvals before any work commences. These reviews, permits and approvals may include but are not limited to the following:

    a) Review by the U.S. Army Corps of Engineers for any Category 2 or Individual Permit activity and procurement of any permits or approvals identified by the Corps;

    b) Review by the Department of Environmental Protection (DEP) and procurement of any permits or approvals identified by DEP;

    c) Review by the Massachusetts NHESP for any projects within estimated and/or priority habitat and any permits of approvals identified by the program; and

    d) Review by the local planning boards, boards of health, zoning boards and building inspectors and procurement of any permits or approvals required by these boards or agencies.

9. Equipment no larger than a mini excavator or caterpillar shall be used for the excavation.

10. The owner(s) shall take all reasonable precautions to prevent the release of contaminants in the event of severe weather.

11. Every day before work begins a dust monitor will be set up at a location downwind of the work and shall be observed regularly. On windy days, dust monitoring frequency shall increase. If needed, dust suppression activities shall occur.

12. As soon as possible all disturbed areas shall be brought to final grade and permanently stabilized.

13. If any unforeseen problems occur during work that could affect any of the interests of the Act or the Bylaw, upon discovery the owner shall notify the Commission.

14. Any departures from or changes to the plans, specifications, or data approved in this Order shall not be acted on until approved by the Commission.

15. The owner(s) shall take all reasonable precautions to prevent the release of contaminants by ignorance, accident, or vandalism during and after work on this project. In the event that there is a discharge or spillage of contaminants into any part of the site governed by this Order, the owner shall immediately notify the Commission and shall take all necessary actions to contain and remove the pollutants from the site. This condition shall remain in perpetuity and shall not expire with the issuance of the Certificate of Compliance.

EXHIBIT A

16. The excavation shall be backfilled daily to avoid having an unattended open pit and if heavy rains are predicted to occur, the excavation will be backfilled prior to its onset.

17. Work shall stop if water accumulates in the excavation or if visibility is diminished.

18. Work shall stop if soil becomes too wet to properly manage.

19. The excavation shall be inspected by a qualified individual after heavy rain.

PRECONSTRUCTION:

20. Erosion controls shall be installed at the site in accordance with the plans approved by this Order and/or per the direction of the Committee or Assistant NRC Director. If hay bales and silt fencing are used as erosion controls, hay bales shall be entrenched 4-inches into the ground and double staked and silt fencing shall be entrenched a minimum of 4-inches into the ground. Since most, if not all stormwater catch basins in the streets and roads of the Town discharge immediately or ultimately into wetlands resource areas, erosion controls need to be installed in all stormwater catch basins located adjacent to the site that may receive stormwater runoff from the site. These additional erosion controls shall be installed in accordance with the plans approved by this Order and/or per the direction of the Committee or Assistant NRC Director. Usually silt sacks (not filter fabric) installed and properly maintained shall meet this latter requirement.

21. The applicant shall preserve and protect all sizeable trees within wetland resource areas during the demolition and/or construction phases of this project. If a Tree Protection Plan is required under the Tree Protection Bylaw that includes trees in wetland resource areas, the applicant shall submit a copy of the Tree Protection Plan. For all sizeable trees within wetland resource areas that are not protected under the Tree Protection Plan, the applicant shall include a tree protection plan that meets the standards of the WPC which are as follows:

    The applicant shall install temporary construction fences around all of the trees with a DBH* of ten (10) inches or greater and which are **within the limit of work boundaries**. The fences shall be placed as far out from the trunks of the trees as possible to protect the root systems, allowing at least 18 inches of space from the trunk for each inch of trunk diameter if practicable. For example, if a tree's diameter is 10 inches, then the fence should have a diameter of 15 feet. The fence shall be kept clear of building materials, waste and excess soil. No digging, trenching or other soil disturbance shall be allowed in the fenced area.

    *DBH means Diameter at Breast Height which is the diameter at a height of four and one-half (4.5) feet above the existing grade at the base of the tree.

EXHIBIT A

22. After erosion controls and the MassDEP sign have been installed and prior to the start of construction, the applicant shall request that the Committee and/or Assistant NRC Director conduct a preconstruction site inspection to ensure that all preconstruction conditions have been fulfilled. No work on the project may begin until the Committee or Assistant NRC Director so authorizes.

23. All "Preconstruction" Conditions of the Order shall be satisfied prior to the start of construction. The Committee may grant a waiver from this Condition if or when a request has been made by the applicant in writing and unique circumstances warrant such a waiver.

24. The applicant shall submit in writing, the names and contact information of the person(s) responsible at all times for compliance with this Order and for maintenance of erosion and sedimentation controls. Appropriate parties would be the contractor, project engineer and/or wetlands specialist, etc.

CONSTRUCTION:

25. A copy of the above referenced plans and this Order of Conditions must be provided to the contractor **prior to the commencement of work** and must be available at all times at the construction site for reference.

26. No work, disturbance, or alteration may occur on the resource area side of the erosion control barrier (which will also serve as a limit of work demarcation) unless permitted under this Order. No heavy equipment may operate beyond the limit of work at any time. No construction materials, stockpiled soil or fill, debris, brush, leaves, or other materials may be placed beyond the limit of work. The only exception to this condition is for work associated with the installation of wetland enhancement/restoration plantings as outlined in submitted plans and for the hand removal of trash and debris.

27. No plants listed on the latest Massachusetts Department of Agricultural Resources Prohibited Plant List may be brought onto or planted anywhere on the property. (Plant List is available at http://www.mass.gov/agr/farmproducts/Prohibited_Plant_Index2.htm.)

28. The applicants must keep at least 20 feet of extra silt fence or 5 extra hay bales on site in case there is a need for immediate repair of erosion controls or if sediment is found to be leaving the site at any location.

29. Silt sacks, if required for the project, shall be emptied at least once every two weeks and whenever silt and debris have collected to a level that is affecting the functionality of the silt sack and/or catch basins. Silt sacks shall be maintained in good working order and must be repaired or replaced when damaged.

30. The applicants must remove all silt caught by hay bales and siltation fencing at least once every two weeks and whenever the silt collects to a height greater than 1/2 the height of the

EXHIBIT A

barrier in any location. The applicant must immediately report to the Committee any sediment that goes beyond the erosion control line. The applicant must take whatever steps are necessary to prevent further damage to the resource area, and must then submit to the Committee a plan for remediation and/or restoration.

31. If dewatering is necessary, the applicant must submit a plan to the Wetlands Protection Committee identifying how dewatering will be accomplished, where water will be discharged and what measures will be used to protect adjacent resource areas. **No dewatering is allowed until the Committee or Assistant NRC Director has reviewed and approved said dewatering plan.** No dewatering may proceed until the Committee or Assistant NRC Director has inspected and approved the installation of the dewatering controls.

32. There shall be no stockpiling of soil, sand or similar unconsolidated material within 100 feet of resource areas unless otherwise authorized by these Conditions, by the Wetlands Protection Committee, or by the Assistant NRC Director. Any stockpile of soil, sand, or similar materials that is permitted within a buffer zone or resource area, must be enclosed within a line of entrenched and staked hay bales or silt fence. In the event that all earthwork ceases for more than 30 days, all exposed soils must be stabilized with a temporary vegetative cover, straw mulch, or other method of erosion control accepted by the Wetlands Protection Committee.

33. If a stormwater management system is required in the plans, then upon installation and prior to being buried, the project engineer or site manager shall inspect the stormwater management system for compliance with this Order and the approved plans. The engineer shall submit a signed and stamped statement to the Committee noting that the system has been installed per plan and/or noting any deviations from the plans. If the project engineer does not inspect the stormwater system prior to being buried, excavation of the system may be required to expose it for inspection.

34. No fueling or maintenance of vehicles shall be allowed within a buffer zone or resource area unless otherwise authorized by the Conditions, the Committee or the Assistant NRC Director.

35. No construction materials, debris, brush, leaves or other materials shall be deposited within the resource area*(s)* or down gradient of the limit of work.

36. At the end of each workday, the applicant or contractor shall mechanically sweep or manually sweep sediments from the adjacent streets, unless tracking and sediment is not evident on the streets.

37. Following the completion of construction and grading, all exposed soils within the resource area(s) and buffer zones must be stabilized with a permanent vegetative cover. Bark mulch or wood mulch will not be considered to provide a permanent stabilization on slopes with a gradient steeper than 3:1.

EXHIBIT A

38. The Committee reserves the right to impose additional conditions on portions of this project to mitigate any impacts which could result from site erosion, or any noticeable degradation of surface water quality discharging from the site.

POST CONSTRUCTION:

39. Upon completion of construction and final soil stabilization, the Applicant shall submit the following to the Wetlands Protection Committee to request a Certificate of Compliance (COC):
    - A completed Request for Certificate of Compliance – WPA Form 8A;
    - A copy of the Phase IV completion statement required under the MA Contingency Plan must be submitted in order to obtain a Certificate of Compliance.
    - A letter **signed** and **stamped** by a Professional Engineer, Registered Land Surveyor, Registered Landscape Architect *or Licensed Site Professional* **certifying** either that all work has been completed "strictly in compliance" with the Order of Conditions or that all work has been completed "substantially in compliance" with the Order. If said letter certifies that the work has been completed "substantially in compliance", then the letter must describe in detail any deviations from the Plans as approved by the Committee and their potential effect on the project and the wetland resource areas. A "substantially in compliance" letter without the detailing of deviations shall be found unacceptable by the Committee and will cause a Request for a Certificate of Compliance to be denied.

40. Immediately after work is completed, a jute mate shall be installed and the area shall be seeded.

41. Upon completion of the project, excess material including but not limited to soil, cut vegetation or other landscape debris generated from work associated with this project shall either be reused on site in areas that are outside of buffer zones and resource areas or be removed from the site and disposed of in a legal fashion.

42. With the approval of the Committee or Assistant NRC Director, erosion controls may be removed from the site when the surface is permanently stabilized. These must be removed before the issuance of a Certificate of Compliance.

43. Should new wetland resource areas be created as part of a mitigation plan for this project, such areas shall hereafter be subject to the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131§ 40) and the Wellesley Wetlands Protection Bylaw. This condition is ongoing and does not expire with the Order of Conditions or the issuance of a Certificate of Compliance.

44. There shall be no sedimentation into wetlands or water bodies from discharge pipes or surface runoff leaving the site.

EXHIBIT A

CONDITIONS IN PERPETUITY

45. Wetlands and/or wetland buffer zones located on this property are subject to the Massachusetts Wetlands Protection Act (MGL Ch. 131, s. 40) and/or the Wellesley Wetlands Protection Bylaw. Any work within a wetland resource area or adjacent buffer zones that might fill, excavate, or otherwise alter that area, requires approval from the Wellesley Wetlands Protection Committee, in accordance with the Act and the Bylaw. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance or a Certificate of Compliance.

46. Fertilization of lawn and landscaped areas is a significant source of excess nutrient loading in downstream water bodies. No fertilization of any wetland resource area is allowed. Only organic fertilizers, such as leaf mulch, may be used on lawn and landscaped areas. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance of a Certificate of Compliance.

47. No synthetic pesticides or herbicides may be applied within any wetland resource area including any Riverfront Area or within a wetland buffer zone. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance of a Certificate of Compliance.

48. Only calcium-based deicing chemicals may be used on surfaces where runoff or drainage will discharge into wetland resource areas. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance of a Certificate of Compliance.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28150	10/9/2013	Soil	No	NA	NA	NA	NA	Usable for waste disposal pre-characterization

Sample ID	Date	Lab ID	Matrix	Analysis
Area 1 Comp	10/9/2013	28150-01	soil	8260, 8270, TPH, 8082, RCRA metals, corrosivity, reactivity, ignitability
Trip Blank	NA	28150-02	water	8260

This laboratory report was non-CAM, as samples were not to be used in site characterization or risk assessment.

All QAQC data, including surrogate and trip blank results were reviewed.

This report was deemed usable for the purpose of waste disposal pre-characterization by Angela Boyd on 3/31/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28150
Date Received: 10/10/13

Project: APU Wellesley 2011-037 Tsk#4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 10/22/2013
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.68 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromomethane	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
diethyl ether	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
acetone	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
methylene chloride	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
t-butanol (TBA)	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chloroform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
benzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,4-dioxane	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
dibromomethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
toluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2-hexanone	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.68 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
o-xylene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
styrene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromoform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
naphthalene	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
toluene-D8 SUR	**102**	88-110	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
a,a,a-trifluorotoluene SUR	**107**	70-130	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-002
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 7:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromomethane	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
diethyl ether	< 0.5	0.5	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
acetone	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
methylene chloride	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
t-butanol (TBA)	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chloroform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
benzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,4-dioxane	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
dibromomethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
toluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2-hexanone	< 0.5	0.5	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-002
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 7:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
o-xylene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
styrene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromoform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
naphthalene	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
toluene-D8 SUR	**101**	88-110	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-chlorophenol	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
isophorone	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dichlorophenol	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,2,4-trichlorobenzene	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
naphthalene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzoic acid	< 5	5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-methylnaphthalene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-chloronaphthalene	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
acenaphthylene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
dimethylphthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
acenaphthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dinitrophenol	< 5	5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
dibenzofuran	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
fluorene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
diethyl phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-nitroaniline	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
phenanthrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
anthracene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
di-n-butylphthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
fluoranthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzidine	< 3	3	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
pyrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
butyl benzyl phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(a)anthracene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
chrysene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
3,3'-dichlorobenzidine	< 3	3	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
di-n-octyl phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(b)fluoranthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(k)fluoranthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(a)pyrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
dibenzo(a,h)anthracene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(g,h,i)perylene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**68**	21-100	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
phenol-D5 SUR	**74**	10-102	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4,6-tribromophenol SUR	**85**	10-123	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
nitrobenzene-D5 SUR	**75**	35-114	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-fluorobiphenyl SUR	**90**	43-116	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
p-terphenyl-D14 SUR	**93**	33-141	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1221	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1232	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1242	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1248	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1254	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1260	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**117**	30-150	%	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
decachlorobiphenyl SUR	**111**	30-150	%	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
TPH C10-C36	< 210	210	ug/g	1	JLZ	10/14/13	6447	10/15/13	10:19	SW3550C8100m
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**95**	40-140	%	1	JLZ	10/14/13	6447	10/15/13	10:19	SW3550C8100m
o-terphenyl SUR	**98**	40-140	%	1	JLZ	10/14/13	6447	10/15/13	10:19	SW3550C8100m

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Arsenic	**5.1**	0.6	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Barium	**38**	3	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Chromium	**560**	3	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Lead	**57**	0.6	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Mercury	< 0.17	0.17	ug/g	1	AB	10/11/13	6444	10/11/13	16:19	SW7471B
Selenium	< 3	3	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Cyanide, total	< 0.6	0.6	ug/g	1	APA		1302667	10/14/13		E9014
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA		1302679	10/15/13		SM4500-S
Ignitability	**NonIgnitable**			1	KW		1302662	10/11/13		SW1010
pH	**7.5**		pH	1	APA		1302666	10/15/13	4:40	SW9045C

Project ID: 2011-037 Tsk#4 APU Wellesley
Job ID: 28150
Sample #: 28150-003
Sample ID: Area 1-Comp
Matrix: TCLP Extract
Sampled: 10/9/13 9:30
TCLP: 10/15/13

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	**1.0**	0.50	5	mg/L	1	AB	10/17/13	6455	10/17/13	14:57	SW1311 SW3005A6010C

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28150

Company Name: ES&M
Company Address: 273 West Main St. Norton, MA
Report To: Tom Sweeney
Phone #: 508-726-1800
Invoice To: ☐ Email: ES&M

Project Name: APU Wellesley
Project #: 2011-037 TSK#4
Project Location: NH (MA) ME VT ___ Other
Protocol: RCRA (MCP) SDWA NPDES NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other ___
Quote # ___ ☐ NH Reimbursement Pricing
PO # ___

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☒ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☒ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☒ 8270ABN ☐ 625 ☐ EDB 504.1	☒ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☒ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☒ Corrosivity ☒ Reactive CN ☒ Reactive S- ☒ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde				Grab (G) or Composite (C)
28150-01	AREA 1-COMP	4									10/9/13	0930	MW	1				X	X	X				X							X						C
-02	TRIP BLANK	1								1	10/9/13	0700	MW	1																							C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☐
*Date Needed 72HR TAT

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * WASTE DISPOSAL PACKAGE
* PLEASE RUN TCLP IF OVER THE THEORETICAL Limit

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) H'lynn@esm-inc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#) ___

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 1 °C

CUSTODY RECORD
QSD-01 Revision 03/21/13

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
Mark Winters	10/9/13	12:28	Allen Caswell	10/9/13	12:28
Allen Caswell	10/10/13	12:15			
			Received by Laboratory:	10/10/13	1220

[signature] 10/10/13 ~~1220~~ 1620 [signature] 10/10/13 1620

11

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28272	10/28/2013	Soil	Yes	Yes	No	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
S-01 Sidewall South	10/28/2013	28272-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
S-02 Sidewall East	10/28/2013	28272-02	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
S-03 Bottom 5'	10/28/2013	28272-03	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
S-04 Bottom 3'	10/28/2013	28272-04	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
S-05 Sidewall West	10/28/2013	28272-05	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

QC performance standards were not met, as no sample was specified for a metals matrix spike

All QAQC data, including method blank, Laboratory Control Sample (LCS), duplicate, LCS duplicate, and matrix spike results were reviewed.

This report was deemed usable by Angela Boyd on 3/31/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28272
Date Received: 10/28/13

Project: APU Wellesley 2011-037 Task #4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester
Principal, General Manager

Date of Approval: 11/8/2013
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28272

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
S-01 Sidewall South	Solid	10/28/2013 12:15	28272-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
S-02 Sidewall East	Solid	10/28/2013 12:25	28272-002	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
S-03 Bottom 5'	Solid	10/28/2013 12:30	28272-003	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
S-04 Bottom 3'	Solid	10/28/2013 12:35	28272-004	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
S-05 Sidewall West	Solid	10/28/2013 13:00	28272-005	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28272

Sample#: 28272-001

Sample ID: S-01 Sidewall South

Matrix: Solid Percent Dry: 96.9% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**36**	3	ug/g	1	AB	10/30/13	6486	10/30/13	13:53	SW3051A6010C
Lead	**4.9**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	13:53	SW3051A6010C
Nickel	**9**	3	ug/g	1	AB	10/30/13	6486	10/30/13	13:53	SW3051A6010C

Sample#: 28272-002

Sample ID: S-02 Sidewall East

Matrix: Solid Percent Dry: 97% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**71**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:00	SW3051A6010C
Lead	**4.4**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	14:00	SW3051A6010C
Nickel	**11**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:00	SW3051A6010C

Sample#: 28272-003

Sample ID: S-03 Bottom 5'

Matrix: Solid Percent Dry: 96.1% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**80**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:08	SW3051A6010C
Lead	**4.2**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	14:08	SW3051A6010C
Nickel	**10**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:08	SW3051A6010C

Sample#: 28272-004

Sample ID: S-04 Bottom 3'

Matrix: Solid Percent Dry: 95.6% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**270**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:15	SW3051A6010C
Lead	**4.6**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	14:15	SW3051A6010C
Nickel	**9**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:15	SW3051A6010C

Sample#: 28272-005

Sample ID: S-05 Sidewall West

Matrix: Solid Percent Dry: 96.3% Results expressed on a dry weight basis.

Sampled: 10/28/13 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**240**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:23	SW3051A6010C
Lead	**5.1**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	14:23	SW3051A6010C
Nickel	**9**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:23	SW3051A6010C

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28272

Sample#: 28272-001

Sample ID: S-01 Sidewall South

Matrix: Solid Percent Dry: 96.9% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**1.5**	0.85	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**470**		mV	1	APA		1302787	10/29/13		ASTM1498-08
pH	**7.7**		pH	1	APA		1302786	10/29/13	5:40	SW9045C

Sample#: 28272-002

Sample ID: S-02 Sidewall East

Matrix: Solid Percent Dry: 97% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**5.1**	0.82	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**420**		mV	1	APA		1302787	10/29/13		ASTM1498-08
pH	**7.6**		pH	1	APA		1302786	10/29/13	5:45	SW9045C

Sample#: 28272-003

Sample ID: S-03 Bottom 5'

Matrix: Solid Percent Dry: 96.1% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**4.4**	0.85	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**410**		mV	1	APA		1302787	10/29/13		ASTM1498-08
pH	**7.6**		pH	1	APA		1302786	10/29/13	5:50	SW9045C

Sample#: 28272-004

Sample ID: S-04 Bottom 3'

Matrix: Solid Percent Dry: 95.6% Results expressed on a dry weight basis.

Sampled: 10/28/13 12:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**17**	0.85	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**390**		mV	1	APA		1302787	10/29/13		ASTM1498-08
pH	**7.3**		pH	1	APA		1302786	10/29/13	5:55	SW9045C

Sample#: 28272-005

Sample ID: S-05 Sidewall West

Matrix: Solid Percent Dry: 96.3% Results expressed on a dry weight basis.

Sampled: 10/28/13 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**14**	0.85	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**390**		mV	1	APA		1302787	10/29/13		ASTM1498-08
pH	**7.2**		pH	1	APA		1302786	10/29/13	6:00	SW9045C

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 2011-037

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28272**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/8/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28272

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 3 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6486	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6486	Chromium			16	ug/g	14		2.45	24.7		
		Nickel			19	ug/g	17		6.2	27.5		
		Lead			5100	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6486	Chromium			16	ug/g	14		2.45	24.7	0	35
		Nickel			19	ug/g	17		6.2	27.5	2	35
		Lead			5100	ug/g	5100		3750	6470	1	35
SW3051A6010C	DUP6486	Chromium	28293-001		18	ug/g					3	35
		Lead	28293-001		40	ug/g					17	35
SW3051A6010C	MS6486	Chromium	28293-001		130	ug/g	129	89	75	125		
		Lead	28293-001		150	ug/g	129	77	75	125		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM6490	Chromium, Hexavalent			60	ug/g	93		26.2	288		
SW3060A7196A	CRMD6490	Chromium, Hexavalent			55	ug/g	93		26.2	288		30
SW3060A7196A	PB6490	Chromium, Hexavalent		<	0.80	ug/g						
SW9045C	DUP1302786	pH	28272-005		7.3	pH						30

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28272

Company Name: ES+M
Company Address: 273 West Main Street Norton, MA 02766
Report To: Tom Sneesby
Phone #: 508 226 1800
Invoice To: ES+M
☐ Email:

Project Name: APC Wellesley
Project #: 2011-037 Task #4
Project Location: NH (MA) ME VT Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	pH	BOD	Conductivity	Turbidity	TSS	TDS	TVS	Alkalinity	RCRA Metals	Priority Pollutant Metals	TAL Metals	Hardness	Total Metals-list:	Dissolved Metals-list:	Ammonia	COD	TKN	TN	TON	TOC	T-Phosphorus	Phenols	Bacteria P/A	Bacteria MPN	Cyanide	Sulfide	Nitrate + Nitrite	Ortho P	Nitrate	Nitrite	Chloride	Sulfate	Bromide	Fluoride	Reactivity CN	Reactive S-	Ignitibility/FP	Corrosivity	TCLP Metals	TCLP VOC	TCLP SVOC	TCLP Pesticide	Subcontract: Grain Size	Herbicides	Formaldehyde	Total Cr, Pb, Ni *	Cr6+ *	ORP	Grab (G) or Composite (C)
28272 -01	S-01 SIDEWALL SOUTH	2		2							10/28/13	12:15	MW	X																																										X	X	C
-02	S-02 SIDEWALL EAST	2		2							10/28/13	12:25	MW	X																																											X	X	C
-03	S-03 Bottom 3'	2		2							10/28/13	12:30	MW	X																																												X	X	C
-04	S-04 Bottom 3'	2		2							10/28/13	12:35	MW	X																																												X	X	C
-05	S-05 SIDEWALL WEST	2		2							10/28/13	13:00	MW	X																																												X	X	C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☒
Standard (10 Business Days) ☐
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * Run Hexavalent Chromium if Total Chromium is above 30 mg/kg *

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) hflynn@esm-inc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 3 °C

CUSTODY RECORD
QSD-01 Revision 03/21/13

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
	Thomas Winters	10/28/13	13:32		10/28/13	1:30
	Relinquished by:	Date	Time	Received by:	Date	Time
	Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
		10/28/13	3:10		10/28/13	1510

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28279	10/29/2013	Soil	Yes	Yes	No	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
S-06 Sidewall West	10/29/2013	28279-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
S-07 Sidewall North	10/29/2013	28279-02	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

QC performance standards were not met, as no sample was specified for a metals matrix spike

All QAQC data, including method blank, Laboratory Control Sample (LCS), duplicate, LCS duplicate, and matrix spike results were reviewed.

This report was deemed usable by Angela Boyd on 3/31/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28279
Date Received: 10/29/13

Project: APU Wellesley 2011-037 Task #4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester
Principal, General Manager

Date of Approval: 11/8/2013
Total number of pages: 10

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28279

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
S-06 3' Sidewall West	Solid	10/29/2013 12:00	28279-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
S-07 Sidwall North	Solid	10/29/2013 12:11	28279-002	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28279

Sample#: 28279-001

Sample ID: S-06 3' Sidewall West

Matrix: Solid Percent Dry: 94.6% Results expressed on a dry weight basis.

Sampled: 10/29/13 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**560**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:30	SW3051A6010C
Lead	**5.9**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	14:30	SW3051A6010C
Nickel	**9**	3	ug/g	1	AB	10/30/13	6486	10/30/13	14:30	SW3051A6010C

Sample#: 28279-002

Sample ID: S-07 Sidwall North

Matrix: Solid Percent Dry: 95.2% Results expressed on a dry weight basis.

Sampled: 10/29/13 12:11

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**62**	3	ug/g	1	AB	10/30/13	6486	10/30/13	15:58	SW3051A6010C
Lead	**8.6**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	15:58	SW3051A6010C
Nickel	**15**	3	ug/g	1	AB	10/30/13	6486	10/30/13	15:58	SW3051A6010C

Sample#: 28279-001

Sample ID: S-06 3' Sidewall West

Matrix: Solid Percent Dry: 94.6% Results expressed on a dry weight basis.

Sampled: 10/29/13 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**28**	0.85	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**370**		mV	1	APA		1302801	10/30/13	5:05	ASTM1498-08
pH	**7.5**		pH	1	APA		1302800	10/30/13	4:50	SW9045C

Sample#: 28279-002

Sample ID: S-07 Sidwall North

Matrix: Solid Percent Dry: 95.2% Results expressed on a dry weight basis.

Sampled: 10/29/13 12:11

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	< 0.87	0.87	ug/g	1	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**370**		mV	1	APA		1302801	10/30/13	5:10	ASTM1498-08
pH	**7.4**		pH	1	APA		1302800	10/30/13	4:55	SW9045C

Absolute Resource associates

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 2011-037

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28279**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/8/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28279

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 3 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6486	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6486	Chromium			16	ug/g	14		2.45	24.7		
		Nickel			19	ug/g	17		6.2	27.5		
		Lead			5100	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6486	Chromium			16	ug/g	14		2.45	24.7	0	35
		Nickel			19	ug/g	17		6.2	27.5	2	35
		Lead			5100	ug/g	5100		3750	6470	1	35
SW3051A6010C	DUP6486	Chromium	28293-001		18	ug/g					3	35
		Lead	28293-001		40	ug/g					17	35
SW3051A6010C	MS6486	Chromium	28293-001		130	ug/g	129	89	75	125		
		Lead	28293-001		150	ug/g	129	77	75	125		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM6490	Chromium, Hexavalent			60	ug/g	93		26.2	288		
SW3060A7196A	CRMD6490	Chromium, Hexavalent			55	ug/g	93		26.2	288		30
SW3060A7196A	PB6490	Chromium, Hexavalent		<	0.80	ug/g						
SW9045C	DUP1302800	pH	28279-002		7.4	pH						30

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28279

Company Name: ES+M

Company Address: 273 West Main Street Norton, MA 02766

Report To: Tom Sneesby

Phone #: 508-226-1800

Invoice To: ES+M

☐ Email:

Project Name: APU Wellesley

Project #: 2011-037 Task #4

Project Location: NH MA ME VT ___ Other

Protocol: RCRA MCP SDWA NHDES NPDES OTHER

Reporting Limits: QAPP EPA DW GW-1 S-1 Other

Quote # ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB 504.1	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☒ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde	Total Cr, Pb, Ni * Cr+6 *			Grab (G) or Composite (C)
28279-01	S-06 SIDEWALL 3'	2		2							10/29/13	12:00	MW									X												X			C
↓ -02	S-07 SIDEWALL	2		2							10/29/13	12:11	MW									X												X			C

TAT REQUESTED

Priority (24 hr)* ☐
Expedited (48 hr)* ☒
Standard (10 Business Days) ☐
*Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * Run Hexavalent Chromium if Total Chromium is above 30 mg/kg

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) lflynn@eam-inc.com

☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO

TEMPERATURE 3 °C

CUSTODY RECORD

QSD-01 Revision 03/21/13

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
[signature]	10/29/13	12:40	[signature]	10/29/13	12:40
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: [signature]	10/29/13	2:37	Received by Laboratory: [signature]	10/29/13	1437

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28292	10/30/2013	Soil	Yes	No	No	No	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
S-09 Sidewall North 5'	10/30/2013	28292-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
S-10 Bottom North 5'	10/30/2013	28292-02	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

Lab presumptive certainty was not achieved because samples were not iced prior to receipt. Samples were received by the lab within 3 hours of collection. QC performance standards were not met, as no sample was specified for a metals matrix spike

All QAQC data, including method blank, Laboratory Control Sample (LCS), duplicate, LCS duplicate, and matrix spike results were reviewed.

This report was deemed usable by Angela Boyd on 3/31/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Doug Heely
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28292
Date Received: 10/30/13

Project: Morses Pond

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/8/2013
Total number of pages: 10

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Morses Pond
Lab ID: 28292

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
S-09 Sidewall North 5'	Solid	10/30/2013 12:45	28292-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
S-10 Bottom North 5'	Solid	10/30/2013 12:30	28292-002	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Absolute Resource associates

Project ID: Morses Pond
Job ID: 28292

Sample#: 28292-001
Sample ID: S-09 Sidewall North 5'
Matrix: Solid Percent Dry: 91.4% Results expressed on a dry weight basis.
Sampled: 10/30/13 12:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**730**	3	ug/g	1	AB	10/30/13	6486	10/30/13	17:20	SW3051A6010C
Lead	**120**	0.6	ug/g	1	AB	10/30/13	6486	10/30/13	17:20	SW3051A6010C
Nickel	**51**	3	ug/g	1	AB	10/30/13	6486	10/30/13	17:20	SW3051A6010C

Sample#: 28292-002
Sample ID: S-10 Bottom North 5'
Matrix: Solid Percent Dry: 91.1% Results expressed on a dry weight basis.
Sampled: 10/30/13 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**840**	3	ug/g	1	AB	10/30/13	6486	10/30/13	17:27	SW3051A6010C
Lead	**52**	0.5	ug/g	1	AB	10/30/13	6486	10/30/13	17:27	SW3051A6010C
Nickel	**19**	3	ug/g	1	AB	10/30/13	6486	10/30/13	17:27	SW3051A6010C

Sample#: 28292-001
Sample ID: S-09 Sidewall North 5'
Matrix: Solid Percent Dry: 91.4% Results expressed on a dry weight basis.
Sampled: 10/30/13 12:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**71**	3.6	ug/g	4	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**330**		mV	1	APA		1302812	10/31/13	5:20	ASTM1498-08
pH	**7.8**		pH	1	APA		1302810	10/31/13	5:15	SW9045C

Sample#: 28292-002
Sample ID: S-10 Bottom North 5'
Matrix: Solid Percent Dry: 91.1% Results expressed on a dry weight basis.
Sampled: 10/30/13 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**85**	3.6	ug/g	4	APA	10/31/13	6490	11/1/13		SW3060A7196A
Oxidation-Reduction Potential	**350**		mV	1	APA		1302812	10/31/13	5:25	ASTM1498-08
pH	**8.0**		pH	1	APA		1302810	10/31/13	5:20	SW9045C

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #:

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28292**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☐ No☑
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

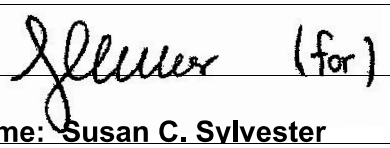
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/8/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28292

Sample Receiving and Chain of Custody Discrepancies

Samples were received at 19 degrees C and not on ice, at the customer's request. Authorization to proceed with analysis was provided by the customer.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question A: Box A is "No." See narrative in "Sample Receiving and COC Discrepancies" section above.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6486	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6486	Chromium			16	ug/g	14		2.45	24.7		
		Nickel			19	ug/g	17		6.2	27.5		
		Lead			5100	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6486	Chromium			16	ug/g	14		2.45	24.7	0	35
		Nickel			19	ug/g	17		6.2	27.5	2	35
		Lead			5100	ug/g	5100		3750	6470	1	35
SW3051A6010C	DUP6486	Chromium	28293-001		18	ug/g					3	35
		Lead	28293-001		40	ug/g					17	35
SW3051A6010C	MS6486	Chromium	28293-001		130	ug/g	129	89	75	125		
		Lead	28293-001		150	ug/g	129	77	75	125		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM6490	Chromium, Hexavalent			60	ug/g	93		26.2	288		
SW3060A7196A	CRMD6490	Chromium, Hexavalent			55	ug/g	93		26.2	288		30
SW3060A7196A	PB6490	Chromium, Hexavalent		<	0.80	ug/g						
SW9045C	DUP1302810	pH	28292-002		8.0	pH						30

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28292

Company Name: Environmental Strategies
Company Address: 273 West Main, Norton, MA
Report To: D Heely
Phone #: (508) 226-1800
Invoice To:
☐ Email: dheely@esm-inc.com

Project Name: Morses Pond
Project #:
Project Location: NH (MA) ME VT NY ____ Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other ____
Quote # ____ ☐ NH Reimbursement Pricing
PO # ____

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide ☐ Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	Total Cr, Pb, Ni, 4-Cr*	Grab (G) or Composite (C)
18092-01	S-09 Sidewall north 5'	2		✓							10/30/13	1245	DH	X	C
-02	S-10 Bottom north 5'	2		✓							10/30/13	1230	DH	X	C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☐
*Date Needed ____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * Run Cr+6 if total Cr > 30 mg/kg

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) ____
☐ HARD COPY REQUIRED ☐ FAX (FAX#) ____

RECEIVED ON ICE ☐ YES ☑ NO
TEMPERATURE 19 °C

CUSTODY RECORD

QSD-01 Revision 08/09/13

	Date	Time		Date	Time
Relinquished by Sampler:	12/30/13	12:50	Received by:	10/30/13	1250
Relinquished by:	10/30/13	1510	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory:	10/30/13	1570

10

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28319	11/1/2014	Soil	Yes	Yes	No	No	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
N-01 West Wall	11/1/2014	28319-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
N-02 North Wall	11/1/2014	28319-02	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
N-03 South Wall	11/1/2014	28319-03	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
N-04 Bottom 7'	11/1/2014	28319-04	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

QC performance standards were not met, as no sample was specified for a metals matrix spike.

All QAQC data, including method blank, Laboratory Control Sample (LCS), and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 3/31/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28319
Date Received: 11/1/13

Project: APU Wellesley 2011-037 Task #4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/12/2013
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28319

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
N-01 West Wall	Solid	11/1/2013 8:45	28319-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
N-02 North Wall	Solid	11/1/2013 9:01	28319-002	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
N-03 South Wall	Solid	11/1/2013 9:22	28319-003	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
N-04 Bottom 7'	Solid	11/1/2013 10:00	28319-004	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28319

Sample#: 28319-001

Sample ID: N-01 West Wall

Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.

Sampled: 11/1/13 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**2000**	29	ug/g	10	AB	11/5/13	6498	11/5/13	16:14	SW3051A6010C
Lead	**300**	0.6	ug/g	1	AB	11/5/13	6498	11/5/13	15:29	SW3051A6010C
Nickel	**58**	3	ug/g	1	AB	11/5/13	6498	11/5/13	15:29	SW3051A6010C

Sample#: 28319-002

Sample ID: N-02 North Wall

Matrix: Solid Percent Dry: 90.2% Results expressed on a dry weight basis.

Sampled: 11/1/13 9:01

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**89**	3	ug/g	1	AB	11/5/13	6498	11/5/13	15:37	SW3051A6010C
Lead	**26**	0.6	ug/g	1	AB	11/5/13	6498	11/5/13	15:37	SW3051A6010C
Nickel	**9**	3	ug/g	1	AB	11/5/13	6498	11/5/13	15:37	SW3051A6010C

Sample#: 28319-003

Sample ID: N-03 South Wall

Matrix: Solid Percent Dry: 89.9% Results expressed on a dry weight basis.

Sampled: 11/1/13 9:22

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**950**	3	ug/g	1	AB	11/5/13	6498	11/5/13	15:44	SW3051A6010C
Lead	**60**	0.6	ug/g	1	AB	11/5/13	6498	11/5/13	15:44	SW3051A6010C
Nickel	**56**	3	ug/g	1	AB	11/5/13	6498	11/5/13	15:44	SW3051A6010C

Sample#: 28319-004

Sample ID: N-04 Bottom 7'

Matrix: Solid Percent Dry: 83.8% Results expressed on a dry weight basis.

Sampled: 11/1/13 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**3800**	30	ug/g	10	AB	11/5/13	6498	11/5/13	16:21	SW3051A6010C
Lead	**300**	0.6	ug/g	1	AB	11/5/13	6498	11/5/13	16:07	SW3051A6010C
Nickel	**150**	3	ug/g	1	AB	11/5/13	6498	11/5/13	16:07	SW3051A6010C

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28319

Sample#: 28319-001

Sample ID: N-01 West Wall

Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.

Sampled: 11/1/13 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**250**	9.2	ug/g	20	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**360**		mV	1	AJD		1302845	11/1/13	16:48	ASTM1498-08
pH	**7.8**		pH	1	KW		1302844	11/1/13	16:32	SW9045C

Sample#: 28319-002

Sample ID: N-02 North Wall

Matrix: Solid Percent Dry: 90.2% Results expressed on a dry weight basis.

Sampled: 11/1/13 9:01

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**12**	0.45	ug/g	1	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**360**		mV	1	AJD		1302845	11/1/13	16:51	ASTM1498-08
pH	**7.4**		pH	1	KW		1302844	11/1/13	16:38	SW9045C

Sample#: 28319-003

Sample ID: N-03 South Wall

Matrix: Solid Percent Dry: 89.9% Results expressed on a dry weight basis.

Sampled: 11/1/13 9:22

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**84**	4.4	ug/g	10	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**330**		mV	1	AJD		1302845	11/1/13	16:55	ASTM1498-08
pH	**7.9**		pH	1	KW		1302844	11/1/13	16:44	SW9045C

Sample#: 28319-004

Sample ID: N-04 Bottom 7'

Matrix: Solid Percent Dry: 83.8% Results expressed on a dry weight basis.

Sampled: 11/1/13 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**560**	9.9	ug/g	20	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**300**		mV	1	AJD		1302845	11/1/13	17:10	ASTM1498-08
pH	**7.8**		pH	1	KW		1302844	11/1/13	16:47	SW9045C

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 2011-037

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28319**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/12/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28319

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 0 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6498	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6498	Chromium			14	ug/g	14		2.45	24.7		
		Nickel			17	ug/g	17		6.2	27.5		
		Lead			4500	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6498	Chromium			14	ug/g	14		2.45	24.7	5	35
		Nickel			19	ug/g	17		6.2	27.5	11	35
		Lead			4700	ug/g	5100		3750	6470	4	35

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM6505	Chromium, Hexavalent			68	ug/g	93		26.2	288		
SW3060A7196A	CRMD6505	Chromium, Hexavalent			68	ug/g	93		26.2	288		30
SW3060A7196A	PB6505	Chromium, Hexavalent		<	0.40	ug/g						

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28319

Company Name: ES+M
Company Address: 273 WEST MAIN STREET NORTON, MA 02766
Report To: TOM SNEESBY
Phone #: 508-226-1800
Invoice To: ES+M
☐ Email:

Project Name: APU Wellesley
Project #: 2011-037 TASK #4
Project Location: NH (MA) ME VT ___ Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other ___
Quote # ___ ☐ NH Reimbursement Pricing
PO # ___

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT
☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gasses-List:
☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint
☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB 504.1
☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB
☐ O&G 1664 ☐ Mineral O&G SM5520F
☒ pH ☐ BOD ☐ Conductivity ☐ Turbidity
☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☐ Total Metals-list:
☐ Dissolved Metals-list:
☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC
☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN
☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P
☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
Total Cr, Pb, N *Cr+6 *

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	Grab (G) or Composite (C)
28319-01	N-01 WEST WALL	2		2							11/1/13	08:45	MW	C
-02	N-02 NORTH WALL	2		2							11/1/13	09:01	MW	C
-03	N-03 SOUTH WALL	2		2							11/1/13	09:22	MW	C
-04	N-04 Bottom 7'	2		2							11/1/13	10:00	MW	C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☒
Standard (10 Business Days) ☐
*Date Needed ___

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * RUN HEXAVALENT CHROMIUM IF TOTAL CHROMIUM IS ABOVE 30MG/KG

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) HANN@ESM-INC.COM
☐ HARD COPY REQUIRED ☐ FAX (FAX#) ___

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 0 °C

CUSTODY RECORD
QSD-01 Revision 03/21/13

	Date	Time		Date	Time
Relinquished by Sampler: Mark Winters	11/1/13	11:25	Received by:	11/1/13	1125
Relinquished by:	11/1/13	1410	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory:	11/1/13	1410

11

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28392	11/11/2014	Soil	Yes	Yes	No	No	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
N-09 Bottom 5'	11/11/2014	28392-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
TP-01 (0'-3')	11/11/2014	28392-02	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
TP-01 (3'-5')	11/11/2014	28392-03	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
TP-02 (0'-3')	11/11/2014	28392-04	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
TP-02 (3'-5')	11/11/2014	28392-05	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
TP-03 (0'-3')	11/11/2014	28392-06	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
TP-03 (3'-5')	11/11/2014	28392-07	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

QC performance standards were not met, as no sample was specified for a metals matrix spike.

All QAQC data, including method blank, Laboratory Control Sample (LCS), and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/1/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28392
Date Received: 11/12/13

Project: APU Wellesley 2011-037 Task #4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/20/2013
Total number of pages: 14

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28392

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
N-09 Bottom 5'	Solid	11/11/2013 16:00	28392-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
TP-01 (0'-3')	Solid	11/11/2013 16:05	28392-002	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
TP-01 (3'-5')	Solid	11/11/2013 16:10	28392-003	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
TP-02 (0'-3')	Solid	11/11/2013 16:15	28392-004	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
TP-02 (3'-5')	Solid	11/11/2013 16:20	28392-005	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
TP-03 (0'-3')	Solid	11/11/2013 16:25	28392-006	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28392

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
TP-03 (0'-3')	Solid	11/11/2013 16:25	28392-006	
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
TP-03 (3'-5')	Solid	11/11/2013 16:30	28392-007	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28392

Sample#: 28392-001

Sample ID: N-09 Bottom 5'

Matrix: Solid Percent Dry: 94.2% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**73**	3	ug/g	1	AB	11/14/13	6526	11/13/13	16:29	SW3051A6010C
Lead	**31**	0.5	ug/g	1	AB	11/14/13	6526	11/13/13	16:29	SW3051A6010C
Nickel	**22**	3	ug/g	1	AB	11/14/13	6526	11/13/13	16:29	SW3051A6010C

Sample#: 28392-002

Sample ID: TP-01 (0'-3')

Matrix: Solid Percent Dry: 93.9% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**42**	3	ug/g	1	AB	11/14/13	6526	11/13/13	16:47	SW3051A6010C
Lead	**95**	0.5	ug/g	1	AB	11/14/13	6526	11/13/13	16:47	SW3051A6010C
Nickel	**8**	3	ug/g	1	AB	11/14/13	6526	11/13/13	16:47	SW3051A6010C

Sample#: 28392-003

Sample ID: TP-01 (3'-5')

Matrix: Solid Percent Dry: 92.9% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**35**	3	ug/g	1	AB	11/14/13	6526	11/13/13	16:57	SW3051A6010C
Lead	**230**	0.5	ug/g	1	AB	11/14/13	6526	11/13/13	16:57	SW3051A6010C
Nickel	**10**	3	ug/g	1	AB	11/14/13	6526	11/13/13	16:57	SW3051A6010C

Sample#: 28392-004

Sample ID: TP-02 (0'-3')

Matrix: Solid Percent Dry: 90.7% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**300**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:04	SW3051A6010C
Lead	**83**	0.6	ug/g	1	AB	11/14/13	6526	11/13/13	17:04	SW3051A6010C
Nickel	**24**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:04	SW3051A6010C

Sample#: 28392-005

Sample ID: TP-02 (3'-5')

Matrix: Solid Percent Dry: 92.1% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**980**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:12	SW3051A6010C
Lead	**570**	0.5	ug/g	1	AB	11/14/13	6526	11/13/13	17:12	SW3051A6010C
Nickel	**50**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:12	SW3051A6010C

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28392

Sample#: 28392-006

Sample ID: TP-03 (0'-3')

Matrix: Solid Percent Dry: 93.7% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**420**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:19	SW3051A6010C
Lead	**33**	0.5	ug/g	1	AB	11/14/13	6526	11/13/13	17:19	SW3051A6010C
Nickel	**22**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:19	SW3051A6010C

Sample#: 28392-007

Sample ID: TP-03 (3'-5')

Matrix: Solid Percent Dry: 94.4% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**400**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:27	SW3051A6010C
Lead	**35**	0.5	ug/g	1	AB	11/14/13	6526	11/13/13	17:27	SW3051A6010C
Nickel	**25**	3	ug/g	1	AB	11/14/13	6526	11/13/13	17:27	SW3051A6010C

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28392

Sample#: 28392-001

Sample ID: N-09 Bottom 5'

Matrix: Solid Percent Dry: 94.2% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**17**	4.3	ug/g	1	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**440**		mV	1	APA		1302963	11/12/13	10:30	ASTM1498-08
pH	**7.8**		pH	1	APA		1302962	11/12/13	10:30	SW9045C

Sample#: 28392-002

Sample ID: TP-01 (0'-3')

Matrix: Solid Percent Dry: 93.9% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	< 4.4	4.4	ug/g	1	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**430**		mV	1	APA		1302963	11/12/13	10:35	ASTM1498-08
pH	**6.9**		pH	1	APA		1302962	11/12/13	10:35	SW9045C

Sample#: 28392-003

Sample ID: TP-01 (3'-5')

Matrix: Solid Percent Dry: 92.9% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	< 4.4	4.4	ug/g	1	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**410**		mV	1	APA		1302963	11/12/13	10:40	ASTM1498-08
pH	**7.6**		pH	1	APA		1302962	11/12/13	10:40	SW9045C

Sample#: 28392-004

Sample ID: TP-02 (0'-3')

Matrix: Solid Percent Dry: 90.7% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**16**	4.6	ug/g	1	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**400**		mV	1	APA		1302963	11/12/13	10:45	ASTM1498-08
pH	**7.9**		pH	1	APA		1302962	11/12/13	10:45	SW9045C

Sample#: 28392-005

Sample ID: TP-02 (3'-5')

Matrix: Solid Percent Dry: 92.1% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**95**	22	ug/g	5	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**400**		mV	1	APA		1302963	11/12/13	10:50	ASTM1498-08
pH	**7.8**		pH	1	APA		1302962	11/12/13	10:50	SW9045C

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28392

Sample#: 28392-006

Sample ID: TP-03 (0'-3')

Matrix: Solid Percent Dry: 93.7% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**23**	4.4	ug/g	1	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**390**		mV	1	APA		1302963	11/12/13	10:55	ASTM1498-08
pH	**8.0**		pH	1	APA		1302962	11/12/13	10:55	SW9045C

Sample#: 28392-007

Sample ID: TP-03 (3'-5')

Matrix: Solid Percent Dry: 94.4% Results expressed on a dry weight basis.

Sampled: 11/11/13 16:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**15**	4.2	ug/g	1	APA		1302998	11/18/13		SW3060A7196A
Oxidation-Reduction Potential	**380**		mV	1	APA		1302963	11/12/13	11:00	ASTM1498-08
pH	**8.2**		pH	1	APA		1302962	11/12/13	11:00	SW9045C

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 2011-037

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28392**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/20/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28392

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 2 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

HexChrome: The reporting limits are elevated for the associated samples due to a trace concentration detected in the PB1302998.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6526	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6526	Chromium			16	ug/g	14		2.45	24.7		
		Nickel			20	ug/g	17		6.2	27.5		
		Lead			5500	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6526	Chromium			18	ug/g	14		2.45	24.7	12	35
		Nickel			22	ug/g	17		6.2	27.5	7	35
		Lead			5400	ug/g	5100		3750	6470	1	35

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM1302998	Chromium, Hexavalent			54	ug/g	93		26.2	288		
SW3060A7196A	CRMD1302998	Chromium, Hexavalent			60	ug/g	93		26.2	288		30
SW3060A7196A	PB1302998	Chromium, Hexavalent		<	4.0	ug/g						
SW9045C	DUP1302962	pH	28392-007		8.2	pH						30

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28392

Company Name: ES+M

Company Address: 273 WEST MAIN STREET NORTON, MA 02766

Report To: TOM Sneesby

Phone #: 508-226-1800

Invoice To: ☐ Email: ES+M

Project Name: APU Wellesley 2011-037 TASK#4

Project #:

Project Location: NH (MA) ME VT NY Other

Protocol: RCRA (MCP) SDWA NPDES NHDES OTHER

Reporting Limits: QAPP GW-1 (S-1) EPA DW Other

Quote # ☐ NH Reimbursement Pricing

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☒ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde	TOTAL Cr, Pb, N * Cr+6 *			Grab (G) or Composite (C)
28392-01	N-09 Bottom 5'	2		2						(11)	1-11-13	16:00	MW									X												X			C
02	TP-01 (0'-3')	2		2							1-11-13	16:05	MW									X												X			C
03	TP-01 (3'-5')	2		2							1-11-13	16:10	MW									X												X			C
04	TP-02 (0'-3')	2		2							1-11-13	16:15	MW									X												X			C
05	TP-02 (3'-5')	2		2							1-11-13	16:20	MW									X												X			C
06	TP-03 (0'-3')	2		2							1-11-13	16:25	MW									X												X			C
07	TP-03 (3'-5')	2		2							1-11-13	16:30	MW									X												X			C

JS per receipt 11/12/13

JS per call from Doug Heeley

TAT REQUESTED
- Priority (24 hr)* ☒
- ~~Expedited (48 hr)*~~ ☐
- Standard (10 Business Days) ☐
- *Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * RUN HEXAVALENT CHROMINUM IF TOTAL CHROMINUM IS ABOVE 30MG/KG

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) lflynn@esm-inc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 2 °C

CUSTODY RECORD

QSD-01 Revision 08/09/13

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
Mark Winters	11-11-13	17:32	FedEx	11/11/13	1732
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: FedEx	11/12/13	0920	Received by Laboratory: Jane Stratton	11/12/13	0920

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28327	11/4/2014	Soil	Yes	Yes	No	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
S-08 Bottom 5'	11/4/2014	28327-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

QC performance standards were not met, as no sample was specified for a metals matrix spike.

All QAQC data, including method blank, Laboratory Control Sample (LCS), and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/1/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28327
Date Received: 11/4/13

Project: APU Wellesley 2011-037 Task #4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/12/2013
Total number of pages: 10

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28327

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
S-08 Bottom 5'	Solid	11/4/2013 11:00	28327-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4
Job ID: 28327

Sample#: 28327-001
Sample ID: S-08 Bottom 5'
Matrix: Solid Percent Dry: 95.5% Results expressed on a dry weight basis.
Sampled: 11/4/13 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**97**	3	ug/g	1	AB	11/5/13	6498	11/5/13	20:56	SW3051A6010C
Lead	**7.1**	0.5	ug/g	1	AB	11/5/13	6498	11/5/13	20:56	SW3051A6010C
Nickel	**14**	3	ug/g	1	AB	11/5/13	6498	11/5/13	20:56	SW3051A6010C

Sample#: 28327-001
Sample ID: S-08 Bottom 5'
Matrix: Solid Percent Dry: 95.5% Results expressed on a dry weight basis.
Sampled: 11/4/13 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**6.4**	0.43	ug/g	1	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**440**		mV	1	APA		1302857	11/5/13	5:30	ASTM1498-08
pH	**7.5**		pH	1	APA		1302859	11/5/13	5:15	SW9045C

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 2011-037

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28327**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☑ No*☐

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: SCSylvester (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/12/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28327

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, on the day of sampling, at 7 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6498	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6498	Chromium			14	ug/g	14		2.45	24.7		
		Nickel			17	ug/g	17		6.2	27.5		
		Lead			4500	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6498	Chromium			14	ug/g	14		2.45	24.7	5	35
		Nickel			19	ug/g	17		6.2	27.5	11	35
		Lead			4700	ug/g	5100		3750	6470	4	35

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM6505	Chromium, Hexavalent			68	ug/g	93		26.2	288		
SW3060A7196A	CRMD6505	Chromium, Hexavalent			68	ug/g	93		26.2	288		30
SW3060A7196A	PB6505	Chromium, Hexavalent		<	0.40	ug/g						

Absolute Resource associates
124 Heritage Avenue #10
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28327

Company Name: ES+M

Company Address: 273 West Main Street Norton, MA 02766

Report To: Tom Sneesby

Phone #: 508-226-1800

Invoice To: ES+M

Project Name: APU Wellesley

Project #: 2011-037 Task #4

Project Location: NH (MA) ME VT ___ Other

Protocol: RCRA (MCP) SDWA NHDES NPDES OTHER

Reporting Limits: QAPP EPA DW GW-1 (S-1) Other ___

Quote # ___ ☐ NH GREE/ODD Fund Pricing

PO # ___

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER (Specify)	Sampling: DATE	TIME	SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MIBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB 504.1	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☒ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ TOC ☐ Grain Size ☐ TCLP Herbicides	TOTAL Cr, Pb, Ni * Cr+6 *	ORP		Grab (G) or Composite (C)
28327-01	S-08 Bottoms'	2		2								11-04-13	11:00	AW									X													x	X		C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☒
Standard (10 Business Days) ☐
*Date Needed ___

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * RUN HEXAVALENT CHROMINUM IF TOOTAL CHROMINUM IS Above 30 mg/kg

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) lflynn@esm-inc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#) ___ ☐ OTHER (specify) ___

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 7 °C

CUSTODY RECORD

QSD-01 Revision 12/23/10

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
Mark Winters	11-04-13	12:35	Greg Pickering	11/4/13	12:35
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Greg Pickering	11/4/13	2:15	Received by Laboratory: Way Bill#: [illegible]	11/4/13	14:15

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	28339	11/5/2014	Soil	Yes	Yes	No	No	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
N-05 Eastwall	11/5/2014	28339-01	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
N-06 Northwall	11/5/2014	28339-02	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH
N-07 Bottom 7'	11/5/2014	28339-03	soil	Chromium, nickel, lead, hexavalent chromium, Oxidation/Reduction Potential, pH

QC performance standards were not met, as no sample was specified for a metals matrix spike.

All QAQC data, including method blank, Laboratory Control Sample (LCS), and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/1/14.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28339
Date Received: 11/5/13

Project: APU Wellesley 2011-037 Task #4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/12/2013
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Task #4

Lab ID: 28339

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
N-05 Eastwall	Solid	11/5/2013 10:30	28339-001	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
N-06 Northwall	Solid	11/5/2013 11:20	28339-002	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C
N-07 Bottom 7'	Solid	11/5/2013 11:49	28339-003	
				Solid Digestion for ICP Analysis
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
				ORP in solids by ASTM-1498-08
				pH in solids by SW9045C

Absolute Resource associates

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28339

Sample#: 28339-001

Sample ID: N-05 Eastwall

Matrix: Solid Percent Dry: 92.4% Results expressed on a dry weight basis.

Sampled: 11/5/13 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**400**	3	ug/g	1	AB	11/7/13	6506	11/7/13	15:30	SW3051A6010C
Lead	**120**	0.6	ug/g	1	AB	11/7/13	6506	11/7/13	15:30	SW3051A6010C
Nickel	**26**	3	ug/g	1	AB	11/7/13	6506	11/7/13	15:30	SW3051A6010C

Sample#: 28339-002

Sample ID: N-06 Northwall

Matrix: Solid Percent Dry: 93.5% Results expressed on a dry weight basis.

Sampled: 11/5/13 11:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**1400**	28	ug/g	10	AB	11/7/13	6506	11/7/13	15:53	SW3051A6010C
Lead	**180**	0.6	ug/g	1	AB	11/7/13	6506	11/7/13	15:38	SW3051A6010C
Nickel	**75**	3	ug/g	1	AB	11/7/13	6506	11/7/13	15:38	SW3051A6010C

Sample#: 28339-003

Sample ID: N-07 Bottom 7'

Matrix: Solid Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 11/5/13 11:49

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**300**	3	ug/g	1	AB	11/7/13	6506	11/7/13	15:45	SW3051A6010C
Lead	**29**	0.5	ug/g	1	AB	11/7/13	6506	11/7/13	15:45	SW3051A6010C
Nickel	**15**	3	ug/g	1	AB	11/7/13	6506	11/7/13	15:45	SW3051A6010C

Project ID: APU Wellesley 2011-037 Task #4

Job ID: 28339

Sample#: 28339-001

Sample ID: N-05 Eastwall

Matrix: Solid Percent Dry: 92.4% Results expressed on a dry weight basis.

Sampled: 11/5/13 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**42**	8.5	ug/g	20	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**380**		mV	1	APA		1302868	11/6/13	5:20	ASTM1498-08
pH	**6.8**		pH	1	APA		1302869	11/6/13	5:15	SW9045C

Sample#: 28339-002

Sample ID: N-06 Northwall

Matrix: Solid Percent Dry: 93.5% Results expressed on a dry weight basis.

Sampled: 11/5/13 11:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**34**	0.44	ug/g	1	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**380**		mV	1	APA		1302868	11/6/13	5:25	ASTM1498-08
pH	**7.9**		pH	1	APA		1302869	11/6/13	5:20	SW9045C

Sample#: 28339-003

Sample ID: N-07 Bottom 7'

Matrix: Solid Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 11/5/13 11:49

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**25**	0.42	ug/g	1	APA	11/7/13	6505	11/8/13		SW3060A7196A
Oxidation-Reduction Potential	**370**		mV	1	APA		1302868	11/6/13	5:30	ASTM1498-08
pH	**7.5**		pH	1	APA		1302869	11/6/13	5:25	SW9045C

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: **Absolute Resource Associates** Project #: 2011-037

Project Location: Massachusetts RTN:

This Form provides certifications for the following data set: **28339**

Matrices: Groundwater/Surface Water ☐ Soil/Sediment ☑ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☑	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VIA ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes☑ No☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes☑ No☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes☑ No☐
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes☑ No☐
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modifications(s)? (Refer to the individual methods for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes☐ No☐ Yes☐ No☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes☑ No☐

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes☐ No*☑

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes☐ No*☑
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes☐ No*☑

* All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: (for) **Position: Lab Director**

Printed Name: Susan C. Sylvester **Date: 11/12/13**

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 28339

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 3 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

Not applicable.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question G: The CAM protocol reporting limits were not achieved for this project due to dilutions necessary for sample analysis. Box G is "No."
Question H: A solid metal sample was not specified for a matrix spike. Box H is "No."
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK6506	Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
SW3051A6010C	CRM6506	Chromium			13	ug/g	14		2.45	24.7		
		Nickel			19	ug/g	17		6.2	27.5		
		Lead			5100	ug/g	5100		3750	6470		
SW3051A6010C	CRMD6506	Chromium			13	ug/g	14		2.45	24.7	1	35
		Nickel			19	ug/g	17		6.2	27.5	1	35
		Lead			5300	ug/g	5100		3750	6470	5	35

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM6505	Chromium, Hexavalent			68	ug/g	93		26.2	288		
SW3060A7196A	CRMD6505	Chromium, Hexavalent			68	ug/g	93		26.2	288		30
SW3060A7196A	PB6505	Chromium, Hexavalent		<	0.40	ug/g						

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28339

Company Name: ES+M
Company Address: 273 WEST MAIN Street NORTON, MA 02766
Report To: TOM SWEsby
Phone #: 508-326-1800
Invoice To: ES+M
☐ Email:

Project Name: APO Wellesley
Project # 3011-037 TASK 4
Project Location: NH (MA) ME VT NY Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☒ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde	TOTAL Cr, Pb, V, *Cr+6 *			Grab (G) or Composite (C)
28339-01	N-05 EASTWALL	2		2							11-05-13	10:30	MW									X													X			C
02	N-06 NORTHWALL	2		2							11-05-13	11:20	MW									X													X			C
03	N-07 BOTTOM 7'	2		2							11-5-13	11:49	MW									X													X			C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☑
Standard (10 Business Days) ☐
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS: RUN HEXAVALENT CHROMIUM IF TOTAL CHROMIUM * IS ABOVE 30 MG/KG.

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) HFlynn@ESM-INC.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 3 °C

CUSTODY RECORD
QSD-01 Revision 08/09/13

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
1	MARK WINTERS	11-05-13	13:40		11/5/13	1:40
2	Relinquished by:	Date	Time	Received by:	Date	Time
3	Relinquished by:	11/5/13	3:15	Received by Laboratory:	11/5/13	1575

11

67 International Drive, Loudon, New Hampshire 03307
800.950.7645 Phone 603.783.0104 Fax

A Proud Member of the
D.A. COLLINS COMPANIES

ESMI OF NEW HAMPSHIRE

October 24, 2013

American Premier Underwriters, Inc.
1 Bacon Street
Wellesley, Ma 02482

Re: 1 Bacon Street, Wellesley MA

To whom it may concern:

Please accept this correspondence as our letter of acceptance to receive and thermally treat up to 400 tons of soil as profiled from the Site at 1 Bacon Street in Wellesley, MA. The generator has certified the waste is not a characteristic hazardous waste.

ESMI's information is as follows:

Facility Name:	Environmental Soil Management, Inc
Facility Address:	67 International Drive Loudon, NH 03301
Telephone:	603-783-0228
Fax:	603-783-0104
NH Permit No:	DES-SW-SP-96-002
EPA ID No:	NH5986485852

If you have any questions or comments, please do not hesitate to contact us.

Sincerely,

Marc Aubrey
General Manager
Environmental Soil Management, Inc.

INNOVATE

Absolute Resource associates
124 Heritage Avenue #10 Portsmouth, NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 22098
Date Received: 7/28/11

Project: APU Wellesley 2010-052

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester
Principal, General Manager

Date of Approval: 8/22/2011
Total number of pages: 9

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2010-052
Job ID: 22098

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.71 mL MeOH/g soil.
Received on ice at 4˚C, in satisfactory condition.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
chloromethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
bromomethane	< 0.2	0.2	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
chloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
diethyl ether	< 0.5	0.5	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
acetone	< 2	2	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
methylene chloride	< 0.2	0.2	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
t-butanol (TBA)	< 2	2	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
chloroform	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
benzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
trichloroethene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,4-dioxane	< 2	2	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
dibromomethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
toluene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
2-hexanone	< 0.5	0.5	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B

Absolute Resource associates

Project ID: APU Wellesley 2010-052
Job ID: 22098

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.71 mL MeOH/g soil.
Received on ice at 4˚C, in satisfactory condition.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
o-xylene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
styrene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
bromoform	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
bromobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
naphthalene	< 0.2	0.2	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
toluene-D8 SUR	**97**	88-110	%	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
4-bromofluorobenzene SUR	**92**	86-115	%	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B
a,a,a-trifluorotoluene SUR	**90**	70-130	%	1	LMM	8/1/11	4387	8/2/11	18:08	SW5035A8260B

Absolute Resource associates

Project ID: APU Wellesley 2010-052
Job ID: 22098

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-chlorophenol	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
isophorone	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4-dichlorophenol	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
1,2,4-trichlorobenzene	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
naphthalene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzoic acid	< 5	5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-methylnaphthalene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-chloronaphthalene	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
acenaphthylene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
dimethylphthalate	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
acenaphthene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4-dinitrophenol	< 5	5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
dibenzofuran	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
fluorene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
diethyl phthalate	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D

Absolute Resource associates

Project ID: APU Wellesley 2010-052
Job ID: 22098
Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4-nitroaniline	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
phenanthrene	**0.07**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
anthracene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
di-n-butylphthalate	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
fluoranthene	**0.10**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzidine	< 3	3	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
pyrene	**0.10**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
butyl benzyl phthalate	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzo(a)anthracene	**0.05**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
chrysene	**0.08**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
3,3'-dichlorobenzidine	< 3	3	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
di-n-octyl phthalate	< 0.5	0.5	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzo(b)fluoranthene	**0.06**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzo(k)fluoranthene	**0.07**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzo(a)pyrene	**0.06**	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
dibenzo(a,h)anthracene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
benzo(g,h,i)perylene	< 0.05	0.05	ug/g	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**60**	21-100	%	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
phenol-D5 SUR	**77**	10-102	%	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2,4,6-tribromophenol SUR	**68**	10-123	%	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
nitrobenzene-D5 SUR	**66**	35-114	%	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
2-fluorobiphenyl SUR	**69**	43-116	%	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D
p-terphenyl-D14 SUR	**67**	33-141	%	1	AJD	8/1/11	4401	8/10/11	8:58	SW3546/8270D

Absolute Resource associates

Project ID: APU Wellesley 2010-052
Job ID: 22098

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
PCB-1221	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
PCB-1232	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
PCB-1242	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
PCB-1248	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
PCB-1254	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
PCB-1260	< 0.2	0.2	ug/g	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**79**	30-150	%	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082
decachlorobiphenyl SUR	**95**	30-150	%	1	JLZ	8/1/11	4398	8/4/11	5:52	SW3546/8082

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
TPH C10-C36	< 210	210	ug/g	1	JLZ	8/1/11	4399	8/9/11	17:30	SW3550B8100m
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**85**	40-140	%	1	JLZ	8/1/11	4399	8/9/11	17:30	SW3550B8100m
o-terphenyl SUR	**81**	40-140	%	1	JLZ	8/1/11	4399	8/9/11	17:30	SW3550B8100m

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Arsenic	**7.5**	0.7	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C
Barium	**230**	3	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C
Cadmium	< 0.3	0.3	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C
Chromium	**1800**	3	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C
Lead	**400**	0.7	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C
Mercury	< 0.08	0.08	ug/g	1	BJS	8/3/11	4415	8/3/11	14:11	SW7471B
Selenium	< 3	3	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C
Silver	< 0.5	0.5	ug/g	1	BJS	8/1/11	4403	8/1/11	16:09	SW3051A6010C

Project ID: APU Wellesley 2010-052
Job ID: 22098

Sample#: 22098-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.7% Results expressed on a dry weight basis.
Sampled: 7/27/11 11:05

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Cyanide, total	**3.3**	0.6	ug/g	1	APA		1101658	8/9/11		E9014
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA		1101602	8/3/11		SM4500-S
Ignitability	**NonIgnitable**			1	BJS		1101706	8/12/11		SW1010
pH	**8.1**		pH	1	APA		1101603	8/2/11	11:42	E150.1

METALS RESULTS

Lab Number: 22098-02
Sample ID: Area 1-Comp
Date Sampled: 7/27/11
Date Extracted: 8/18/11
Matrix: TCLP Extract

Analyte	Concentration mg/L	Quantitation Limit mg/L	Analysis Date	TCLP Limit mg/L	Instrument Dil'n Factor	Init	Method Reference
TCLP Chromium	4.9	0.5	8/19/11	5	10	BJS	SW 1311/3005A/6010C
TCLP Lead	< 0.1	0.1	8/19/11	5	10	BJS	SW 1311/3005A/6010C

Absolute Resource associates

Absolute Resource associates
124 Heritage Avenue #10
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 22098

Company Name: ES+M
Company Address: 273 West Main Street Norton, MA 02766
Report To: Tom Sneesby
Phone #: 508 226 1800
Invoice To: ES+M

Project Name: APU Wellesley
Project #: 2010-052
Project Location: NH (MA) ME VT Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other
Quote # ☐ NH GREE/ODD Fund Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER (Specify)	Sampling: DATE	TIME	SAMPLER	☐ VOC 8260 ☐ VOC 8260 NHDES (X) ☐ VOC 8260 MADEP	☐ VOC 624 ☐ VOC BTEX ☐ MIBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint (X)	☐ 8270PAH ☐ 8270ABN (X) ☐ 625 ☐ EDB 504.1	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB (X)	☐ O&G 1664 ☐ Mineral O&G SM5520F	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals (X)	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP (X)	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ TOC ☐ Grain Size ☐ TCLP Herbicides	Grab (G) or Composite (C)
22098-01	Area 1-Comp	4		X						1		7/27/11	11:05	TS	X				X	X	X				X							X				C

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) X
*Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS
* Waste Disposal Package
*Please Run TCLP if over The Theoretical Limit

REPORTING INSTRUCTIONS X PDF (e-mail address) Hynn@esm-inc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#) _____ ☐ OTHER (specify) _____

RECEIVED ON ICE ☐ YES ☐ NO
TEMPERATURE 4 °C

CUSTODY RECORD
QSD-01 Revision 12/23/10

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
1	Tom Sneesby	7/27/11	12:30		7/27/11	12:30
2		7/28/11	1:00			
3				Received by Laboratory: Way Bill#:	7/28/11	1:00

9

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Tom Sneesby
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
Job ID: 28150
Date Received: 10/10/13

Project: APU Wellesley 2011-037 Tsk#4

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 10/22/2013
Total number of pages: 11

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.68 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromomethane	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
diethyl ether	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
acetone	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
methylene chloride	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
t-butanol (TBA)	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chloroform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
benzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,4-dioxane	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
dibromomethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
toluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2-hexanone	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.68 mL MeOH/g soil.
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
o-xylene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
styrene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromoform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
bromobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
naphthalene	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
toluene-D8 SUR	**102**	88-110	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B
a,a,a-trifluorotoluene SUR	**107**	70-130	%	1	LMM	10/11/13	6438	10/14/13	14:53	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-002
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 7:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromomethane	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
diethyl ether	< 0.5	0.5	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
acetone	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
methylene chloride	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
t-butanol (TBA)	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chloroform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
benzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trichloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,4-dioxane	< 2	2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
dibromomethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
toluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2-hexanone	< 0.5	0.5	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-002
Sample ID: Trip Blank
Matrix: Solid
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 1˚C, in satisfactory condition.
Sampled: 10/9/13 7:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
o-xylene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
styrene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromoform	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
bromobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
naphthalene	< 0.2	0.2	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
toluene-D8 SUR	**101**	88-110	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM	10/11/13	6438	10/14/13	13:29	SW5035A8260B

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-chlorophenol	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
isophorone	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dichlorophenol	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
1,2,4-trichlorobenzene	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
naphthalene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzoic acid	< 5	5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-methylnaphthalene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-chloronaphthalene	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
acenaphthylene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
dimethylphthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
acenaphthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4-dinitrophenol	< 5	5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
dibenzofuran	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
fluorene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
diethyl phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-nitroaniline	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
phenanthrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
anthracene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
di-n-butylphthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
fluoranthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzidine	< 3	3	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
pyrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
butyl benzyl phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(a)anthracene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
chrysene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
3,3'-dichlorobenzidine	< 3	3	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
di-n-octyl phthalate	< 0.5	0.5	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(b)fluoranthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(k)fluoranthene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(a)pyrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
dibenzo(a,h)anthracene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
benzo(g,h,i)perylene	< 0.05	0.05	ug/g	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**68**	21-100	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
phenol-D5 SUR	**74**	10-102	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2,4,6-tribromophenol SUR	**85**	10-123	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
nitrobenzene-D5 SUR	**75**	35-114	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
2-fluorobiphenyl SUR	**90**	43-116	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D
p-terphenyl-D14 SUR	**93**	33-141	%	1	AJD	10/14/13	6449	10/15/13	13:30	SW3546/8270D

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1221	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1232	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1242	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1248	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1254	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
PCB-1260	< 0.2	0.2	ug/g	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**117**	30-150	%	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082
decachlorobiphenyl SUR	**111**	30-150	%	1	JLZ	10/14/13	6448	10/15/13	12:01	SW3546/8082

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
TPH C10-C36	< 210	210	ug/g	1	JLZ	10/14/13	6447	10/15/13	10:19	SW3550C8100m
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**95**	40-140	%	1	JLZ	10/14/13	6447	10/15/13	10:19	SW3550C8100m
o-terphenyl SUR	**98**	40-140	%	1	JLZ	10/14/13	6447	10/15/13	10:19	SW3550C8100m

Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Arsenic	**5.1**	0.6	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Barium	**38**	3	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Chromium	**560**	3	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Lead	**57**	0.6	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Mercury	< 0.17	0.17	ug/g	1	AB	10/11/13	6444	10/11/13	16:19	SW7471B
Selenium	< 3	3	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	10/15/13	6452	10/15/13	15:01	SW3051A6010C

Project ID: APU Wellesley 2011-037 Tsk#4
Job ID: 28150
Sample#: 28150-001
Sample ID: Area 1-Comp
Matrix: Solid Percent Dry: 89.4% Results expressed on a dry weight basis.
Sampled: 10/9/13 9:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Cyanide, total	< 0.6	0.6	ug/g	1	APA		1302667	10/14/13		E9014
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA		1302679	10/15/13		SM4500-S
Ignitability	**NonIgnitable**			1	KW		1302662	10/11/13		SW1010
pH	**7.5**		pH	1	APA		1302666	10/15/13	4:40	SW9045C

Project ID: 2011-037 Tsk#4 APU Wellesley
Job ID: 28150
Sample #: 28150-003
Sample ID: Area 1-Comp
Matrix: TCLP Extract
Sampled: 10/9/13 9:30
TCLP: 10/15/13

Parameter	Result	Reporting Limit	TCLP Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	**1.0**	0.50	5	mg/L	1	AB	10/17/13	6455	10/17/13	14:57	SW1311 SW3005A6010C

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

28150

Company Name: ESEM
Company Address: 273 West Main St. Hopkinton MA
Report To: TOM Sweeney
Phone #: 508-726-1800
Invoice To: ☐ Email: ESEM

Project Name: APC Wellesley
Project #: 2011-037 TSK#4
Project Location: NH (MA) ME VT Other
Protocol: RCRA SDWA NPDES (MCP) NHDES OTHER
Reporting Limits: QAPP GW-1 (S-1) EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

☒ VOC 8260 MADEP ☐ VOC 8260 NHDES ☐ VOC 8260 ☐ VOC 624 ☐ VPH MADEP ☐ VOC 524.2 ☒ TPH ☒ 8270PAH ☐ 8082 PCB ☐ O&G 1664 ☐ pH ☐ TSS ☐ RCRA Metals ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☒ Corrosivity ☒ Reactive CN ☒ Reactive S- ☒ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde ☐ VOC 524.2 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ 1,4-Dioxane ☐ GRO 8015 ☐ Gases-List: ☐ EPH MADEP ☐ TPH Fingerprint ☐ DRO 8015 ☐ MEDRO ☐ 625 ☐ EDB 504.1 ☐ 608 Pest/PCB ☐ Mineral O&G SM5520F ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	Grab (G) or Composite (C)
28150-01	AREA 1-Comp	4									10/9/13	0930	MW	C
-02	TRIP BLANK	1								1	10/9/13	0700	MW	G

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☐
*Date Needed 72 HR TAT

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS * WASTE DISPOSAL PACKAGE
* PLEASE RUN TCLP IF OVER THE THEORETICAL limit

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) HLyon@esm-inc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 1 °C

CUSTODY RECORD
QSD-01 Revision 03/21/13

	Relinquished by Sampler	Date	Time	Received by:	Date	Time
1	Mark Winters	10/9/13	12:28	Allen Cornell	10/9/13	12:28
2	Allen Cornell	10/10/13	12:15			
3				Received by Laboratory:	10/10/13	1220

10/10/13 1620 10/10/13 1620

ENVIRONMENTAL SOIL MANAGEMENT COMPANIES
Generator Waste Profile

ESMI Customer: ENPRO Services		**Purchase Order #**	
Customer Address: 12 Mulliken Way	**City:** Newburyport	**State:** MA	**Zip:** 01950
Contact: John Curley	**Tel:** 978-225-1122	**Fax:**	
Site Contact: Tom Sneesby	**Tel:** 508-226-1800	**Cell:**	
Site Name: American Premier Underwriters, Inc	**Site Tel:** 513-579-2538		
Site Address: 1 Bacon Street	**City:** Wellesley,	**State:** MA	**Zip:** 02482

History of Site Use: ■ **Residential** ☐ **Commercial** ☐ **Industrial** ■ **Other:**

If commercial, industrial or other, please describe history of site:
Site is a Residential Property

Event/process generating waste: ☐ Leaking UST ☐ Leaking AST ☐ Surface Spill ■ other(*describe*):
Paint wastes containing heavy metals from the Henry Wood's Sons Paint Factory; RTN# 3-11653

Waste Material Description: ***Soil/media is contaminated with:*** (Check All That Apply)

☐ NON-HAZARDOUS ***VIRGIN PETROLEUM*** CONTAMINATED SOIL
☐ #2, ☐ #4, ☐ #6 Fuel Oil ☐ Diesel Fuel ☐ Gasoline ☐ Jet Fuel ☐ Animal/Vegetable/Tall oils ☐ White Oil
☐ Kerosene ☐ Mixed Fuels (gas/fuel oil) ☐ Petroleum Solvent ☐ Hydraulic Oil ☐ Motor Oil

☑ NON-HAZARDOUS ***NON-VIRGIN PETROLEUM*** CONTAMINATED SOIL
☐ Used Oils ☐ Grease/Lubes ☐ Used Animal/Vegetable/Tall Oils ☐ Waxes ☐ Petrolatum ☐ Hydraulic Oil
☐ Lubricating Oils ☐ Metal Working Oils ■ Industrial Oils ☐ Used Petroleum Solvent ☐ Electrical Oil
☐ Transformer Oil (non-PCB) ■ Urban Fill

☐ NON-HAZARDOUS ***COAL TAR or PCB*** CONTAMINATED SOIL
☐ Coal Tar ☐ PCB's (<50ppm; Not PCB Remediation Waste)

☐ NON-HAZARDOUS ***DREDGE*** CONTAMINATED SOIL (Also Identify Contaminant)
☐ Dredge Soil associated with Upland Remediation

Are there any known or suspected past releases of contaminants other than the above listed? NO ■ **YES** ☐
If **YES**, Specify:

Approximate Tonnage: 250 tons

Physical Characteristics: %Gravel_____ %Sand_____ %Clay/Silt_____ % H20_____ %Debris_____ ∑ =100%
Describe Debris:

I hereby certify, to the best of my knowledge, (a) I am a responsible official of the generator, (b) that the sampling requirements, pursuant to Env-Or 611.04(NH only), and any additional sampling required by the state of origin, has been adhered to, (c) that the information provided in the profile is correct and complete, (d) that the transport, treatment and recycling of the contaminated materials do not violate any laws or regulations of the state of origin.

Signature: [signature] agent for APU **Date:** 10/1/13

Typed/Printed Name: Douglas Heely **Company:** Environmental Strategies + Mgt

Check One: Owner: ☐ **Generator:** ☐ **Contractor:** ☑ **Consultant:** ☐ **Other (explain):**

Acceptance of all projects is predicated on the review of this form and the analytical results of the material to be received.

ESMI of New Hampshire
67 International Drive
Loudon, New Hampshire 03307
Phone: 603.783.0228
Fax: 603.783.0104

ESMI of New York
304 Towpath Road
Fort Edward, New York 12828
Phone: 518.747.5500
Fax: 518.747.1181

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number: 3 - 11653

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: MORSES POND OUTLET CULVERT 1 BACON ST
2. Street Address: RTE 135
3. City/Town: WELLESLEY 4. Zip Code: 021810000
- [x] 5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
  - [ ] a. Tier 1A [ ] b. Tier 1B [x] b. Tier 1C [ ] d. Tier II
6. If applicable provide the Permit Number: E300996

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

- [x] 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility. Response Actions associated with this BOL (check all that apply):
  - [ ] a. Immediate Response Action (IRA)
  - [ ] b. Release Abatement Measure (RAM)
  - [ ] c. Downgradient Property Status (DPS)
  - [ ] d. Utility Release Abatement Measure (URAM)
  - [x] e. Comprehensive Response Actions
  - [ ] f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
  - [ ] g. Other
- [ ] 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):
- [ ] 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):
- [ ] 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: _____ (mm/dd/yyyy) b. eDEP Transaction ID:

6. Period of Generation Associated with this Bill of Lading 10/24/2013 (mm/dd/yyyy) to 11/24/2013 (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):
   - [x] a. Soil [ ] b. Groundwater [ ] c. Surface Water [ ] d. Sediment [ ] e. Vegetation or Organic Debris
   - [ ] f. Demolition/Construction Waste [ ] g. Inorganic Absorbent Materials [ ] h. Other:
2. Uncontainerized Waste (check all that apply):
   - [ ] a. Inorganic Absorbent Materials [ ] b. Other:

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):

☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments

☐ e. Other:

4. Estimated Quantity: 100 ☑ Tons ☐ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):

☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment

☑ d. Other: FILL

6. Type of Contaminant (check all that apply):

☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel

☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☑ k. Other: METALS

7. Constituents of Concern (check all that apply):

☐ a. As ☐ b. Cd ☑ c. Cr ☐ d. Pb ☐ e. Hg ☐ f. EPH/TPH ☐ g. VPH

☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other:

8. If applicable, check the box for the Reportable Concentration Category of the site:

☑ a. RCS-1 ☐ b. RCS-2 ☑ c. RCGW-1 ☐ d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):

☐ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☑ c. Laboratory Data

☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department

i. Date submitted: (mm/dd/yyyy) ii. Type of Documentation:

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: ENPRO SERVICES INC.

2. Contact First Name: JOHN 3. Last Name: CURLEY

4. Street: 12 MULLIKEN WAY 5. Title: SR. HAZARDOUS MATERIALS COO

6. City/Town: NEWBURYPORT 7. State: MA 8. Zip Code: 019500000

9. Telephone: 978-225-1122 10. Ext: 11. Fax:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 11653

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: ENVIRONMENTAL SOIL MANAGEMENT INC
2. Contact First Name: ANGELA 3. Last Name: GAGNE
4. Street: 67 INTERNATIONAL DRIVE 5. Title: OFFICE MANAGER
6. City/Town: LOUDON 7. State: NH 8. Zip Code: 033070000
9. Telephone: 603-783-0228 10. Ext: 11. Fax:
12. Type of Facility: (Check one)
    a. Temporary Storage i. Period of Temporary Storage: (mm/dd/yyyy) to (mm/dd/yyyy)
    ii. Reason for Temporary Storage:
    ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover
    ☐ f. Asphalt Batch/Cold Mix ☑ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:
13. Division of Hazardous Waste/Class A Permit Number: NA
14. Division of Solid Waste Permit Number: DES-SW-SP-96-002
15. EPA Identification Number: NH5986485852

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9632
2. First Name: DOUGLAS A 3. Last Name: HEELY
4. Telephone: 5082261800 5. Ext.
6. FAX:
7. Signature: Douglas A Heely
8. Date: 10/25/2013 (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 11653

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☑ a. change in contact name ☐ b. Change of address ☐ c. change in person undertaking response actions

2. Name of Organization: AMERICAN PREMIER UNDERWRITERS INC

3. Contact First Name: EARL J 4. Last Name: IMHOFF

5. Street: 1 EAST FOURTH ST 8TH FLOOR 6. Title: AGENT FOR APU

7. City/Town: CINCINNATI 8. State: OH 9. Zip Code: 452020000

10. Telephone: 5135792538 11. Ext: 12. Fax:

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING:

☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: NON-SPECIFIED PRP

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☑ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, Earl Imhoff, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: Earl Imhoff 3. Title: AGENT FOR APU

4. For AMERICAN PREMIER UNDERWRITERS INC (Name of person or entity recorded in Section H) 5. Date: 10/25/2013 (mm/dd/yyyy)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 11653

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

10/25/2013 11:10:34 AM

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY OF SHIPMENT SHEET ____ **OF** ____

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☑ tons ☐ gals
10/28/2013	10/28/2013	1	21.34
10/29/2013	10/29/2013	1	18.18
10/30/2013	10/30/2013	2	27.94
10/31/2013	10/31/2013	2	23.92
5. Totals Recorded on this Summary of Shipment Sheet:		6	91.38

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY OF SHIPMENT SHEET [ ] **OF** [ ]

[ ] - [ ]

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☑ tons ☐ gals
10/25/2013	10/25/2013	1	18.13
5. Totals Recorded on this Summary of Shipment Sheet:		1	18.13

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

...nusetts Department of Environmental Protection
...eau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

SUMMARY OF SHIPMENT SHEET ____ **OF** ____

Release Tracking Number ____ - ____

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☒ tons ☐ gals
11/01/2013	11/01/2013	1	11.90
11/04/2013	11/04/2013	2	29.26
11/06/2013	11/06/2013	2	32.56
11/07/2013	11/07/2013	1	13.84
5. Totals Recorded on this Summary of Shipment Sheet:		6	87.56

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

ssachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY OF SHIPMENT SHEET _____ **OF** _____

SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☒ tons ☐ gals
11/11/2013	11/11/2013	1	16.48
5. Totals Recorded on this Summary of Shipment Sheet:		1	16.48

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

Job# 1295-13 PO# 23612

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number ☐ - ☐

I. LOAD INFORMATION:

Load 1:
Signature of Transporter Representative: X
Date of Shipment: 10/28/13
Time of Shipment: 12:00 ☐ AM ☒ PM
Truck/Tractor Registration: 12364 MA.
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative: ESMi Alleagro
Date of Receipt: 10/28/13
Time of Receipt: 2:19 ☐ AM ☒ PM
Load Size (cu. yds./tons): 21.54

Load 2:
Signature of Transporter Representative:
Date of Shipment: 10/29/13
Time of Shipment: 12:00 ☐ AM ☒ PM
Truck/Tractor Registration: 12364 MA.
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative: ESMi Alleagro
Date of Receipt: 10/29/13
Time of Receipt: 1:20 ☐ AM ☒ PM
Load Size (cu. yds./tons): 18.18

Load 3:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 4:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 5:
Signature of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

Load 6:
Signatiure of Transporter Representative:
Date of Shipment:
Time of Shipment: ☐ AM ☐ PM
Truck/Tractor Registration:
Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt:
Time of Receipt: ☐ AM ☐ PM
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:
Total Volume Recorded This Page (cu. yds./tons): 39.52
Total Carried Forward (cu. yds./tons):
Total Carried Forward and This Page (cu. yds./tons):

1/13/11

Job # 1295-13 PO # 23612

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Release Tracking Number

Page _____ OF _____

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Cheng Sanya

Date of Shipment: 10-30-13

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: R.C.R. 81

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: ESMI / A Cleagne

Date of Receipt: 10/30/13

Time of Receipt: 7:01 ☑ AM ☐ PM

Load Size (cu. yds./tons): 12.54

Load 2:

Signature of Transporter Representative: Cheng Sanya

Date of Shipment: 10-31-13

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: R.C.R. 81 N.H

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: ESMI / A Cleagne

Date of Receipt: 10/31/13

Time of Receipt: 6:59 ☑ AM ☐ PM

Load Size (cu. yds./tons): 12.21

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 24.75

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

1/13/11

Job # 1295-13 PO # 23613

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number | | - | |

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Billy Nickel

Date of Shipment: 10/30/13 Time of Shipment: 230 ☐ AM ☒ PM

Truck/Tractor Registration: 1004 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: FESMI / Alcaro

Date of Receipt: 10/30/13 Time of Receipt: 1:49 ☐ AM ☒ PM

Load Size (cu. yds./tons): 15.40

Load 2:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 15.40

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Job # 1295-13 PO # 23612

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number | | - | |

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 10/31/13

Time of Shipment: 1330 ☐ AM ☒ PM

Truck/Tractor Registration: MA64919

Trailer Registration (if any): —

Receiving Facility/Temporary Storage Representative: ESM / Accept

Date of Receipt: 10/31/13

Time of Receipt: 2:07 ☐ AM ☒ PM

Load Size (cu. yds./tons): 11.71

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative

Date of Receipt:

Time of Receipt | | AM | | PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 11.71

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Job # 1295-13 PO # 23612

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number ☐ - ☐

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 10/24/13 Time of Shipment: 3:45 ☐ AM ☐ PM

Truck/Tractor Registration: 136 M3 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: Eshu Keegan

Date of Receipt: 10/25/13 Time of Receipt: 2:34 ☐ AM ☐ PM

Load Size (cu. yds./tons): 18 13

Load 2:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment: Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons)

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Job # 1245 - 13
oct PO# 23612

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Release Tracking Number ☐ - ☐

Page _____ OF _____

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: [signature]

Date of Shipment: 11-1-13

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: R.C.R.81 N.H.

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: ESMI / Aleagx

Date of Receipt: 11/1/13

Time of Receipt: 7:01 ☒ AM ☐ PM

Load Size (cu. yds./tons): 11.90

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signatiure of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 11.90

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

1/13/11

Job # 1295-3 PO # 23727

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Release Tracking Number

Page _____ OF _____

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative: ESMI / Allegro

Date of Shipment: 11-4-13

Time of Shipment: ☐ AM ☐ PM

Date of Receipt: 11/4/13

Time of Receipt: 7:01 ☑ AM ☐ PM

Truck/Tractor Registration: R.C.R 81. 11.4.

Trailer Registration (if any):

Load Size (cu. yds./tons): 14.79

Load 2:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 14.79

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Job #1295-3 PO# 23727

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number

[ ] - [ ]

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Billy Mate

Date of Shipment: 11/4/13

Time of Shipment: 230 [ ] AM [X] PM

Truck/Tractor Registration: 1004

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: Joni Allegro

Date of Receipt: 11/4/13

Time of Receipt: 1:40 ~~[ ] AM [ ] PM~~

Load Size (cu. yds./tons): 14.47

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: [ ] AM [ ] PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: [ ] AM [ ] PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: [ ] AM [ ] PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: [ ] AM [ ] PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: [ ] AM [ ] PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: [ ] AM [ ] PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: [ ] AM [ ] PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: [ ] AM [ ] PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: [ ] AM [ ] PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: [ ] AM [ ] PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 14.47

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Job # 1295-3 PO # 23727

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number | | - | |

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: Tony Souza

Date of Shipment: 11-6-13

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: P.C.R. 81 N.H

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: ESMI/Aleggio

Date of Receipt: 11/6/13

Time of Receipt: 6:58 ☒ AM ☐ PM

Load Size (cu. yds./tons): 17.15

Load 2:

Signature of Transporter Representative: Tony Souza

Date of Shipment: 11-7-13

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: P.C.R. 81 N.H.

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: ESMI/Aleggio

Date of Receipt: 11/7/13

Time of Receipt: 6:57 ☒ AM ☐ PM

Load Size (cu. yds./tons): 13.84

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

Load 6:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: | | AM | | PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 30.99

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Job #1295-3 PO#2372

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Release Tracking Number ☐ - ☐

Page _____ **OF** _____

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative: [signature]

Date of Shipment: 11/6/13

Time of Shipment: 1:45 ☐ AM ☒ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: ESMI Acoago

Date of Receipt: 11/6/13

Time of Receipt: 1:30 ☐ AM ☒ PM

Load Size (cu. yds./tons): @ 15.41

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signatiure of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): @ 15.41

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

1/13/11

Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Page _____ OF _____

Release Tracking Number ☐ - ☐

I. LOAD INFORMATION:

Load 1:

Signature of Transporter Representative:

Date of Shipment: 11-11-13

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration: R.C.R 82 N.H.

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 11/11/13

Time of Receipt: 7:05 ☒ AM ☐ PM

Load Size (cu. yds./tons): 16.48

Load 2:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 3:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 4:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 5:

Signature of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

Load 6:

Signatiure of Transporter Representative:

Date of Shipment:

Time of Shipment: ☐ AM ☐ PM

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt:

Time of Receipt: ☐ AM ☐ PM

Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume Recorded This Page (cu. yds./tons): 16.48

Total Carried Forward (cu. yds./tons):

Total Carried Forward and This Page (cu. yds./tons):

Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username:	**ESMINC**
Transaction ID:	**637182**
Document:	**BWSC112 Bill of Lading**
Size of File:	**119.31K**
Status of Transaction:	**In Process**
Date and Time Created:	**4/16/2014:3:07:05 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to “Download a Copy” from the Current Submittals page.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 11653

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: MORSES POND OUTLET CULVERT 1 BACON ST
2. Street Address: RTE 135
3. City/Town: WELLESLEY 4. Zip Code: 021810000
- [x] 5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
  - [ ] a. Tier 1A [ ] b. Tier 1B [x] b. Tier 1C [ ] d. Tier II
6. If applicable provide the Permit Number: E300996

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

- [ ] 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility. Response Actions associated with this BOL (check all that apply):
  - [ ] a. Immediate Response Action (IRA)
  - [ ] b. Release Abatement Measure (RAM)
  - [ ] c. Downgradient Property Status (DPS)
  - [ ] d. Utility Release Abatement Measure (URAM)
  - [ ] e. Comprehensive Response Actions
  - [ ] f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
  - [ ] g. Other
- [ ] 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):
- [x] 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):
- [ ] 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: 10/25/2013 11:10: (mm/dd/yyyy) b. eDEP Transaction ID: 605904

6. Period of Generation Associated with this Bill of Lading 10/24/2013 (mm/dd/yyyy) to 11/24/2013 (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)
The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):
   - [ ] a. Soil [ ] b. Groundwater [ ] c. Surface Water [ ] d. Sediment [ ] e. Vegetation or Organic Debris
   - [ ] f. Demolition/Construction Waste [ ] g. Inorganic Absorbent Materials [ ] h. Other:
2. Uncontainerized Waste (check all that apply):
   - [ ] a. Inorganic Absorbent Materials [ ] b. Other:

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):

☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments

☐ e. Other:

4. Estimated Quantity: ☐ Tons ☐ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):

☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment

☐ d. Other:

6. Type of Contaminant (check all that apply):

☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel

☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☐ k. Other:

7. Constituents of Concern (check all that apply):

☐ a. As ☐ b. Cd ☐ c. Cr ☐ d. Pb ☐ e. Hg ☐ f. EPH/TPH ☐ g. VPH

☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other:

8. If applicable, check the box for the Reportable Concentration Category of the site:

☐ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):

☐ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☐ c. Laboratory Data

☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department

i. Date submitted: (mm/dd/yyyy) ii. Type of Documentation:

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: **ENPRO SERVICES INC.**

2. Contact First Name: **JOHN** 3. Last Name: **CURLEY**

4. Street: **12 MULLIKEN WAY** 5. Title: **SR. HAZARDOUS MATERIALS COO**

6. City/Town: **NEWBURYPORT** 7. State: **MA** 8. Zip Code: **019500000**

9. Telephone: **978-225-1122** 10. Ext: 11. Fax:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 11653

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: ENVIRONMENTAL SOIL MANAGEMENT INC
2. Contact First Name: ANGELA
3. Last Name: GAGNE
4. Street: 67 INTERNATIONAL DRIVE
5. Title: OFFICE MANAGER
6. City/Town: LOUDON
7. State: NH
8. Zip Code: 033070000
9. Telephone: 603-783-0228
10. Ext:
11. Fax:
12. Type of Facility: (Check one)
    a. Temporary Storage i. Period of Temporary Storage: (mm/dd/yyyy) to (mm/dd/yyyy)
    ii. Reason for Temporary Storage:

☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover
☐ f. Asphalt Batch/Cold Mix ☑ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:

13. Division of Hazardous Waste/Class A Permit Number: NA
14. Division of Solid Waste Permit Number: DES-SW-SP-96-002
15. EPA Identification Number: NH5986485852

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #:
2. First Name:
3. Last Name:
4. Telephone:
5. Ext.
6. FAX:
7. Signature:
8. Date: (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 11653

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☐ c. change in person undertaking response actions

2. Name of Organization: AMERICAN PREMIER UNDERWRITERS INC

3. Contact First Name: EARL J 4. Last Name: IMHOFF

5. Street: 1 EAST FOURTH ST 8TH FLOOR 6. Title: AGENT FOR APU

7. City/Town: CINCINNATI 8. State: OH 9. Zip Code: 452020000

10. Telephone: 5135792538 11. Ext: 12. Fax:

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING:

☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: NON-SPECIFIED PRP

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☐ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, _____, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: 3. Title:

4. For (Name of person or entity recorded in Section H) 5. Date: (mm/dd/yyyy)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 11653

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

4/16/2014 3:05:36 PM

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 11653

SUMMARY OF SHIPMENT SHEET 1 **OF** 1

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☑ tons ☐ gals
10/25/2013	10/25/2013	1.00	18.13
10/28/2013	10/28/2013	1.00	21.34
10/29/2013	10/29/2013	1.00	18.18
10/30/2013	10/30/2013	2.00	27.94
10/31/2013	10/31/2013	2.00	23.92
11/1/2013	11/1/2013	1.00	11.90
11/4/2013	11/4/2013	2.00	29.26
11/6/2013	11/6/2013	2.00	32.56
11/7/2013	11/7/2013	1.00	13.84
11/11/2013	11/11/2013	1.00	16.48
5. Totals Recorded on this Summary of Shipment Sheet:		14	213.55

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112B

Release Tracking Number
3 - 11653

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET SIGNATURE PAGE

A. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

1. I, Marc Aubrey, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: Marc Aubrey 3. Title: GENERAL MANAGER

4. For: ENVIRONMENTAL SOIL MANAGEMENT,INC. 5. Date: 4/8/2014 (mm/dd/yyyy)

6. Date of Final Shipment associated with this Bill of Lading: 11/11/2013 (mm/dd/yyyy)

B. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTIONS ASSOCIATED WITH THIS BILL OF LADING:

1. I, Earl J. Imhoff, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: Earl J. Imhoff 3. Title:

4. For: (Name of person or entity recorded in Section G) 5. Date: 4/16/2014 (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in BWSC112 Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

☐ 14. Check here if attaching optional supporting documentation such as copies of Load Information Summary Sheets

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 • Tel: (508) 226-1800 • Fax: (508) 226-1811

April 25, 2014

Executive Director
Board of Selectmen
525 Washington Street
3rd Floor
Wellesley, MA 02482

Director of Public Health
Health Department
Annie F. Warren Building, 2nd Floor
90 Washington Street
Wellesley, MA 02481

Subject: **Morse's Pond Culvert Site**
One Bacon Street
Wellesley, Massachusetts
MassDEP RTN 3-11653

Document: Phase IV Final Inspection Report, Completion Statement and Response Action Outcome

As required by the Massachusetts Contingency Plan (MCP), notice is hereby given that the above referenced document has been submitted electronically to the Massachusetts Department of Environmental Protection (MassDEP).

The purpose of this report is to document the completion of the excavation of metal-impacted soil at the One Bacon Street property. In addition, this report serves to document that a temporary solution has been achieved under the MCP for the property.

The report can be viewed on line by selecting File Review/Site File Viewer at the MassDEP website (http://www.mass.gov/eea/agencies/massdep/) or by contacting the MassDEP Northeast Regional Office located at 205B Lowell Street in Wilmington, Massachusetts. The Central Regional Office service center phone number is 978-694-3314.

If you have any questions, please contact our office at 508-226-1800.

Sincerely,

Environmental Strategies & Management, Inc.

Tom Sneesby
Project Manager

Copy: MassDEP Northeast Region

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 11653

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: MORSES POND CULVERT, RTE 135

City/Town: WELLESLEY Zip Code: 02181

B. This notice is being provided to the following party:

1. Name: KEN BREDE

2. Street Address: 1 BACON ST

City/Town: WELLESLEY Zip Code: 02181

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 1 BACON ST

City/Town: WELLESLEY Zip Code: 02181

2. MCP phase of work during which the sampling will be/has been conducted:

☐ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☑ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

E. Contact information related to the party providing this notice:

Contact Name: DOUGLAS HEELY, ES&M

Street Address: 273 WEST MAIN ST

City/Town: NORTON Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Massachusetts Contingency Plan
Post Temporary Solution Status Report

Morses Pond Culvert Site
Wellesley, Massachusetts
MassDEP RTN 3-11653

Prepared for:
American Premier Underwriters, Inc.
One East Fourth Street
Cincinnati, Ohio 45202

Prepared by:
Verdantas LLC
46 Eastman Street
South Easton, Massachusetts 02375

Verdantas Project No: ESM.0008001002

February 2025

Table of Contents

1.0 INTRODUCTION....1
1.1 BACKGROUND....1
1.2 STATEMENT OF PURPOSE....2

2.0 OVERVIEW OF ACTIVITIES....3
2.1 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS....3
2.2 EVALUATION OF SAMPLING RESULTS....3
2.3 CAP MAINTENANCE AND INSPECTION....4

3.0 LSP INFORMATION....5

4.0 FUTURE ACTIVITIES....6

5.0 MCP PUBLIC INVOLVEMENT....7

Figures

Figure 1 Site Map

Tables

Table 1 Summary of Groundwater Analytical Results
Table 2 Summary of Water Table Elevation Measurements

Appendices

Appendix A Laboratory Analytical Reports
Appendix B Cap Inspection Report
Appendix C MCP Public Notification Letters

1.0 Introduction

This Post Temporary Solution (PTS) Status report has been prepared in accordance with the Massachusetts Contingency Plan (MCP), 310 CMR 40.0898 by Verdantas LLC (Verdantas; formerly Environmental Strategies & Management, Inc. [ES&M]) on behalf of American Premier Underwriters, Inc. (APU) for Release Tracking Number (RTN) 3-11653. This RTN pertains to the Morses Pond Culvert site in Wellesley, Massachusetts, herein after referred to as "the Site."

As shown on the site map included as Figure 1, the Site is composed of three areas that were impacted by paint wastes containing metals that were historically used as fill material. Area 1 is the western portion of the Site and includes the private residence at One Bacon Street. Area 2 is the Morses Pond cove located at the southern outlet of Morses Pond, where it discharges to Paint Shop Pond. Area 3 is the upland area around and downgradient of the cove. Massachusetts Bay Transportation Authority (MBTA) railroad tracks are located south of the cove and property owned by the Town of Wellesley is located east of the cove.

1.1 Background

The Site's history and background have been thoroughly described in previous reports, most recently the Phase IV Final Inspection Report (FIR; relative to Area 1) and Response Action Outcome (RAO) Statement, submitted to the Massachusetts Department of Environmental Protection (MassDEP) on April 25, 2014, as well as the Periodic Review of Temporary Solution, Phase IV Completion Statement & Final Inspection Report, submitted to MassDEP on April 29, 2019. The RAO documented the attainment of a Permanent Solution for Area 2, and a Temporary Solution for Areas 1 and 3. Since Area 2 has reached a Permanent Solution, this report pertains solely to Areas 1 and 3.

Area 1 was the focus of a soil excavation program during the fall of 2013. As documented in the RAO report, metals-impacted soil was removed from this area to address two hot spots identified in the Phase II investigation. Although the soil removal program was successful at achieving MCP Method 1 Residential Standards in soil, concentrations of metals in groundwater remain above applicable MCP Method 1, GW-1 Standards. For this reason, this portion of the Site has achieved a Temporary Solution rather than a Permanent Solution.

For Area 3, a Phase IV Remedy Implementation Plan (RIP) Addendum was submitted to MassDEP on December 27, 2013, to describe a limited in-situ chemical reduction program to treat source material and impacted groundwater in Area 3. The program included injection of aqueous calcium polysulfide into impacted soils in the culvert area. The specific goal of this enterprising step was to change the oxidation state of some of the chromium in accessible soils from the more mobile and less desirable hexavalent oxidation state (+6) to the largely immobile and less harmful trivalent oxidation state (+3). This work was conducted as a definitive and enterprising step, with the intent of improving site conditions. MassDEP granted approval of this plan in their Conditional Approval (CA) letter dated August 27, 2014.

The injection program was implemented between May 19 and May 27, 2015 and was described in detail in the Post Temporary Solution Status Report dated December 23, 2015. Since then, PTS Status Reports have been submitted every six months to describe monitoring data collected in accordance with the Phase IV RIP Addendum and the CA letter.

A Periodic Review of the Temporary Solution was submitted to MassDEP in May 2024. In order to achieve a Permanent Solution for the Culvert Site, any remedy would need to reduce concentrations of chromium in soil to below Method 3 Ceiling Limits and reduce chromium concentrations in groundwater to meet GW-1 Standards. Due to physical constraints, such as the presence of the railroad tracks and the steep slope near the Morses Pond Culvert, the residual paint wastes are not accessible. The outcome of the Periodic Review was that no technology or combination of technologies is capable of attaining a Permanent Solution, and that Temporary Solution Status remains appropriate for Areas 1 and 3.

1.2 Statement of Purpose

This Post Temporary Solution Status Report describes activities undertaken at the Site between July 1 and December 31, 2024.

2.0 Overview of Activities

The following section documents the ongoing remedial program, namely post-injection groundwater monitoring and related Post-Temporary Solution activities. There have not been any significant modifications to the monitoring program since the submission of the previous Status Report.

2.1 Groundwater Sample Collection and Analysis

The Periodic Review, submitted in May 2024, stated that groundwater sampling events will continue on a semi-annual basis in May and November. During this report period, a semi-annual groundwater sampling event was conducted on November 4 and 5, 2024.

Prior to groundwater sampling, depth to water was measured at all accessible wells with an electronic oil/water interface probe, and a water level reading was taken at Morses Pond.

Groundwater was purged from the wells included in the sampling program using a peristaltic pump operated at a low setting and connected to disposable tubing. Purged water was run through a flow cell connected to a water quality meter, and was monitored for color, pH, oxidation/reduction potential (ORP), dissolved oxygen, temperature, specific conductance, and turbidity. Once those parameters stabilized, the pump was disconnected from the flow cell. Groundwater samples were then collected in pre-cleaned bottles with appropriate preservatives. In-line 0.45-micron field filters were utilized during the collection of the dissolved metals samples.

The samples were placed in coolers with ice and shipped under chain of custody to Absolute Resource Associates, of Portsmouth, New Hampshire, for analysis of dissolved total chromium, dissolved nickel, dissolved lead, and hexavalent chromium. The laboratory results for all groundwater samples are summarized on Table 1. The complete laboratory analytical reports are included in Appendix A.

Water table elevation information is summarized on Table 2, and water table elevation data collected during the November 2024 monitoring event from wells screened within the shallow aquifer was used to create the water table elevation contours shown on Figure 1.

2.2 Evaluation of Sampling Results

Culvert Area

Concentrations of total and hexavalent chromium in the groundwater sample collected from ESM-7 in November of 2024 continue to exceed MCP Method 1 Standards. Concentrations of total and hexavalent chromium in this well often fluctuate, and recent results fall within the historical range.

Concentrations of metals in groundwater samples collected from monitoring wells MW- B and MW-C in November of 2024 remain lower than all applicable MCP Method 1 Standards. Due to dry conditions, MW-5D did not produce a sufficient volume of groundwater for complete sample collection, and samples were not analyzed for dissolved metals. The concentration of hexavalent chromium in the groundwater sample collected from MW-5D did not exceed the applicable MCP Method 1 Standards. Water table elevation contours have consistently shown groundwater flow in the vicinity of the culvert to generally be away from the pond (towards the east/southeast).

Central Street Area

Concentrations of metals in the groundwater samples collected from ESM-12D, ESM-12S, ESM-13D, ESM-13S, ESM-17I, ESM-18I, and ESM-18S in November of 2024 remain lower than all applicable MCP Method 1 Standards.

Concentrations of total and hexavalent chromium in the groundwater sample collected from ESM-17S in November of 2024 exceeded one or more applicable MCP Method 1 Standards. Total and hexavalent chromium remained within the historic range.

One Bacon Street Property

Concentrations of total chromium, hexavalent chromium, and trivalent chromium in the groundwater sample collected from ESM-16 in November of 2024 decreased when compared to concentrations detected in the groundwater sample collected from this well in May of 2024. Significant fluctuations have been observed in this well.

2.3 Cap Maintenance and Inspection

The soil cap overlying those portions of the Site where residual paint wastes remain is a component of the remedy for this site. As such, the integrity of the cap is inspected each year, and maintenance is completed as necessary. The most recent cap inspection was completed on November 4, 2024, and the inspection checklist form is included in Appendix B. Erosion was observed around the steepest sections of the path located on both sides of the culvert, and on the path along the top of the culvert. However, the overall condition of the cap is good, and it is performing as intended to prevent human contact with impacted soils and to prevent migration of residual paint wastes to Morses Pond. Brush clearing will be conducted in the spring of 2025.

3.0 LSP Information

The Licensed Site Professional (LSP) of Record for the Site is:

Mrs. Angela Boyd
LSP License #3532
Verdantas LLC
46 Eastman Street
South Easton, Massachusetts 02375
(401) 648-8537

Mrs. Boyd opines that the remedial action is achieving remedial goals. Mrs. Boyd's electronic signature and seal are included on the BWSC-108 Transmittal Form submitted with this report.

4.0 Future Activities

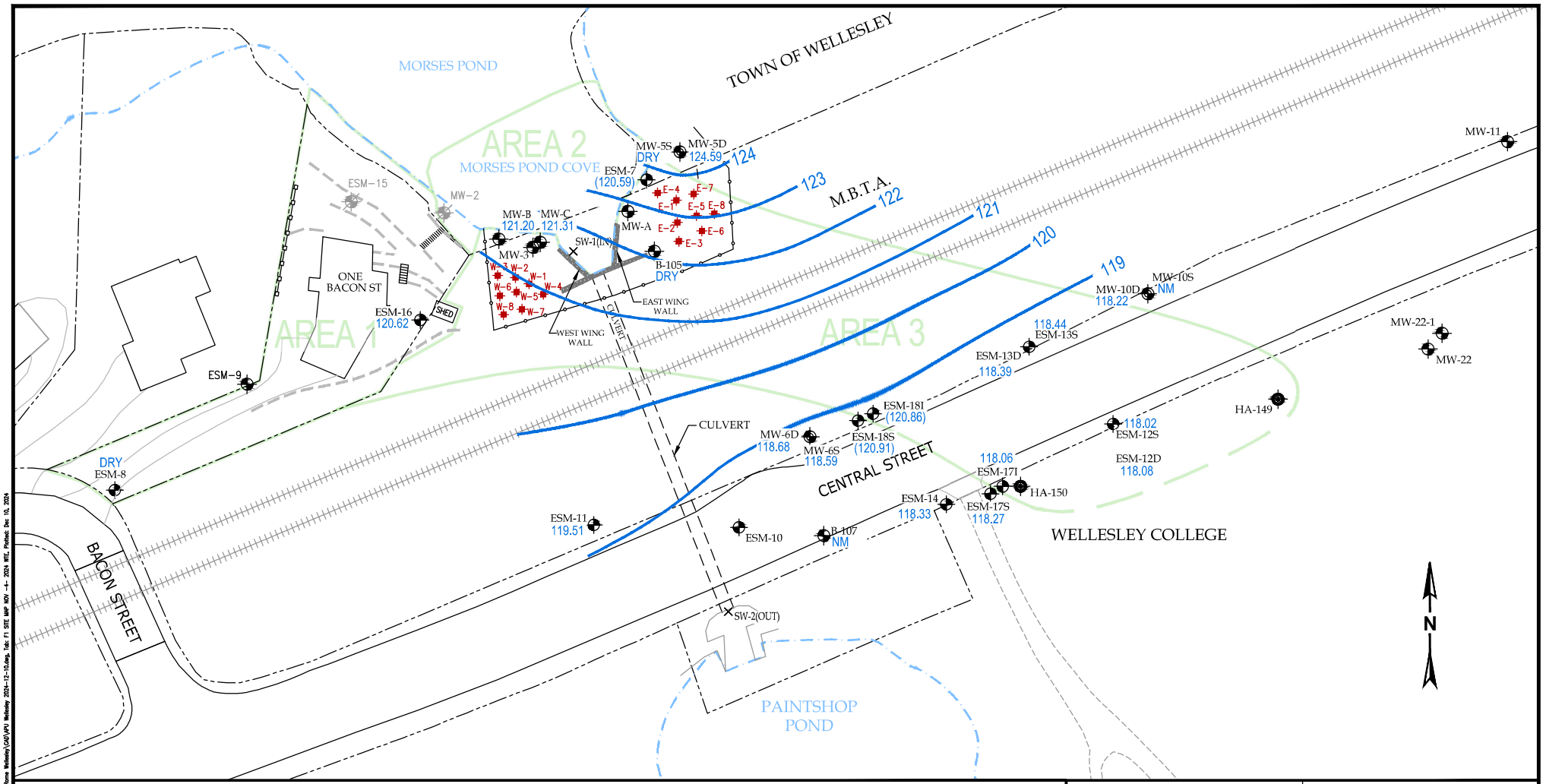
The Site continues to qualify for a Temporary Solution. An updated groundwater monitoring regimen was described in the May 2024 periodic review. This regimen includes collection of groundwater samples from culvert wells ESM-7, MW-5D, MW-B, and MW-C; One Bacon Street well ESM-16; and Central Street wells ESM-12S/D, ESM-13S/D, ESM-17S/I, and ESM-18S/I, twice per year (in May and November) for analysis of dissolved lead, dissolved nickel, dissolved total chromium, and hexavalent chromium. The next sampling event will be conducted in May 2025, and the next PTS Status Report will be submitted in approximately six months

5.0 MCP Public Involvement

As required by the MCP, 310 CMR 40.1403 (3)(e), the Chief Municipal Officer and the Wellesley Board of Health have been notified in writing of the availability of this report. Copies of these letters are included in Appendix C. Appendix C also includes a "BWSC 123 Notice of Environmental Sampling" prepared for the owners of One Bacon Street.

Figures

Figure 1 Site Map



LEGEND

MW-1	MONITORING WELL
MW-6	MONITORING WELL COUPLET
HA-147	MONITORING WELL TRIPLET
ESMT	TRANSECT WELL
W-1	INJECTION WELL
SW	SURFACE WATER GAUGE POINT
	DESTROYED WELL
	SITE BOUNDARY/SPECIFIC WORK AREA
	PROPERTY LINE
	RAILROAD TRACK
	RETAINING WALL
	CHAIN LINK FENCE
NM	NOT MEASURED
118.33	WATER TABLE ELEVATION NOV. 4, 2024
( )	WATER TABLE ELEVATION NOT USED TO CONTOUR
120	WATER TABLE ELEVATION CONTOUR IN FEET

NOTE:

Current Well ID	Former Well ID
MW-2	MP-MW-2
MW-5D	MP-MW-5D
MW-5S	MP-MW-5S
MW-6D	MP-MW-6D
MW-6S	MP-MW-6S
MW-10D	MP-MW-10D
MW-10S	MP-MW-10S
MW-11	MP-MW-11

0 50 100
SCALE FEET

PREPARED BY
verdantas
273 WEST MAIN STREET
NORTON, MASSACHUSETTS 02766
TEL. 508.226.1800

PREPARED FOR
APU

LOCATION
MORSES POND CULVERT SITE
WELLESLEY, MASSACHUSETTS

TITLE
SITE MAP

DRAWN	CHECKED	LSP
MN	AB	AB

DATE	PROJECT NUMBER
12/10/2024	8001-02

RTN	FILE
3-11653	APU WELLESLEY 2024.DWG

FIGURE 1

\\verdantas.com\ESM\Shared\Graphics By D_Rolls\8001-02 APU Blank Rome Wellesley\CAD\APU Wellesley 2024-12-10.dwg, Tab: F1 SITE MAP NOV -4- 2024 WTE, Plotted: Dec 10, 2024

Tables

Table 1 Summary of Groundwater Analytical Results
Table 2 Summary of Water Table Elevation Measurements

TABLE 1
SUMMARY OF
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Wellesley, MA
(results in ug/l)

Location	Sample ID	Date	Dissolved Total Chromium	Hexavalent Chromium	Calculated Trivalent Chromium*	Dissolved Lead	Dissolved Nickel
Standards		MCP Method 1 GW1 Standard (2024)	100	100	100	15	100
		MCP Method 1 GW3 Standard (2024)	300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Culvert Wall							
	B-105	05/10/2013	**60**	40	20	<8	NS
		08/14/2009	**60**	NS	NC	<8	<50
		05/19/2009	**60**	NS	NC	<8	<50
	ESM-7	11/04/2024	**1700**	**2100**	0	<5.4	<54
		05/09/2024	**2600**	**2300**	**300**	<5.4	<54
		11/06/2023	**3700**	**1700**	**2000**	<5.4	<11
		05/24/2023	**8700**	**9400**	0	<5.4	<11
		11/09/2022	**1500**	**1500**	0	<5.0	<10
		05/12/2022	**2300**	**2200**	100	<5.4	<11
		11/23/2021	**2000**	**2100**	0	<5.4	<11
		05/12/2021	**3100**	**3500**	0	<5.0	<10
		11/17/2020	**1600**	**1500**	100	<5.4	<11
		05/13/2020	**2600**	**2400**	**200**	<5	<10
		11/06/2019	**1600**	**1800**	0	<5	<10
		05/08/2019	**10000**	**12000**	0	<5	<10
		03/18/2019	**13000**	**9600**	**3400**	< 5	< 10
		11/05/2018	**17000**	**820**	**16180**	<5	<50
		08/07/2018	**9000**	**7700**	**1300**	<5	<10
		05/09/2018	**13000**	**13000**	0	<5	<10
		11/29/2017	**2400**	**2300**	100	<5	<10

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Culvert Wall								
	ESM-7	05/16/2017		**14000**	**15000**	0	<5	<10
		11/01/2016		**947**	**920**	27	**10**	<5
		05/05/2016		**3870**	**3680**	**190**	<5	<5
		11/20/2015		**6700**	**700**	**6000**	<8	<50
		06/29/2015		**2400**	**2700**	0	<8	<50
		06/04/2015		**1600**	**1800**	0	<8	<50
		05/11/2015		**2500**	**2700**	0	<8	<50
		05/10/2013		**180**	**170**	10	<8	NS
		04/28/2011		**1700**	**1400**	**300**	<5	<40
		04/28/2011	Duplicate	**1900**	**1500**	**400**	<5	<40
		08/13/2009		**5400**	**5700**	0	<8	<50
		05/19/2009		**3700**	**3900**	0	<8	<50
	MW-2	11/05/2018		<10	<10	<10	<5	<10
		04/28/2011		<10	<10	<10	<5	<40
		08/14/2009		<50	NS	<50	<8	<50
		05/18/2009		<50	NS	<50	<8	<50
	MW-3	11/20/2015		**15000**	**720**	**14280**	<8	<50
		05/10/2013		**29000**	**28000**	**1000**	<8	NS
		08/14/2009		**53000**	**57000**	0	<8	<50
		05/19/2009		**52000**	**52000**	0	<8	<50

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		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Culvert Wall							
	MW-5D	11/05/2024	NS	60	NC	NS	NS
		05/09/2024	<54	<10	<54	<5.4	<54
		11/06/2023	<11	50	0	<5.4	<11
		05/24/2023	<11	50	<11	<5.4	<11
		11/09/2022	<10	<10	<10	<5.0	<10
		11/23/2021	<11	<10	<11	<5.4	<11
		05/12/2021	<10	<10	<10	<5.0	<10
		11/18/2020	<11	10	<11	<5.4	**12**
		05/13/2020	<10	<10	<10	<5	<10
		11/06/2019	<10	<10	<10	<5	<10
		03/18/2019	<10	<10	<10	< 5	< 10
		11/05/2018	<10	<10	<10	<5	<50
		08/07/2018	<10	10	<10	<5	<10
		05/09/2018	<10	20	<10	<5	<10
		11/29/2017	<10	90	<10	<5	<10
		05/16/2017	<10	<10	<10	<5	<10
		11/01/2016	<5	<10	<5	**9**	<5
		05/05/2016	<5	<10	<5	<5	<5
		06/29/2015	<50	<10	<50	<8	<50
		06/04/2015	<50	<10	<50	<8	<50

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		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Culvert Wall							
	MW-5D	05/11/2015	<50	<10	<50	<8	<50
		04/28/2011	<10	<10	<10	<5	<40
		08/14/2009	<50	NS	<50	<8	<50
		05/19/2009	<50	NS	<50	<8	<50
	MW-5S	04/28/2011	<10	<10	<10	<5	<40
		08/14/2009	<50	NS	<50	<8	<50
		05/19/2009	<50	NS	<50	<8	<50
	MW-A	05/05/2016	<5	<10	<5	<5	<5
		11/20/2015	<50	<10	<50	<8	<50
		06/29/2015	<50	<10	<50	<8	<50
		06/04/2015	<50	<10	<50	<8	<50
		05/13/2015	<50	<10	<50	<8	<50
	MW-B	11/04/2024	<54	20	<54	<5.4	<54
		05/09/2024	<54	20	<54	<5.4	<54
		11/06/2023	<11	<10	<11	<5.4	<11
		05/24/2023	<11	<10	<11	<5.4	<11
		11/09/2022	<10	<10	<10	<5.0	<10
		05/12/2022	<11	<10	<11	<5.4	<11
		11/23/2021	<10	<10	<10	<5.0	<10
		05/12/2021	<10	<10	<10	<5.0	<10

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		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Culvert Wall							
	MW-B	11/17/2020	<11	10	<11	<5.4	<11
		05/13/2020	<10	10	<10	<5	<10
		11/06/2019	<10	10	<10	<5	<10
		05/08/2019	<10	<10	<10	<5	<10
		03/18/2019	<10	<10	<10	<5	<10
		11/05/2018	<50	<10	<50	<25	<50
		05/09/2018	<10	<10	<10	<5	**20**
		11/29/2017	<10	<10	<10	<5	<10
		05/16/2017	<10	<10	<10	<5	**30**
		11/01/2016	<5	<10	<5	**11**	**9**
		05/05/2016	<5	<10	<5	<5	<5
		11/20/2015	<50	<10	<50	<8	<50
		06/29/2015	<50	<10	<50	<8	<50
		06/04/2015	<50	<10	<50	<8	<50
		05/13/2015	<50	<10	<50	<8	<50
	MW-C	11/04/2024	<54	40	<54	<5.4	<54
		05/09/2024	<54	20	<54	<5.4	<54
		11/06/2023	<11	<10	<11	<5.4	<11
		05/24/2023	<11	<10	<11	<5.4	<11
		11/09/2022	<10	<10	<10	<5.0	<10

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		MCP Method 1 GW3 Standard (2024)	300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Culvert Wall							
	MW-C	05/12/2022	<11	<10	<11	<5.4	<11
		11/23/2021	<11	<10	<11	<5.4	<11
		05/12/2021	<10	<10	<10	<5.0	<10
		11/17/2020	<11	<10	<11	<5.4	<11
		05/13/2020	<10	<10	<10	<5	<10
		11/06/2019	<10	<10	<10	<5	<10
		05/08/2019	<10	<10	<10	<5	<10
		11/05/2018	<50	<10	<50	<5	<50
		08/07/2018	<10	<10	<10	<5	<10
		05/09/2018	<10	<10	<10	<5	<10
		11/29/2017	<10	<10	<10	<5	<10
		05/16/2017	<10	<10	<10	<5	<10
		11/01/2016	<5	<10	<5	**12**	<5
		11/20/2015	<50	<10	<50	<8	<50
		06/29/2015	<50	<10	<50	<8	<50
		06/04/2015	<50	<10	<50	<8	<50
		05/13/2015	<50	<10	<50	<8	<50

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Central Street Area									
	B-107	04/26/2011		<10	<10		<10	**11**	<40
		08/13/2009		<50	NS		<50	<8	<50
		05/14/2009		<50	NS		<50	<8	<50
	ESM-10	04/26/2011		<10	<10		<10	<5	<40
		04/26/2011	Duplicate	<10	<10		<10	<5	<40
		08/12/2009		<50	<10		<50	<8	<50
		05/11/2009		<50	NS		<50	<8	<50
	ESM-11	04/25/2011		<10	<10		<10	<5	<40
		08/12/2009		<50	<10		<50	<8	<50
		05/14/2009		<50	NS		<50	<8	<50
	ESM-12D	11/05/2024		<54	40		<54	<5.4	<54
		05/08/2024		<11	<10		<11	<5.4	<11
		11/07/2023		<11	<10		<11	<5.4	<11
		05/25/2023		<11	<10		<11	<5.4	<11
		11/10/2022		<11	<10		<11	<5.4	<11
		05/11/2022		**97**	**140**		0	<5.4	<11
		11/22/2021		**200**	**220**		0	<5.4	<11
		05/13/2021		**540**	**540**	**J**	0	<5.4	<11
		11/18/2020		**870**	**880**		0	<5.4	<11
		05/14/2020		**960**	**970**		0	< 5.4	< 21

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		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Central Street Area							
	ESM-12D	11/05/2019	**210**	**230**	0	<5	<10
		05/09/2019	**650**	**710**	0	<5	<10
		03/19/2019	**1200**	**1300**	0	< 5	< 10
		11/06/2018	**1100**	**980**	**120**	< 5	< 50
		08/06/2018	**510**	**510**	0	<5	<10
		05/10/2018	**340**	**350**	0	<5	<10
		11/28/2017	**280**	**240**	40	<5	<10
		05/15/2017	**370**	**390**	0	<5	<10
		10/31/2016	**479**	**250**	**229**	<5	<5
		05/04/2016	**814**	**650**	**164**	<5	<5
		11/19/2015	**320**	**390**	0	<8	<50
		05/13/2015	**200**	**190**	10	<8	<50
		05/09/2013	<50	10	<50	<8	NS
		04/26/2011	**50**	100	0	<5	<40
		08/13/2009	**180**	**170**	10	<8	<50
		05/11/2009	**100**	30	70	**19**	<50
	ESM-12S	11/05/2024	<54	60	<54	<5.4	<54
		05/08/2024	<11	<10 M	<11	<5.4	<11
		11/07/2023	<11	20	<11	<5.4	<11
		05/25/2023	<11	<10	<11	<5.4	<11

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METALS
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Wellesley, MA
(results in ug/l)

Location	Sample ID	Date	Dissolved Total Chromium	Hexavalent Chromium		Calculated Trivalent Chromium*	Dissolved Lead	Dissolved Nickel
Standards		MCP Method 1 GW1 Standard (2024)	100	100		100	15	100
		MCP Method 1 GW3 Standard (2024)	300	300		600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000		6000	150	2000
Central Street Area								
	ESM-12S	11/10/2022	**15**	20		0	<5.4	<11
		05/11/2022	**24**	<50 D		24	<5.4	<11
		11/22/2021	**99**	140		0	<5.4	<11
		05/13/2021	640	620	J	20	<5.4	<11
		11/18/2020	1700	1700		0	<5.4	<11
		05/14/2020	1300	1500		0	< 11	< 21
		11/05/2019	510	570		0	<5	<50
		05/09/2019	470	580		0	<5	<10
		03/19/2019	860	910		0	< 5	< 10
		11/06/2018	1000	960		40	< 5	< 50
		08/06/2018	230	260		0	<5	<10
		05/10/2018	140	130		10	<5	<10
		11/28/2017	120	120		0	<5	<10
		05/15/2017	160	180		0	<5	<10
		10/31/2016	342	340		2	**8**	<5
		05/04/2016	311	260		51	<5	<5
		11/19/2015	270	270		0	<8	<50
		05/13/2015	110	90		20	<8	<50
		05/09/2013	<50	<10		<50	<8	NS
		04/26/2011	**50**	110		0	<5	<40

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		MCP Method 1 GW3 Standard (2024)		300	300		600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)		3000	3000		6000	150	2000
Central Street Area									
	ESM-12S	08/13/2009		**340**	**330**		10	<8	<50
		08/13/2009	Duplicate	**350**	**330**		20	<8	<50
		05/11/2009		**240**	**220**		20	<8	<50
	ESM-13D	11/05/2024		<54	20		<54	<5.4	<54
		05/08/2024		<11	<10		<11	<5.4	<11
		11/07/2023		<11	<10		<11	<5.4	<11
		05/25/2023		<11	<10		<11	<5.4	<11
		11/10/2022		<11	<10		<11	<5.4	<11
		05/11/2022		<11	<10		<11	<5.4	<11
		11/22/2021		<11	20		<11	<5.4	<11
		05/13/2021		**25**	60	**J**	0	<5.4	<11
		11/18/2020		<11	40		<11	<5.4	<11
		05/14/2020		**37**	40		0	< 5.4	< 11
		11/05/2019		**30**	30		0	<5	<10
		05/09/2019		**10**	<10		10	<5	<10
		03/19/2019		**10**	20		0	< 5	< 10
		11/06/2018		**70**	60		10	< 5	< 50
		08/06/2018		**30**	20		10	<5	<10
		05/10/2018		**50**	30		20	<5	<10
		11/28/2017		**140**	**110**		30	<5	<10

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		MCP Method 1 GW3 Standard (2024)	300	300		600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000		6000	150	2000
Central Street Area								
	ESM-13D	05/15/2017	**140**	**120**		20	<5	<10
		10/31/2016	**88**	80		8	<5	<5
		05/04/2016	**80**	80		0	<5	<5
		11/19/2015	**60**	50		10	<8	<50
		05/12/2015	<50	<10		<50	<8	<50
		05/09/2013	<50	<10		<50	<8	NS
		04/25/2011	<10	<10		<10	<5	<40
		08/11/2009	<50	10		<50	<8	<50
		05/14/2009	<50	NS		<50	<8	<50
	ESM-13S	11/05/2024	<54	20		<54	<5.4	<54
		05/08/2024	**14**	20		0	<5.4	<11
		11/07/2023	**15**	10		5	<5.4	<11
		05/25/2023	**18**	20		0	<5.4	<11
		11/10/2022	**22**	20		2	<5.4	<11
		05/11/2022	**15**	<10		15	<5.4	<11
		11/22/2021	**83**	100		0	<5.4	<11
		05/13/2021	**310**	**390**	J	0	<5.4	<11
		11/18/2020	**280**	**280**		0	<5.4	<11
		05/14/2020	**720**	**780**		0	< 5.4	< 21
		11/05/2019	**670**	**740**		0	<5	<10

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		MCP Method 1 GW3 Standard (2024)		300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)		3000	3000	6000	150	2000
Central Street Area								
	ESM-13S	05/09/2019		**100**	90	10	<5	<10
		03/19/2019		**80**	80	0	< 5	< 10
		11/06/2018		**440**	**430**	10	< 5	< 50
		08/06/2018		**3900**	**4100**	0	<5	<10
		05/10/2018		**680**	**670**	10	<5	<10
		11/28/2017		**1000**	**960**	40	<5	<10
		05/15/2017		**300**	**320**	0	<5	<10
		10/31/2016		**1120**	**1070**	50	<5	<5
		05/04/2016		**430**	**430**	0	<5	<5
		11/19/2015		**490**	**530**	0	<8	<50
		05/12/2015		**60**	50	10	<8	<50
		05/09/2013		<50	<10	<50	<8	NS
		04/25/2011		**30**	20	10	<5	<40
		08/11/2009		**230**	**230**	0	<8	<50
		05/14/2009		**760**	**710**	50	<8	<50
		05/14/2009	Duplicate	**760**	**710**	50	<8	<50
	ESM-14	05/15/2017		<10	<10	<10	<5	<10
		05/04/2016		<5	<10	<5	<5	<5
		11/19/2015		<50	<10	<50	<8	<50
		05/12/2015		<50	<10	<50	<8	<50

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		MCP Method 1 GW3 Standard (2024)	300	300		600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000		6000	150	2000
Central Street Area								
	ESM-14	04/26/2011	**70**	70		0	**8**	<40
		08/13/2009	<50	NS		<50	11	<50
		05/18/2009	<50	NS		<50	<8	<50
	ESM-17I	11/05/2024	<54	50		<54	<5.4	<54
		05/08/2024	<11	<10		<11	<5.4	<11
		11/07/2023	<11	<10		<11	<5.4	<11
		05/25/2023	<11	<10		<11	<5.4	<11
		11/10/2022	<11	<10		<11	<5.4	<11
		05/11/2022	<11	<10		<11	<5.4	<11
		11/22/2021	<11	40		<11	<5.4	<11
		05/13/2021	<11	20	J	<11	<5.4	<11
		11/18/2020	<11	50		<11	<5.4	<11
		05/14/2020	<32	<10		<32	< 5.4	< 32
		11/05/2019	<10	<10		<10	<5	<10
		05/09/2019	<10	<10		<10	<5	<10
		03/19/2019	<10	<10		<10	<5	< 10
		11/06/2018	<50	<10		<50	< 5	< 50
		08/06/2018	<10	<10		<10	<5	<10
		05/10/2018	<10	<10		<10	<5	<10
		11/28/2017	<10	<10		<10	<5	<10

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		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000		6000	150	2000
Central Street Area								
	ESM-17I	05/15/2017	<10	<10		<10	<5	<10
		10/31/2016	<5	<10		<5	<5	<5
		05/04/2016	<5	<10		<5	<5	<5
		11/19/2015	<50	<10		<50	<8	<50
		05/12/2015	<50	<10		<50	<8	<50
	ESM-17S	11/05/2024	**1400**	**1500**		0	<5.4	<54
		05/08/2024	**250**	**220**		30	<5.4	<11
		11/07/2023	**440**	**380**		60	<5.4	<11
		05/25/2023	**730**	**760**		0	<5.4	<11
		11/10/2022	**320**	**310**		10	<5.4	<11
		05/11/2022	**14**	10		4	<5.4	<11
		11/22/2021	**26**	30		0	<5.4	<11
		05/13/2021	**1000**	**990**	J	10	<5.4	<11
		11/18/2020	**100**	**120**		0	<5.4	<11
		05/14/2020	**64**	70		0	< 5.4	< 21
		11/05/2019	**70**	80		0	<5	<10
		05/09/2019	**1500**	**1500**		0	<5	<10
		03/19/2019	**2700**	**2300**		**400**	< 5	< 10
		11/06/2018	**60**	50		10	< 5	< 50
		08/06/2018	**30**	20		10	<5	<10

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		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000		6000	150	2000
Central Street Area								
	ESM-17S	05/10/2018	700	710		0	<5	<10
		11/28/2017	<10	<10		<10	<5	<10
		05/15/2017	**20**	30		0	<5	<10
		10/31/2016	**22**	<10		22	<5	<5
		05/04/2016	**39**	40		0	<5	<5
		11/19/2015	<50	<10		<50	<8	<50
		05/12/2015	<50	<10		<50	<8	<50
	ESM-18I	11/05/2024	<54	<10		<54	<5.4	<54
		05/08/2024	<11	<10		<11	<5.4	<11
		11/07/2023	<11	<10		<11	<5.4	<11
		05/25/2023	<11	<10		<11	<5.4	<11
		11/10/2022	<11	<10		<11	<5.4	<11
		05/11/2022	<11	20		<11	<5.4	<11
		11/22/2021	<11	<10		<11	<5.4	<11
		05/13/2021	<11	20	J	<11	<5.4	<11
		11/18/2020	<11	30		<11	<5.4	<11
		05/14/2020	<21	<10		<21	< 5.4	< 21
		11/05/2019	<10	<10		<10	<5	<10
		05/09/2019	<10	<10		<10	<5	<10
		03/19/2019	<10	<10		<10	< 5	< 10

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Central Street Area								
	ESM-18I	11/06/2018	<50	<10		<50	< 5	< 50
		08/06/2018	<10	<10		<10	<5	<10
		05/10/2018	<10	<10		<10	<5	<10
		11/28/2017	<10	<10		<10	<5	<10
		05/15/2017	<10	<10		<10	<5	<10
		10/31/2016	<5	<10		<5	<5	<5
		05/04/2016	<5	<10		<5	<5	<5
		11/19/2015	<50	<10		<50	<8	<50
		05/12/2015	<50	<10		<50	<8	<50
	ESM-18S	11/05/2024	<54	20		<54	<5.4	<54
		05/08/2024	**1600**	**1200**		**400**	<5.4	<11
		11/07/2023	**340**	**330**		10	<5.4	<11
		05/25/2023	**130**	**140**		0	<5.4	<11
		11/10/2022	**66**	60		6	<5.4	<11
		05/11/2022	**3000**	**3600**		0	<5.4	<11
		12/28/2021	**1900**	**1800**		100	<5.0	<10
		11/22/2021	**2700**	**3000**		0	<5.4	<11
		05/13/2021	<11	<10	**J**	<11	<5.4	<11
		11/18/2020	<11	10		<11	<5.4	<11
		05/14/2020	<21	20		<21	< 5.4	< 21

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Standards		MCP Method 1 GW1 Standard (2024)	100	100	100	15	100
		MCP Method 1 GW3 Standard (2024)	300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Central Street Area							
	ESM-18S	11/05/2019	<10	<10	<10	<5	<10
		05/09/2019	<10	<10	<10	<5	<10
		03/19/2019	<10	<10	<10	< 5	< 10
		11/06/2018	<50	<10	<50	< 5	< 50
		08/06/2018	<10	<10	<10	<5	<10
		05/10/2018	<10	<10	<10	<5	<10
		11/28/2017	<10	<10	<10	<5	<10
		05/15/2017	<10	<10	<10	<5	<10
		10/31/2016	**11**	<10	11	<5	<5
		05/04/2016	**7**	<10	7	<5	<5
		11/19/2015	<50	<10	<50	<8	<50
		05/11/2015	<50	<10	<50	<8	<50
	MW-6D	05/15/2017	<10	<10	<10	<5	<10
		10/31/2016	<5	<10	<5	**12**	<5
		05/04/2016	<5	<10	<5	<5	<5
		11/19/2015	<50	<10	<50	<8	<50
		05/11/2015	<50	<10	<50	<8	<50
		04/25/2011	<10	<10	<10	<5	<40
		08/12/2009	<50	<10	<50	<8	<50
		05/12/2009	<50	NS	<50	<8	<50

Notes: NS - Not sampled H - Sample analyzed beyond hold time. NC - Not calculated

J = The percent recovery for this compound was below the acceptance criteria in the LCS. The LCSD showed acceptable results. The reported concentration is an estimate.

(1) Hex Chrom analysis was performed on 2009 GW samples when Chrom results were >100.

Bold indicates that compound was detected above the laboratory reporting limit.

RED indicates concentration detected exceeds the lowest Method 1 Standard.

*Trivalent Chromium Calculation Logic: Cr+3 = Total Cr – Cr+6
If Cr+6 > Total Cr, Zero is reported
If both Total Cr and Cr+6 are ND, <RL is reported. NC -not calculated. D - sample dilution was required.

TABLE 1
SUMMARY OF
GROUNDWATER ANALYTICAL RESULTS
METALS
Morses Pond Culvert Site
Wellesley, MA
(results in ug/l)

Location	Sample ID	Date	Dissolved Total Chromium	Hexavalent Chromium	Calculated Trivalent Chromium*	Dissolved Lead	Dissolved Nickel
Standards		MCP Method 1 GW1 Standard (2024)	100	100	100	15	100
		MCP Method 1 GW3 Standard (2024)	300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
Central Street Area							
	MW-6S	05/15/2017	<10 M	<10	<10	<5 M	<10
		10/31/2016	<5	<10	<5	<5	<5
		05/04/2016	<5	<10	<5	<5	<5
		11/19/2015	<50	<10	<50	<8	<50
		05/11/2015	<50	20	<50	<8	<50
		04/25/2011	<10	<10	<10	<5	<40
		08/12/2009	<50	<10	<50	<8	<50
		05/12/2009	<50	NS	<50	<8	<50
	MW-10D	04/25/2011	<10	<10	<10	<5	<40
		08/11/2009	<50	<10	<50	<8	<50
		05/13/2009	<50	NS	<50	<8	<50
	MW-10S	04/25/2011	<10	<10	<10	<5	<40
		08/11/2009	<50	<10	<50	<8	<50
		05/13/2009	<50	NS	<50	<8	<50
	MW-11	04/26/2011	<10	<10	<10	<5	<40
		08/11/2009	<50	<10	<50	<8	<50
		05/13/2009	<50	NS	<50	<8	<50

Notes: NS - Not sampled H - Sample analyzed beyond hold time. NC - Not calculated

J = The percent recovery for this compound was below the acceptance criteria in the LCS. The LCSD showed acceptable results. The reported concentration is an estimate.

(1) Hex Chrom analysis was performed on 2009 GW samples when Chrom results were >100.

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TABLE 1
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GROUNDWATER ANALYTICAL RESULTS
METALS
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Location	Sample ID	Date	Dissolved Total Chromium	Hexavalent Chromium	Calculated Trivalent Chromium*	Dissolved Lead	Dissolved Nickel
Standards		MCP Method 1 GW1 Standard (2024)	100	100	100	15	100
		MCP Method 1 GW3 Standard (2024)	300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
One Bacon St. Property							
	ESM-8	04/27/2011	**470**	**460**	10	<5	<40
		08/11/2009	**80**	60	20	<8	<50
		05/18/2009	**140**	**130**	10	<8	<50
	ESM-9	03/18/2019	<10	<10	<10	< 5	< 10
		11/05/2018	<10	<200	<10	<5	<50
		08/06/2018	<10	<10	<10	<5	<10
		05/16/2017	**10**	<10	10	<5	<10
		05/06/2016	<5	<10	<5	<5	<5
		05/12/2015	<50	<10	<50	<8	<50
		04/27/2011	<10	<10	<10	<5	<40
		08/11/2009	<50	<10	<50	<8	<50
		05/18/2009	<50	NS	<50	<8	<50
	ESM-15	04/27/2011	<10	<10	<10	<5	<40
	ESM-16	11/04/2024	**610**	**1600**	0	<5.4	<54
		05/09/2024	**15000**	**12000**	**3000**	<5.4	<54
		11/06/2023	**3800**	**7400**	0	<5.4	<11
		05/24/2023	**35000**	**36000**	0	<5.4	<11
		11/10/2022	**1800**	**2000**	0	<11	<21
		05/12/2022	**4500**	**4700**	0	<5.4	<11
		11/23/2021	**5300**	**5700**	0	<5.0	<10

Notes: NS - Not sampled H - Sample analyzed beyond hold time. NC - Not calculated

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TABLE 1
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GROUNDWATER ANALYTICAL RESULTS
METALS
Morses Pond Culvert Site
Wellesley, MA
(results in ug/l)

Location	Sample ID	Date	Dissolved Total Chromium	Hexavalent Chromium	Calculated Trivalent Chromium*	Dissolved Lead	Dissolved Nickel
Standards		MCP Method 1 GW1 Standard (2024)	100	100	100	15	100
		MCP Method 1 GW3 Standard (2024)	300	300	600	10	200
		MCP Meth. 3 Ceiling Limit for Groundwater (2024)	3000	3000	6000	150	2000
One Bacon St. Property							
	ESM-16	05/12/2021	**39000**	**40000** H	0	<5.0	<10
		11/17/2020	**11000**	**11000**	0	<5.4	<11
		05/13/2020	**4500**	**4200**	**300**	<5	<10
		11/06/2019	**6200**	**6700**	0	<5	<10
		05/08/2019	**7500**	**7500**	0	<5	<10
		03/18/2019	**64000**	**65000**	0	< 5	< 10
		11/05/2018	**11000**	**11000**	0	<5	<50
		08/06/2018	**3600**	**3400**	**200**	<5	<10
		05/16/2017	**28000**	**32000**	0	<5	<10
		11/01/2016	**2720**	**2660**	60	**9**	<5
		05/05/2016	**26600**	**26600**	0	<5	<5
		05/12/2015	**13000**	**14000**	0	<8	<50
		04/27/2011	**7600**	**4800**	**2800**	<5	<40

Notes: NS - Not sampled H - Sample analyzed beyond hold time. NC - Not calculated

J = The percent recovery for this compound was below the acceptance criteria in the LCS. The LCSD showed acceptable results. The reported concentration is an estimate.

(1) Hex Chrom analysis was performed on 2009 GW samples when Chrom results were >100.

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*Trivalent Chromium Calculation Logic: Cr+3 = Total Cr – Cr+6
If Cr+6 > Total Cr, Zero is reported
If both Total Cr and Cr+6 are ND, <RL is reported. NC -not calculated. D - sample dilution was required.

TABLE 2
SUMMARY OF
WATER TABLE ELEVATION MEASUREMENTS

Morses Pond Culvert Site
Wellesley, MA

Well ID	Screen Interval	Aquifer Zone	Date	Casing Elevation (feet)	Depth to Water (feet)	Corrected Water Elevation (feet)
B-105	13.5-23.5'	Shallow	11/04/24	140.53	DRY	
B-107	25-35'	Intermediate	11/04/24	137.08	NM	
ESM-7	5-15'	Shallow	11/04/24	129.36	8.77	120.59
ESM-8	20-30'	Shallow	11/04/24	146.79	DRY	
ESM-11	20-30'	Shallow	11/04/24	142.24	22.73	119.51
ESM-12D	45-55'	Deep	11/04/24	141.08	23.00	118.08
ESM-12S	20-30'	Shallow	11/04/24	140.88	22.86	118.02
ESM-13S	20-30'	Shallow	11/04/24	142.23	23.79	118.44
ESM-13D	45-55'	Deep	11/04/24	141.85	23.46	118.39
ESM-14	12-22'	Shallow	11/04/24	137.89	19.56	118.33
ESM-16	16-26'	Shallow	11/04/24	138.43	17.81	120.62
ESM-17i			11/04/24	138.13	20.07	118.06
ESM-17S			11/04/24	137.96	19.69	118.27
ESM-18I			11/04/24	141.10	20.24	120.86
ESM-18S			11/04/24	141.31	20.40	120.91
Gauge Point			11/04/24		1.19	
MW-5D	27-32'	Intermediate	11/04/24	127.64	3.05	124.59
MW-5S	3-13'	Shallow	11/04/24	127.44	DRY	
MW-6D	36-46'	Intermediate	11/04/24	141.13	22.45	118.68
MW-6S	16-26'	Shallow	11/04/24	138.81	20.22	118.59
MW-10D	36-46'	Intermediate	11/04/24	144.34	26.12	118.22
MW-10S	26-36'	Shallow	11/04/24	141.71	NM	
MW-B			11/04/24	125.57	4.37	121.20
MW-C			11/04/24	125.66	4.35	121.31

Notes: NM - Not Measured NA - Not Applicable ND - Not Detected

Appendices

Appendix A Laboratory Analytical Reports
Appendix B Cap Inspection Form
Appendix C MCP Public Notification Letters

Appendix A

Laboratory Analytical Reports

Verdantas QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	71961	11/4/2024	GW	Yes	Yes	Yes	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
MW-B	11/04/24	71961-001	GW	metals, hexavalent chromium
MW-C	11/04/24	71961-002	GW	metals, hexavalent chromium
ESM-16	11/04/24	71961-003	GW	metals, hexavalent chromium
ESM-7	11/04/24	71961-004	GW	metals, hexavalent chromium

All QAQC data, including method blank, laboratory control sample (LCS), and LCS duplicate results were reviewed. This report was deemed usable by Angela Boyd on 12/2/24

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Angela Boyd
Verdantas
46 Eastman Street, Suites B and C
South Easton, MA 02375

PO Number: 8001-02 Phase 2
Job ID: 71961
Date Received: 11/4/24

Project: APU Wellesley 8001-02

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Willie Stone
Authorized Signature

Date of Approval: 11/22/2024
Total number of pages: 13

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Project ID: APU Wellesley 8001-02

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
MW-B	Water	11/4/2024 11:25	71961-001	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in water by SW7196A
				Lead in water by 6020
				Nickel in water by 6020
MW-C	Water	11/4/2024 10:40	71961-002	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in water by SW7196A
				Lead in water by 6020
				Nickel in water by 6020
ESM-16	Water	11/4/2024 12:25	71961-003	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in water by SW7196A
				Lead in water by 6020
				Nickel in water by 6020
ESM-7	Water	11/4/2024 10:15	71961-004	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in water by SW7196A
				Lead in water by 6020
				Nickel in water by 6020

Project ID: APU Wellesley 8001-02
Job ID: 71961

Sample#: 71961-001
Sample ID: MW-B
Matrix: Water
Sampled: 11/4/24 11:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/19/24	23:35	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/19/24	23:35	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/19/24	23:35	SW3005A6020B

Sample#: 71961-002
Sample ID: MW-C
Matrix: Water
Sampled: 11/4/24 10:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/19/24	23:45	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/19/24	23:45	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/19/24	23:45	SW3005A6020B

Sample#: 71961-003
Sample ID: ESM-16
Matrix: Water
Sampled: 11/4/24 12:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**0.61**	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:14	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:14	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:14	SW3005A6020B

Sample#: 71961-004
Sample ID: ESM-7
Matrix: Water
Sampled: 11/4/24 10:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Chromium	**1.7**	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:24	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:24	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:24	SW3005A6020B

Project ID: APU Wellesley 8001-02
Job ID: 71961

Sample#: 71961-001
Sample ID: MW-B
Matrix: Water
Sampled: 11/4/24 11:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.02**	0.01	mg/L	1	NFL		2403404	11/4/24	16:30	SW7196A

Sample#: 71961-002
Sample ID: MW-C
Matrix: Water
Sampled: 11/4/24 10:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.04**	0.01	mg/L	1	NFL		2403404	11/4/24	16:30	SW7196A

Sample#: 71961-003
Sample ID: ESM-16
Matrix: Water
Sampled: 11/4/24 12:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**1.6**	1.0	mg/L	100	NFL		2403404	11/4/24	16:30	SW7196A

Sample#: 71961-004
Sample ID: ESM-7
Matrix: Water
Sampled: 11/4/24 10:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**2.1**	0.50	mg/L	50	NFL		2403404	11/4/24	16:30	SW7196A

Absolute Resource associates

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: Absolute Resource Associates	Project #: 8001-02
Project Location: Massachusetts	RTN:

This Form provides certifications for the following data set: list Laboratory Sample ID Number(s): 71961

Matrices: ☑ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH (GC/PID/FID) CAM IV A ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP VPH (GC/MS) CAM IV C ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☑	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes ☐ No
E	VPH, EPH, APH, and TO-15 only a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes ☐ No[1]

***Data User Note:** Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.*

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☑ No[1]

[1] *All negative responses must be addressed in an attached laboratory narrative.*

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: _____ **Position:** Chief Operating Officer

Printed Name: Aaron DeWees **Date:** 11/22/24

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 71961

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6020B	BLK19546	Chromium		<	0.050	mg/L						
		Nickel		<	0.050	mg/L						
		Lead		<	0.0050	mg/L						
SW3005A6020B	LCS19546	Chromium			0.55	mg/L	0.5	111	80	120		
		Nickel			0.54	mg/L	0.5	109	80	120		
		Lead			0.59	mg/L	0.5	118	80	120		
SW3005A6020B	LCSD19546	Chromium			0.56	mg/L	0.5	111	80	120	0	20
		Nickel			0.54	mg/L	0.5	108	80	120	1	20
		Lead			0.60	mg/L	0.5	119	80	120	1	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW7196A	LCS2403404	Chromium, Hexavalent			0.09	mg/L	0.1	93	85	115		
SW7196A	LCSD2403404	Chromium, Hexavalent			0.09	mg/L	0.1	93	85	115	0	20
SW7196A	PB2403404	Chromium, Hexavalent		<	0.01	mg/L						

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

71961

Company Name: Verdantas

Company Address: 46 Eastman Street South Easton, MA 02375

Report To: apoyd@verdantas.com

Phone #: (508) 361-9112

Project Name: APU Wellesley

Project #: 8001-02

Project Location: NH (MA) ME VT

Accreditation Required? N/(Y)

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES (MCP) NHDES DOD

Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: QAPP (GW-1) S-1 EPA DW Other

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
71961-01	MW-B	2	X				X				11/4/24	1125	ED
-02	MW-C	2	X				X				11/4/24	1040	ED
-03	ESM-16	2	X				X				11/4/24	1205	ED
-04	ESM-7	2	X				X				11/4/24	1015	JN

ANALYSIS REQUEST

| Lab Sample ID | ☐ VOC 8260 | ☐ VOC 8260 NHDES | ☐ VOC 8260 MADEP | ☐ VOC BTEX MtBE, only | ☐ VOC 8021VT | ☐ VOC 624.1 | ☐ VPH MADEP | ☐ GRO 8015 | ☐ 1,4-Dioxane | ☐ VOC 524.2 | ☐ VOC 524.2 NH List | ☐ Gases-List: | ☐ TPH 8100 | ☐ DRO 8015 | ☐ EPH MADEP | ☐ TPH Fingerprint | ☐ 8270PAH | ☐ 8270ABN | ☐ 625.1 | ☐ EDB | ☐ 8082 PCB | ☐ 8081 Pesticides | ☐ 608.3 Pest/PCB | ☐ PFAS 537.1 | ☐ PFAS 533 | ☐ PFAS isotope dilution | ☐ O&G 1664 | ☐ Mineral O&G 1664 | ☐ pH | ☐ BOD | ☐ Conductivity | ☐ Turbidity | ☐ Apparent Color | ☐ TSS | ☐ TDS | ☐ TS | ☐ TVS | ☐ Alkalinity | ☐ Acidity | ☐ RCRA Metals | ☐ Priority Pollutant Metals | ☐ TAL Metals | ☐ Hardness | ☐ Total Metals-list: | ☐ Dissolved Metals-list: | ☐ Ammonia | ☐ COD | ☐ TKN | ☐ TN | ☐ TON | ☐ TOC | ☐ Ferrous Iron | ☐ T-Phosphorus | ☐ Bacteria P/A | ☐ Bacteria MPN | ☐ Enterococci | ☐ Cyanide | ☐ Sulfide | ☐ Nitrate + Nitrite | ☐ Ortho P | ☐ Phenols | ☐ Nitrate | ☐ Nitrite | ☐ Chloride | ☐ Sulfate | ☐ Bromide | ☐ Fluoride | ☐ Corrosivity | ☐ Ignitibility/FP | ☐ TCLP Metals | ☐ TCLP VOC | ☐ TCLP SVOC | ☐ TCLP Pesticide | Subcontract: ☐ Grain Size | ☐ Herbicides | ☐ Asbestos | Hexavalent Chromium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---

Sample Receipt Condition Report

71961

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☒-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☐-Yes ☐-No ☒-N/A CoC signed: ☒-Yes ☐-No

Receipt Temp: 4 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☒-Yes ☐-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:_____

Preservation / Analysis	Bottle Size/Type & Quantity										Check pH for ALL applicable* samples and document:
HCl	40mL(G)		250mL(P)		500mL(P)		1L(G)				
HNO_3	125mL(P)		250mL(P)	4	500mL(P)						→ pH ✓OK
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		
NaOH	125mL(P)		250mL(P)								
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)						
ZnAc-NaOH	125mL(P)		250mL(P)								
Trizma	125mL(P)		250mL (P)								*pH ✓by analyst:VOC, PFAS, TOC,O&G
NH_4Ac	125mL(P)		250mL (P)								Residual Cl not present:
NaS_2O_3	40mL(G)		120mL(P)								ABN625____Pest608____
MeOH	20mL(G)		40mL(G)								Bacteria ResCl ✓by analyst
None (solid)	2oz(G)		4oz(G)		8oz(G)		Syringe				PC Dry applicable? Y (N)
None (water)	40ml (G)		60mL(P)		125mL(P)	4	250mL(P)		500mL(P)		1L(G) 1L (P)
Mold	Cassette		Bulk		Plate		Tape Lift				
Asbestos	Cassette		Bulk								
Lead	Cassette		Bulk		Wipe						

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?			X	
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624	X			NFL
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?	X			(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: MEO Date/Time: 11/4/24 16:07

Peer Review Checklist

☐ Client ID/Project Manager	☐ On Ice, Temperature OK?	☐ Sample IDs	☐ Analyses in Correctly
☐ Project Name	☐ PO# (if provided)	☐ Matrix	-references
☐ TAT/rushes communicated	☐ Sub samples sent? Shipping Charge?	☐ Date/Time collected	-wastewater methods
☐ Received Date/Time	☐ Issues noted above communicated?	☐ Short HT's communicated	☐ Notes from CoC in LIMS

Reviewed By: _____ Date: _____

Notes: (continue on back as needed)

	Initials	Date	What was sent?
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice

Verdantas QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Absolute Resource Associates	71980	11/5/2024	GW	Yes	Yes	Yes	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
ESM-12S	11/05/24	71980-001	GW	metals, hexavalent chromium
ESM-12D	11/05/24	71980-002	GW	metals, hexavalent chromium
ESM-17I	11/05/24	71980-003	GW	metals, hexavalent chromium
ESM-17S	11/05/24	71980-004	GW	metals, hexavalent chromium
ESM-13S	11/05/24	71980-005	GW	metals, hexavalent chromium
ESM-13D	11/05/24	71980-006	GW	metals, hexavalent chromium
ESM-18I	11/05/24	71980-007	GW	metals, hexavalent chromium
ESM-18S	11/05/24	71980-008	GW	metals, hexavalent chromium
MW-5D	11/05/24	71980-009	GW	hexavalent chromium

All QAQC data, including method blank, laboratory control sample (LCS), LCS duplicate, and matrix spike results were reviewed. This report was deemed usable by Angela Boyd on 12/2/24

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Angela Boyd
Verdantas
46 Eastman Street, Suites B and C
South Easton, MA 02375

PO Number: 8001-02 Phase 2
Job ID: 71980
Date Received: 11/5/24

Project: APU Wellesley 8001-02

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Willie Stone
Authorized Signature

Date of Approval: 11/22/2024
Total number of pages: 16

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Project ID: APU Wellesley 8001-02

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
ESM-12S	Water	11/5/2024 8:35	71980-001	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-12D	Water	11/5/2024 9:15	71980-002	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-17I	Water	11/5/2024 11:35	71980-003	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-17S	Water	11/5/2024 10:55	71980-004	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-13S	Water	11/5/2024 8:35	71980-005	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-13D	Water	11/5/2024 9:20	71980-006	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-18I	Water	11/5/2024 11:35	71980-007	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020
ESM-18S	Water	11/5/2024 10:50	71980-008	
				Chromium in water by 6020
				Dissolved Prep for ICPMS Analysis
				Hexavalent Chromium in Wastewater by SM3500CrB
				Lead in water by 6020
				Nickel in water by 6020

Absolute Resource associates

Project ID: APU Wellesley 8001-02

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
MW-5D	Water	11/5/2024 12:30	71980-009	Hexavalent Chromium in Wastewater by SM3500CrB

Absolute Resource associates

Project ID: APU Wellesley 8001-02
Job ID: 71980

Sample#: 71980-001
Sample ID: ESM-12S
Matrix: Water
Sampled: 11/5/24 8:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:34	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:34	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:34	SW3005A6020B

Sample#: 71980-002
Sample ID: ESM-12D
Matrix: Water
Sampled: 11/5/24 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:44	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:44	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:44	SW3005A6020B

Sample#: 71980-003
Sample ID: ESM-17I
Matrix: Water
Sampled: 11/5/24 11:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:53	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:53	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	0:53	SW3005A6020B

Sample#: 71980-004
Sample ID: ESM-17S
Matrix: Water
Sampled: 11/5/24 10:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	**1.4**	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:03	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:03	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:03	SW3005A6020B

Sample#: 71980-005
Sample ID: ESM-13S
Matrix: Water
Sampled: 11/5/24 8:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:13	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:13	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:13	SW3005A6020B

Absolute Resource associates

Project ID: APU Wellesley 8001-02
Job ID: 71980

Sample#: 71980-006
Sample ID: ESM-13D
Matrix: Water
Sampled: 11/5/24 9:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:23	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:23	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:23	SW3005A6020B

Sample#: 71980-007
Sample ID: ESM-18I
Matrix: Water
Sampled: 11/5/24 11:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:33	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:33	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:33	SW3005A6020B

Sample#: 71980-008
Sample ID: ESM-18S
Matrix: Water
Sampled: 11/5/24 10:50

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:42	SW3005A6020B
Lead	< 0.0054	0.0054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:42	SW3005A6020B
Nickel	< 0.054	0.054	mg/L	1	AGN	11/18/24	19546	11/20/24	1:42	SW3005A6020B

Project ID: APU Wellesley 8001-02
Job ID: 71980

Sample#: 71980-001
Sample ID: ESM-12S
Matrix: Water
Sampled: 11/5/24 8:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.06**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-002
Sample ID: ESM-12D
Matrix: Water
Sampled: 11/5/24 9:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.04**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-003
Sample ID: ESM-17I
Matrix: Water
Sampled: 11/5/24 11:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.05**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-004
Sample ID: ESM-17S
Matrix: Water
Sampled: 11/5/24 10:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**1.5**	0.05	mg/L	5	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-005
Sample ID: ESM-13S
Matrix: Water
Sampled: 11/5/24 8:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.02**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-006
Sample ID: ESM-13D
Matrix: Water
Sampled: 11/5/24 9:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
Chromium, Hexavalent	**0.02**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

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Project ID: APU Wellesley 8001-02
Job ID: 71980

Sample#: 71980-007
Sample ID: ESM-18I
Matrix: Water
Sampled: 11/5/24 11:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	< 0.01	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-008
Sample ID: ESM-18S
Matrix: Water
Sampled: 11/5/24 10:50

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**0.02**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Sample#: 71980-009
Sample ID: MW-5D
Matrix: Water
Sampled: 11/5/24 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**0.06**	0.01	mg/L	1	NFL		2403405	11/5/24	16:17	SM3500CrB

Absolute Resource associates

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

MassDEP Analytical Protocol Certification Form

Laboratory Name: Absolute Resource Associates	Project #: 8001-02
Project Location: Massachusetts	RTN:

This Form provides certifications for the following data set: list Laboratory Sample ID Number(s): 71980

Matrices: ☐ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH (GC/PID/FID) CAM IV A ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP VPH (GC/MS) CAM IV C ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☑	MassDEP APH CAM IX A ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☑	MassDEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes ☐ No
E	VPH, EPH, APH, and TO-15 only a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes ☐ No[1]

***Data User Note:** Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.*

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☑ No[1]

[1] *All negative responses must be addressed in an attached laboratory narrative.*

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: _____ **Position:** Chief Operating Officer

Printed Name: Aaron DeWees **Date:** 11/22/24

Sample Integrity Table

Parameter	Method	Matrix	Minimum Volume	Recommended Container(s)	Required Preservation	Holding Time
Volatile Organics	EPA 8260	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
Volatile Organics	EPA 8260	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	14 Days
Semivolatile Organics	EPA 8270	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Semivolatile Organics	EPA 8270	Solid	20g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Organochlorine Pesticides	EPA 8081	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Organochlorine Pesticides	EPA 8081	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
PCBs	EPA 8082	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	365 Days
PCBs	EPA 8082	Solid	20g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	365 Days
Herbicides (subcontracted)	EPA 8151	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C	7 Days
Herbicides (subcontracted)	EPA 8151	Solid	30g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
MA DEP VPH	MADEP VPH	Aqueous	40mL	2 x 40mL VOA Vials with Teflon lined septa	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP VPH	MADEP VPH	Solid	40mL	1 x 40mL VOA Vial with 10mLs Methanol and 1 unpreserved container for percent moisture	Cool to ≤6°C Methanol	28 Days
MA DEP EPH	MADEP EPH	Aqueous	1L	1L Amber Glass Bottle w/Teflon liner	Cool to ≤6°C 1:1 HCl to pH <2	14 Days
MA DEP EPH	MADEP EPH	Solid	30g	4oz Amber Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days
Total Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	1:1 HNO_3 to pH <2	180 Days
Dissolved Metals	EPA 6010	Aqueous	100mL	250mL Polyethylene Bottle	Filter First 1:1 HNO_3 to pH <2	180 Days
Total Metals	EPA 6010	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	180 Days
Total Mercury (may be combined with Total Metals)	EPA 7470	Aqueous	100mL	125mL Polyethylene Bottle	1:1 HNO_3 to pH <2	28 Days
Total Mercury (may be combined with Total Metals)	EPA 7471	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	28 Days
Chromium, Hexavalent	EPA 7196	Aqueous	100mL	125mL Polyethylene Bottle	Cool to ≤6°C (NH4)2SO4 buffer	28 Days
Chromium, Hexavalent (subcontract)	EPA 7196	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	30 Days
Cyanide, Total	EPA 9014	Aqueous	125mL	125mL Polyethylene Bottle	Cool to ≤6°C 1:1 NaOH to pH >8	14 Days
Cyanide, Total	EPA 9014	Solid	15g	4oz Glass Jar w/Teflon liner	Cool to ≤6°C	14 Days

Absolute Resource Associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Absolute Resource associates

Case Narrative
Lab # 71980

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

No other exceptions noted.

MassDEP Analytical Protocol Certification Form Questions A through I

No explanation is needed for Questions A through I answered in the affirmative.
Question I: Metals: The MCP required metals were not requested by the customer. Box I is "No."

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6020B	BLK19546	Chromium		<	0.050	mg/L						
		Nickel		<	0.050	mg/L						
		Lead		<	0.0050	mg/L						
SW3005A6020B	LCS19546	Chromium			0.55	mg/L	0.5	111	80	120		
		Nickel			0.54	mg/L	0.5	109	80	120		
		Lead			0.59	mg/L	0.5	118	80	120		
SW3005A6020B	LCSD19546	Chromium			0.56	mg/L	0.5	111	80	120	0	20
		Nickel			0.54	mg/L	0.5	108	80	120	1	20
		Lead			0.60	mg/L	0.5	119	80	120	1	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SM3500CrB	LCS2403405	Chromium, Hexavalent			0.11	mg/L	0.1	107		85	115		
SM3500CrB	LCSD2403405	Chromium, Hexavalent			0.10	mg/L	0.1	103		85	115	3	20
SM3500CrB	MS2403405	Chromium, Hexavalent	71965-003		0.04	mg/L	0.1	38	*	75	125		
SM3500CrB	PB2403405	Chromium, Hexavalent		<	0.01	mg/L							

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

71980

Company Name: Verdantas

Company Address: 440 Eastman Street South Easton, MA 02375

Report To: Angela Boyd

Phone #: (508) 361-9112

Project Name: APU Wellesley

Project #: 8001-02

Project Location: NH (MA) ME VT

Accreditation Required? N/E

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES (MCP) NHDES DOD

Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: QAPP EPA DW (GW-1) Other S-1

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
71980-01	ESM-12S	2	X				X				11/5/24	835	ED
-02	ESM-12D	2	X				X				11/5/24	915	ED
-03	ESM-17I	2	X				X				11/5/24	1135	ED
-04	ESM-17S	2	X				X				11/5/24	1055	ED
-05	ESM-13S	2	X				X				11/5/24	835	JN
-06	ESM-13D	2	X				X				11/5/24	920	JN
-07	ESM-18I	2	X				X				11/5/24	1135	JN
-08	ESM-18S	2	X				X				11/5/24	1050	JN
-09	MW-5D	1	X								11/5/24	1230	JN

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624.1 ☐ VOC BTEX MtBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH 8100 ☐ DRO 8015 ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625.1 ☐ EDB	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608.3 Pest/PCB	☐ PFAS 537.1 ☐ PFAS 533 ☐ PFAS Isotope dilution	☐ O&G 1664 ☐ Mineral O&G 1664	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ Apparent Color	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ Acidity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐	Hardness	☐ Total Metals-list:	☒ Dissolved Metals-list: Pb, Ni, Total Cr (Cr^3, Cr^6)	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ Ferrous Iron	☐ T-Phosphorus ☐ Bacteria P/A ☐ Bacteria MPN ☐ Enterococci	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Phenols	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Asbestos	☒ Hexavalent Chromium
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X
													X	X											X	X	X	X	X	X	X

TAT REQUESTED

Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard ☒
(10 Business Days)
*Date Needed_____

Invoice To: ap@verdantas.com
Email: ap@verdantas.com
PO #: 8001-02 Phase 2
Quote #: —
☐ NH Reimbursement Pricing

SPECIAL INSTRUCTIONS: Metals were field filtered

Reporting Instructions:
☑ EDD:_____ Report To (email): aboyd@verdantas.com

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 6.0 °C

CUSTODY RECORD

QSD-01 Revision 07/27/2022

Relinquished by Sampler:	Date 11/5/24	Time 1315	Received by:	Date 11/5/24	Time 13:15
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date 11/8/24	Time 14:57	Received by Laboratory: Marie Michele	Date 11/5/24	Time 14:51

Sample Receipt Condition Report

71980

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☒-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☐-Yes ☐-No ☒-N/A CoC signed: ☒-Yes ☐-No

Receipt Temp: 6 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☒-Yes ☐-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:_____

Preservation / Analysis	Bottle Size/Type & Quantity										Check pH for ALL applicable* samples and document:
HCl	40mL(G)		250mL(P)		500mL(P)		1L(G)				
HNO_3	125mL(P)		250mL(P)	8	500mL(P)						→ pH ✓ OK
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		
NaOH	125mL(P)		250mL(P)								
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)						
ZnAc-NaOH	125mL(P)		250mL(P)								
Trizma	125mL(P)		250mL (P)								*pH ✓by analyst:VOC, PFAS, TOC, O&G
NH_4Ac	125mL(P)		250mL (P)								Residual Cl not present:
NaS_2O_3	40mL(G)		120mL(P)								ABN625____ Pest608____
MeOH	20mL(G)		40mL(G)								Bacteria ResCl ✓by analyst
None (solid)	2oz(G)		4oz(G)		8oz(G)		Syringe				PC Dry applicable? Y (N)
None (water)	40ml (G)		60mL(P)		125mL(P)	9	250mL(P)		500mL(P)		1L(G) 1L (P)
Mold	Cassette		Bulk		Plate		Tape Lift				
Asbestos	Cassette		Bulk								
Lead	Cassette		Bulk		Wipe						

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			-09 Cr VI bottle less than half volum OK per ASD
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?			X	
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624	X			NFL
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?	X			(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: MEO Date/Time: 11/5/24 15:30

Peer Review Checklist

☐ Client ID/Project Manager ☐ On Ice, Temperature OK? ☐ Sample IDs ☐ Analyses in Correctly

☐ Project Name ☐ PO# (if provided) ☐ Matrix -references

☐ TAT/rushes communicated ☐ Sub samples sent? Shipping Charge? ☐ Date/Time collected -wastewater methods

☐ Received Date/Time ☐ Issues noted above communicated? ☐ Short HTs communicated ☐ Notes from CoC in LIMS

Reviewed By: _____ Date: _____

Notes: (continue on back as needed)

	Initials	Date	What was sent?
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice

Appendix B

Cap Inspection Form

CAP INSPECTION CHECKLIST

Release Trackng #:	3-11653	Weather:	Overcast
Site Name:	Morse's Pond Culvert Site, Area 3	Temperature:	45F
City:	Wellesley	Site Map:	Attached
State:	Massachusetts	Inspection Date:	11/4/2024
Inspection Team:	Jennifer Newport, Erica Dietz		

ITEM	REMARKS/MAINTENANCE REQUIRED
VEGETATIVE COVER	
AVERAGE GRASS HEIGHT Estimated Height (inches): 24 to 36 inches	
SPARSE COVER AREAS? Yes X No Location (also indicate on map): Length: 3' Width: 3'	
GRASS CONDITION Healthy X Fair Poor	
TREES/SHRUBS? Yes X No Location (also indicate on map): See Photos Areal Extent: Height: Up to 3-4'	
GROUND SURFACE	
SETTLEMENT (LOW SPOTS) Yes No X Location (also indicate on map): Areal Extent: Depth:	
CRACKS Yes No Location (also indicate on map): Areal Extent: Depth:	Not applicable
EROSION Yes X No Location (also indicate on map): Areal Extent: Depth:	Path on top of culvert, and on both sides in steepest sections
HOLES Yes No X Location (also indicate on map): Areal Extent: Depth: Suspected Cause (e.g. rodent, other):	No signs of burrowing or human digging

ITEM			REMARKS/MAINTENANCE REQUIRED
WET AREAS	Yes _____	No X	
Ponding:			
Location (also indicate on map):			
Areal Extent:			
Seeps:	Yes _____	No X	
Location (also indicate on map):			
Areal Extent:			
Estimated Flow Rate:			
Soft Subgrade:			
Location (also indicate on map):			
Areal Extent:			
ACCESS AND SITE SECURITY			
CHAIN LINK FENCE			
Functioning:	Yes X	No _____	
Holes in Mesh:	Yes _____	No X	
Location (also indicate on map):			
Damaged Posts	Yes _____	No X	
Location (also indicate on map):			
Vegetation Growth on Fence	Yes X	No _____	
Location (also indicate on map):			
WALLS AND SLOPES			
Culvert Walls			
Damage:	Yes _____	No X	
Leaning:	Yes _____	No X	
Location (also indicate on map):			
EAST WING WALL			
Erosion:	Yes _____	No X	
Settlement:	Yes _____	No X	
Location (also indicate on map):	Yes _____	No _____	
WEST WING WALL			
Erosion:	Yes _____	No X	
Settlement:	Yes _____	No X	
Location (also indicate on map):	Yes _____	No _____	
MORSE'S POND SHORE			
Erosion:	Yes _____	No X	
Settlement:	Yes _____	No X	
Location (also indicate on map):	Yes _____	No _____	

ITEM	REMARKS/MAINTENANCE REQUIRED
GENERAL	
VANDALISM Yes X No Location (also indicate on map): Description of Damage:	Graffiti, general trash

Morse's Pond Culvert – Cap
Inspection November 4, 2024
Wellesley, Massachusetts

#1 View from Morse's Pond Beach to One Bacon Street property.

#2 View from Morse's Pond Beach looking at outfall.

#3 View from Morse's Pond Beach looking at East Wing Wall.

#4 View of fence and foot path on East Wing Wall.

#5 View of post at Morse's Pond Beach.

#6 View of top section on East Wing Wall.

Morse's Pond Culvert – Cap
Inspection November 4, 2024
Wellesley, Massachusetts

#7 View of area between East and West Wing Wall. Includes foot path and fence.

#8 View of West Wing Wall looking down from top section.

#9 View of fence and pathway on West Wing Wall.

#10 View of path way on West Wing Wall leading down to water and One Bacon Street property.

#11 View of culvert from West Wing Wall.

#12 View of Morse's Pond Beach area from West Wing Wall.

Morse's Pond Culvert – Cap
Inspection November 4, 2024
Wellesley, Massachusetts

#13 Fence line along top of Wing Walls looking Up at railroad track area.

#14 View from center of Wing Walls looking Down at culvert inlet.

#15 Typical Injection Well and Monitoring Well – condition is good.

Appendix C

MCP Public Notification Letters

46 Eastman Street
South Easton, MA 02375
(401) 648-8652

February 11, 2025

Executive Director
Board of Selectmen
525 Washington Street
3rd Floor
Wellesley, MA 02482

Re: Post Temporary Solution Status Report
Morses Pond Culvert Site
One Bacon Street
Wellesley, Massachusetts
MassDEP RTN 3-11653

As required by the Massachusetts Contingency Plan, notice is hereby given that the above referenced document has been submitted electronically to the Massachusetts Department of Environmental Protection (MassDEP).

The purpose of the post temporary solution status report is to provide an update regarding remedial actions for Area 1 (One Bacon Street and vicinity) and Area 3 (Morses Pond Culvert/Central Street area). Activities conducted during the reporting period included the measurement of water table elevation, the collection of groundwater samples, and inspection of the engineered cap. The results are presented in the report.

The report and all others submitted to MassDEP can be viewed on the Reportable Release File Viewer (https://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=3-0011653) or by contacting the MassDEP Northeast Regional Office located at 150 Presidential Way in Woburn, Massachusetts. The regional office service center phone number is (978) 694-3200.

If you have any questions, please contact our office at (401) 648-8652.

Sincerely,
VERDANTAS LLC

Angela Boyd
Licensed Site Professional

46 Eastman Street
South Easton, MA 02375
(401) 648-8652

February 11, 2025

Director of Public Health
Health Department
Annie F. Warren Building, 2nd Floor
90 Washington Street
Wellesley, MA 02481

Re: Post Temporary Solution Status Report
Morses Pond Culvert Site
One Bacon Street
Wellesley, Massachusetts
MassDEP RTN 3-11653

As required by the Massachusetts Contingency Plan, notice is hereby given that the above referenced document has been submitted electronically to the Massachusetts Department of Environmental Protection (MassDEP).

The purpose of the post temporary solution status report is to provide an update regarding remedial actions for Area 1 (One Bacon Street and vicinity) and Area 3 (Morses Pond Culvert/Central Street area). Activities conducted during the reporting period included the measurement of water table elevation, the collection of groundwater samples, and inspection of the engineered cap. The results are presented in the report.

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If you have any questions, please contact our office at (401) 648-8652.

Sincerely,
VERDANTAS LLC

Angela Boyd
Licensed Site Professional

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123
This Notice is Related to:
Release Tracking Number
3 - 11653

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Morses Pond Culvert

City/Town: Wellesley, MA Zip Code: 02482-5701

B. This notice is being provided to the following party:

1. Name: Verdantas LLC
2. Street Address: 46 Eastman Street

City/Town: South Easton, MA Zip Code: 02375

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 1 Bacon Street

City/Town: Wellesley, MA Zip Code: 02482-5701

2. MCP phase of work during which the sampling will be/has been conducted:

☐ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☑ Post-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commercial ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Groundwater samples were collected from ESM-16 for analysis of hexavalent chromium and dissolved metals.

E. Contact information related to the party providing this notice:

Contact Name: Angela Boyd
Street Address: 46 Eastman Street
City/Town: South Easton, MA Zip Code: 02375
Telephone: (401) 648-8537 Email: aboyd@verdantas.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 11653

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/eea/agencies/massdep/cleanup. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

46 Eastman Street
South Easton, MA 02375
(401) 648-8537

July 25, 2024

Mr. Benjamin Stonelake, Jr., Esq.
Blank Rome, LLP
One Logan Square
Philadelphia, PA 19103-6998

Re: Signatory Authority
Morse's Pond Site/Wellesley, MA (RTN 3-11653)
Former AGT Laboratories Site/Natick MA (RTN 3-21096)

Dear Mr. Stonelake:

This letter will authorize the undersigned, Angela Boyd, to sign Massachusetts Department of Environmental Protection (MassDEP) transmittal forms on behalf of American Premier Underwriters, Inc. (APU), One East Fourth Street, Cincinnati, Ohio 45202. The transmittal forms will be used to submit required regulatory submittals to MassDEP for the Morse's Pond site in Wellesley, MA (RTN 3-11653) and the former AGT Laboratories site in Natick, MA (RTN 3-21096). Verdantas will send you draft reports, and you will review and approve each report prior to submission. Verdantas will upload the reports to eDEP and will sign on behalf of APU following your specific approval of each report.

Please sign at the bottom of this letter to provide me with this authorization. Please call me at (401) 648-8537 if you have any questions.

Sincerely,

Angela Boyd

Angela Boyd
Licensed Site Professional

Benjamin G. Stonelake, Jr., Esquire
Blank Rome LLP
Attorneys for American Premier Underwriters, Inc.

Appendix L:

Qualifications of Environmental Professional

JOSEPH SPENCER, LSP, CHMM, ASTM-CEP

BACKGROUND

2024-Present
Senior Project Manager
Weston & Sampson

2022-2024
Project Manager
Weston & Sampson

2021-2022
Senior Project Environmental Scientist
Weston & Sampson

2016-2021
Project Environmental Scientist
Weston & Sampson

2015-2016
Environmental Scientist II
Weston & Sampson

2015
Senior Environmental Analyst
Massachusetts Dept of Environmental Health

2012-2015
Environmental Scientist
Weston & Sampson

2011-2012
Environmental Field Technician
Weston & Sampson

2007-2009
Construction Project Manager
Spencer Construction

2005-2007
Site Superintendent
Sarrette Foundations

EDUCATION

2013-2015
Graduate Coursework
Environmental Geoscience
University of Massachusetts Lowell

2011
Bachelor of Science
Environmental, Earth, & Ocean Science
University of Massachusetts Boston

PROFESSIONAL CERTIFICATIONS

Licensed Site Professional,
Massachusetts No. 9422

Joe is a senior project manager and Licensed Site Professional (LSP) with extensive experience managing the investigation, remediation, and redevelopment of Brownfields properties in Massachusetts. He has worked on numerous projects funded by the US Environmental Protection Agency (EPA), including Brownfields sites and polychlorinated biphenyls (PCB) short-term cleanup sites. He has conducted, authored, and/or reviewed hundreds of ASTM due diligence assessments on both the purchase and divestment sides. Joe has also led multiple complex regulatory compliance and closure strategies across multiple industry sectors under the MCP, CERCLA, and TSCA.

SPECIFIC PROJECT EXPERIENCE

Commuter Ferry Terminal, Lynn, Massachusetts. Environmental scientist for the assessment and cleanup of a parcel that has since been developed as a commuter ferry terminal. Project involved pre-characterizing the site and providing compliance with the MCP, including LSP services, assessment, and site closure. Also worked with the marine design engineer to manage sediment generated during the replacement of a public boat ramp and construction of a new seawall.

Community-Wide Brownfields Assessment and Area-Wide Planning, Chicopee, Massachusetts. Project manager / site assessment task manager for QEP and LSP services for a community-wide assessment grant and Brownfields Area Wide Plan (AWP) for Willimansett neighborhood. Work has included multiple Phase I ESAs, Phase II ESAs, and hazardous building material surveys. Responsibilities include managing field activities and the regulatory strategy, deadlines, and submittals, as well as overall technical responsibility for site assessment and re-use deliverables for the Project.

Site Assessment and Regulatory Compliance, Bay and Tapley Sites, Springfield, Massachusetts. Project manager / project environmental scientist for assessment, remedial planning, and regulatory compliance at a complex of multiple release sites known as the Bay & Tapley Sites in Springfield. Developed iterative assessment approach for multiple unique releases as well as site-wide impacts. Oversaw all stages of on-going assessment and remedial planning. Provides regulatory and technical support, as well as report writing for documents required under the MCP and TSCA.

Brownfields and Licensed Site Professional (LSP) Services, Peabody, Massachusetts. Project manager / site assessment task manager for QEP and LSP services for the City of Peabody's Riverwalk Project. Work has included multiple Phase I and Phase II ESAs, hazardous building material surveys, demolition, and remediation / reuse planning and design at multiple sites, including 24 Caller Street. Responsibilities include managing field activities and the regulatory strategy, deadlines, and submittals for the Project. Multiple phases of this project have been funded by the US EPA Community Wide Brownfields Assessment Grant, an EPA Brownfields Revolving Loan Fund (RLF), and other funding sources, including but not limited to a Community Development Block Grant (CDBG) and MassDevelopment Brownfields grant.

JOSEPH SPENCER, LSP, CHMM, ASTM-CEP

Certified Hazardous Materials Manager, Institute of Hazardous Materials Management - No. 26971

ASTM Certified Environmental Professional - No. ASTM-0049

OSHA 40-Hour HAZWOPER

OSHA 10-Hour Construction

PROFESSIONAL TRAINING

Phase I ESA Practices for Commercial Real Estate - ASTM International

PROFESSIONAL AFFILIATIONS

Environmental Business Council of New England

Licensed Site Professional Association, Technical Practices Committee

ASTM International E50 Committee on Environmental Assessment, Risk Management, and Corrective Action

PAPERS & PRESENTATIONS

Developing Background Concentrations of Metals and PAHs in Soil in an Urban Railroad Right-of-Way

33rd Annual International Conference on Soils, Sediments, Water, & Energy, October 16-19, 2017, Amherst, MA

Construction on Contaminated Property, January 2025 Monthly Meeting, Safety Alliance Furthering Educational Resources (SAFER), Providence, RI, 8 Jan.

Environmental Assessment and Remediation, CEE 720/820 Solid and Hazardous Waste Engineering Class, Department of Civil and Environmental Engineering, University of New Hampshire, Durham, NH, 8 Nov.

Environmental Regulations, Storage Tanks, Assessment and Remediation, Environmental Health and Safety for Facility Managers, Metropolitan College, Boston University, Boston, MA, 5 Mar.

Polychlorinated Biphenyls (PCBs) Assessment, Conway Park, Somerville, Massachusetts. Project Manager for the assessment and cleanup of PCBs, which were detected in surficial soil at a children's playground and ballfield in Conway Park. Managed the initial response which included closing the field, community outreach, and notification to MassDEP and EPA. Also oversaw the comprehensive assessment, implementation of selected remedial alternatives, regulatory deadlines, and report writing for documents required under the MCP and TSCA. Assisted with the evaluation of cleanup options, cleanup design.

Brownfields and Licensed Site Professional (LSP) Services, Framingham, Massachusetts. Project manager / site assessment task manager for QEP and LSP services for the City of Framingham. Work included multiple Phase I ESAs and subsurface investigations at multiple sites, including the Cedar Woods property. Responsibilities included developing sampling plans and managing field activities, as well as the regulatory strategy, deadlines, and submittals.

Tremont Crossing Redevelopment, Peabody, Massachusetts. Project manager / project environmental scientist for the Tremont Crossing redevelopment. Provided development support and LSP services, and aided in navigating the EPA Brownfields funding process (QEP services). Responsibilities included the design and management of a subsurface investigation and all regulatory submittals (RAM Plan, PSS, AUL, etc.). Also responsible for generating EPA Brownfields-required documents, including a community relations plan, analysis of brownfields cleanup alternatives, and revolving loan fund application.

Ferdinand Redevelopment Project / Bruce C Bolling Building, Boston, Massachusetts. Environmental scientist for the redevelopment of the historic Ferdinand, Curtis, and Waterman Buildings into the new Dudley Square municipal office facility. Participated in the evaluation of hazardous building materials, preparation of construction plans and specifications for the abatement of hazardous materials, and abatement monitoring and oversight. Work included a subsurface sampling and analysis program that detected elevated concentrations of metals and PAHs in the soil, and chlorinated solvents, including PCE, in both soil and groundwater. Assisted with the remedial design to manage contaminated soil and groundwater during construction and install a vapor mitigation system, including a vapor barrier and sub-slab depressurization system, beneath the proposed building. Responsibilities included providing oversight of remedial activities (i.e., chemical injections), sample collection, and technical support with MCP-related reports.

Area A-7 Police Station Remediation, East Boston, Massachusetts. Project scientist / project manager for the assessment and remediation of the new Area A-7 Police Station where elevated concentrations of metals and petroleum were detected in soil and groundwater. Responsibilities included overseeing multiple phases of environmental assessment, managing regulatory deadlines, and report writing for documents required under the MCP to support the new police station construction and site closure. Also assisted with design of the soil and hazardous waste management plan and preparation of plans and specifications for the environmental remediation and soil management during construction.

MELISSA DAVIS, REM

BACKGROUND

2024-Present
Senior Project Manager
Weston & Sampson

2022-2024
Senior Compliance Officer
Energy North Group

2018-2022
Senior Environmental Compliance Manager
BW Gas & Convenience Holdings, LLC

2016-2018
Independent Contractor
USA & Canada Projects

2004-2010
Group Manager (Environmental)
WattersonEFM

2000-2004
Environmental Project Manager
TTL Associates, Inc.

1998-2000
Environmental Scientist
O'Reilly, Talbot & Okun Associates, Inc.

1996-1998
Sustainable Waste Management and Recycling Project Coordinator
Town of Amherst

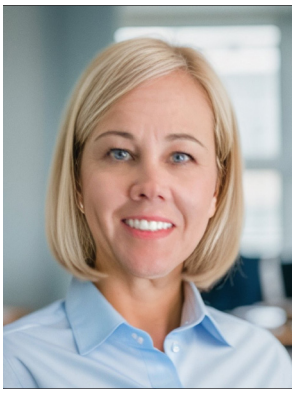
EDUCATION

2023
Graduate Certificate
Offshore Wind Energy
University of Massachusetts Amherst

1997
Bachelor of Science cum laude
Environmental Science
University of Massachusetts Amherst

PROFESSIONAL REGISTRATION

Registered Environmental Manager
No. 17989030768240829



Melissa is a senior project manager with 25 years of experience in successfully collaborating with all compliance stakeholders to provide in-depth environmental and compliance oversight from a capacity of an owner/operator and environmental consultant. She is a detailed-oriented professional with a proven track record of managing investigations, advising, developing policies, and implementing regulations to ensure compliance that aligns with organizational goals.

SPECIFIC PROJECT EXPERIENCE

EPA-Funded Brownfield Projects, Massachusetts. Worked on numerous EPA-funded Brownfield projects, including assessments of mill buildings, former manufacturing facilities, sawmills, and multiple municipal parcels. Assisted team with the EPA Brownfields Program including out-reach meetings, quarterly reporting, and database updates to EPA.

Brownfield Assessment Grant, Phase I ESAs and Subsurface Investigations, Franklin Regional Council of Governments (FRCOG), Western Massachusetts. Managed Phase I ESAs and/or Phase II site investigations on five previous sites, ranging from vacant lots to former industrial properties, as part of a Brownfields assessment grant. Tasks included historical research at local and state agencies, a site reconnaissance, soil sampling, data analysis, and report writing. Additional responsibilities included development of inventory field sheets and a health and safety plan, coordination with local authorities, organization of the field data into a usable database, and preparation of a report.

Brownfields Services, Peabody, Massachusetts. Assisted the Brownfield's team with EPA and MCP submittals for the City of Peabody's Riverwalk Project. Work has included multiple Phase I and Phase II ESAs, hazardous building material surveys, demolition, and remediation / reuse planning and design at multiple sites, including 24 Caller Street. Responsibilities include managing field activities and the regulatory strategy, deadlines, and submittals for the Project. Multiple phases of this project have been funded by the US EPA Community Wide Brownfields Assess-ment Grant, an EPA Brownfields Revolving Loan Fund (RLF), and other funding sources, including but not limited to a Community Development Block Grant (CDBG) and MassDevelopment Brownfields grant.

Brownfield Assessment Grant, Phase I ESAs and Subsurface Investigations, Framingham, Massachusetts. A site with a long history of commercial activities resulting in releases of oil and/or hazardous materials impacting soil, groundwater, and surface water within wetlands. Managed investigations under the direction of the LSP to align with community development goals.

Soil Management for Utility Projects, Various Sites, Massachusetts. Project Manager for various utility and construction sites, which are often managed under the Massachusetts Contingency Plan (e.g., RAMs, URAMs, etc.). Responsibilities included the design and management of soil precharacterization programs, post-excavation characterization of soils, data analysis, and preparation of appropriate reuse/disposal packages for soils.

PROFESSIONAL CERTIFICATIONS

Class A/B Operator Certification Training (various states)

10-Hour Occupational Safety and Health Administration Training (OSHA) - 2024

40-Hour Hazardous Waste Operation and Emergency Response Certification (HAZWOPER) 1998-2024

Environmental Professional per EPA CERCLA

PROFESSIONAL AFFILIATIONS

2004-2006
Chairwoman, Brownfield Redevelopment Committee

Former Haverhill Manufactured Gas Plant (MGP) site (now National Grid), Haverhill, Massachusetts. Represented current/owner occupant by working with consultants, agencies, and legal. This multi-year project, which identified benzene and coal tar impacts, included soil/groundwater sampling from upland and sediment and surface water samples from the Little River. A complex disposal site underneath an active gasoline station and car wash (upland) and a deteriorating retaining wall separating the Little River from the upland. Remediation strategies used included an air injection and extraction treatment system, installation of a temporary cap on the Little River, surface water booms, and potentiometric data to determine rate of seepage.

Former Coal Gasification Facility, Springfield, Massachusetts. Environmental scientist responsible for planning, managing, and performing environmental assessment activities at a former MGP facility associated with the basketball hall of fame expansion project. Prepared various MCP submittals under the direction of the LSP.

PFAS Investigation Municipal Redevelopment Project, Lynnfield, Massachusetts. Project Manager for PFAS impacts discovered during soil characterization for construction. Assisted with design and implementation for MCP-related response activities.

Hazardous Waste Management Program Development, Haffner's, Lowell/ Lawrence, Massachusetts. Designed and implemented a hazardous waste program that aligned with RCRA and OSHA requirements for a petroleum energy company.

Ameresco and Next Grid – Solar PV Development Projects, Massachusetts. Managed Phase I ESAs for various proposed and ongoing solar development sites throughout Massachusetts.

Phase I and II ESAs, Colorado, Iowa, Kansas, Maine, Massachusetts, Missouri, Montana, Nebraska, New Hampshire, New Mexico, Oklahoma, Oregon, South Dakota, Texas, and Wyoming. Directed due diligence for over 800 convenience store properties (w/retail motor fuel sales) associated with acquisitions (up to a one-billion-dollar deal), divestitures, refinancing and environmental documentation required for a public filing. (with former employer)

Phase I and II ESAs, Corridor Studies, Illinois, Indiana, Kentucky, Michigan, New York, New Jersey, Ohio, and Pennsylvania. Due Diligence Client Manager for over 250 CVS redevelopment projects and Real Estate Investment Trust (REIT) refinancing. (with former employer)

EPA and State-Specific Compliance, Iowa, Kansas, Maine, Massachusetts, Missouri, Nebraska, New Hampshire, New Mexico, Oklahoma, Oregon, South Dakota, Texas, and Wyoming. Oversaw all aspects of storage tank compliance, including emergency response and primary regulatory contact for over 500 retail fueling stations including ten bulk storage facilities. Navigated numerous EPA inspections at SPCC bulk fuel locations including negotiating settlement agreements. Corporate compliance manager for all environmental projects including legacy and new releases. (with former employer)

APPENDIX K

Wildlife Habitat Assessment, September 2025

Weston & Sampson SM

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Wildlife Habitat Evaluation

September 2025

MORSES POND BEACH & BATHHOUSE IMROVEMENTS

WELLESLEY, MASSACHUSETTS

PREPARED FOR:
TOWN OF WELLESLEY RECREATION DEPARTMENT

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

Morses Pond Beach & Bathhouse Improvements
WSE Project No. ENG25-0709

October 16th, 2025

Glenn D. Remick, AIA, LEED AP, MCPPO
Project Manager, Design and Construction
Town of Wellesley
888 Worcester Street, Suite 370
Wellesley, MA 02481

Re: Wildlife Habitat Evaluation
Morses Pond Beach & Bathhouse Area

Dear Mr. Remick:

Weston & Sampson Engineers, Inc. is hereby enclosing a copy of the Wildlife Habitat Evaluation performed for the Morses Pond Beach & Bathhouse Area.

As part of the evaluation, we have attached the following:

Appendix A: Wildlife Habitat Evaluation Narrative
Appendix B: Project Maps
Appendix C: Photographs
Appendix D: IPaC Species List

If you have any questions regarding this submittal, please contact me at (774) 298-3095.

Sincerely,

WESTON & SAMPSON

Gregory Russo, CE, CISEC, CWS
Technical Specialist

APPENDIX A
WILDLIFE HABITAT EVALUATION NARRATIVE

TABLE OF CONTENTS

		Page
1.0	SITE DESCRIPTION AND PROJECT BACKGROUND	2
2.0	WILDLIFE HABITAT EVALUATION METHODOLOGY	3
3.0	IMPORTANT HABITAT FEATURES	5
4.0	THREATENED, ENDANGERED AND RARE SPECIES	8
5.0	INVASIVE SPECIES	9
6.0	CONSERVATION AREAS	10
7.0	SUMMARY	11

1.0 SITE DESCRIPTION AND PROJECT BACKGROUND

The evaluation area is located at Morses Pond Beach off Turner Road in Wellesley, MA. This evaluation focused on the Morses Pond Beach area and some of the surrounding park land. The evaluation area is bounded by Morses Pond, Ice House Pond, Town of Wellesley Water Department property, and the MBTA Commuter Rail. The beach area is mostly sand and grass covered with some paved walking paths, picnic pavilions, a volleyball court, and playground areas. The area also contains the current bathhouse, floating docks, and a boat launch area. The northern path to access the beach is paved and surrounded by mowed grass. Morses Pond and Ice House Pond along this path are bordered by shrubby vegetation and some trees. The southern road to access the beach is paved and surrounded by trees and shrubs. Wildlife Habitat Evaluation (WHE) mapping is provided in Appendix B and site photographs are provided in Appendix C.

Dominant tree species on site included red oak (*Quercus rubra*), eastern white pine (*Pinus strobus*), Norway maple (*Acer platanoides*), and black locust (*Robinia pseudoacacia*). Shrubs on site were dominated by common buckthorn (*Rhamnus cathartica*), glossy buckthorn (*Frangula alnus*), multiflora rose (*Rosa multiflora*), speckled alder (*Alnus incana*), and silky dogwood (*Cornus amomum*). Dominant vine and herb species on site included Asian bittersweet (*Celastrus orbiculatus*), Virginia creeper (*Parthenocissus quinquefolia*), garlic mustard (*Alliaria petiolata*), common wormwood (*Artemisia vulgaris*), and mowed grass.

2.0 WILDLIFE HABITAT EVALUATION METHODOLOGY

The Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands was developed by Mass DEP, the Massachusetts Division of Fisheries and Wildlife's Natural Heritage and Endangered Species Advisory Committee Wildlife Working Group, and the University of Massachusetts to provide guidance on how to identify important wildlife habitat features and evaluate how these features can be protected within wetland resource areas. This guidance establishes impact thresholds for various inland wetland resource areas that trigger the need for a WHE. These evaluations demonstrate to Conservation Commissions and applicants the level of consideration necessary for a project to meet the performance standards outlined in the Massachusetts Wetlands Protection Act (WPA) for each wetland resource area when a project is proposing to alter wildlife habitat areas.

The WPA regulations require that a WHE be conducted under this guidance when a proposed project will alter Inland Bank, Land Under Water (LUW), Riverfront Area (RFA), or Land Subject to Flooding (BLSF or ILSF) beyond the thresholds permitted under 310 CMR 10.54(4)(a)5., 10.56(4)(a)3., 10.57(4)(a)3., and 10.58(4)(d)1. Under the WPA, the term wildlife habitat is defined under 310 CMR 10.04 as "Those areas, which due to their plant community composition and structure, hydrologic regime or other characteristics, provide important food, shelter, migratory or overwintering areas, or breeding areas for wildlife."

Thus, the presence of wildlife in a wetland resource area is not the sole factor in evaluating wildlife habitat value. Plant community composition and structure, hydrologic regime, or other characteristics providing "important" features for wildlife must be present. More specifically, it is wetland habitat value and not a particular wildlife species (except for rare species) that is protected by the WPA. Inland wetland resource areas are presumed to be significant to the protection of wildlife habitat with only a few minor exceptions associated with Land Subject to Flooding.

The site that was the subject of this WHE contains Inland Bank, LUW, and BLSF.

A WHE for the project was conducted by Weston & Sampson to:

- Document "important wildlife habitat features" throughout the evaluation area, as such term is used in the Wetlands Protection Act regulations, and the Wildlife Habitat Assessment Policy;
- Identify potential adverse impacts to important wildlife habitat features that could result from potential future development; and
- Identify invasive species present within the evaluation area.

On August 5th and 13th, 2025, a WHE was conducted across the entire evaluation area. The locations of the important habitat features identified during the WHE are depicted in Appendix B, Figure 4.

There are thresholds associated with each resource area identified in the WPA and in the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands guidance document published by MassDEP. Alterations greater than these certain thresholds may be permitted if they will have no adverse effects on important wildlife habitat per 310 CMR 10.60. This WHE has been conducted with the goal of determining what important habitat features are present on the site and where, so that this information can be used to make threshold determinations later if needed. Because there is currently no design for any future project and specific resource area impacts are

unknown, this WHE has been conducted for information gathering and feasibility purposes only. Therefore, WHE forms were not used for this evaluation, however all of the important habitat features listed in the forms were considered.

3.0 IMPORTANT HABITAT FEATURES

As part of this evaluation, important habitat features were identified throughout the Morses Pond Beach area and some of the surrounding park land. Habitat features that were identified on site have been described and quantified below. Please refer to Appendix B, Figure 4.

Wildlife Food – One important habitat feature to consider is a source of plants that can provide important food sources, including hard mast and fruit/berry producers. Sources of food identified on site at the time of evaluation included acorns from red oak (*Quercus rubra*) and berries from silky dogwood (*Cornus amomum*) and common red raspberry (*Rubus idaeus*). Acorns and berries are consumed by numerous birds and small mammals.

Red oak (*Quercus rubra*) was common throughout the forested areas adjacent to site which includes a large area of forested parkland. Additionally, silky dogwood (*Cornus amomum*) was a common species along the adjacent shorelines of Morses Pond and Ice House Pond. Although there would still be abundant food sources available nearby after any potential future development, preserving as many of the existing food source plants, or re-planting any that are removed, is important in preserving habitat within the park.

In addition to upland hard mast and fruit/berry producers, the adjacent waters of Morses Pond and Ice House Pond contained aquatic food plants such as pondweeds (*Potamogeton spp.*), fragrant water lily (*Nymphaea odorata*), and duckweed (*Lemna minor*).

Standing Dead Trees – Ten standing dead trees were observed during the evaluation. These trees could provide potential cavities and perching habitat, especially when adjacent to waterbodies. Standing dead trees adjacent to roadways may need to be removed for safety during any potential future development, but those adjacent to Morses or Ice House Pond that do not pose a risk to heath and safety should be preserved as important habitat features.

Small Mammal Burrows and Cover/Perches/Basking/Denning/Nesting Habitat – Most of the dense herbaceous cover was observed in narrow bands along portions of the Morses Pond and Ice House Pond banks. There were four additional areas where dense herbaceous cover was observed in corners of the site that are not accessible to mowers. Cover was limited throughout the rest of the site where land was mowed or paved and where forested areas had minimal ground cover. Areas with dense shrub cover but lacking herbaceous cover were not considered.

Vegetation species in these areas included common buckthorn (*Rhamnus cathartica*), glossy buckthorn (*Frangula alnus*), multiflora rose (*Rosa multiflora*), speckled alder (*Alnus incana*), silky dogwood (*Cornus amomum*), Asian bittersweet (*Celastrus orbiculatus*), Virginia creeper (*Parthenocissus quinquefolia*), garlic mustard (*Alliaria petiolata*), and common wormwood (*Artemisia vulgaris*). This cover could provide shelter for any voles, small mammals, amphibians or reptiles that may utilize the area. This cover can also be utilized by avian species for nesting however no nesting was observed.

Six small mammal burrows were observed on site and many more are assumed to be present. One large rock pile that could provide cover or denning habitat for small mammals or reptiles was also observed.

An abundance of large and small woody debris was observed between the southern access road and the commuter rail tracks. These logs and branches could provide cover for small mammals, reptiles, and birds within this forested area of the site, especially since this area lacked herbaceous vegetation. Additionally, there were a few fallen logs and branches along the bank of Ice House Pond as well as overhanging branches that were within one meter above the water's surface. These logs and branches could provide cover for any reptiles or amphibians that utilize the pond. Finally, the forested areas immediately adjacent to Morses Pond and Ice House Pond provide good visibility of open water for avian species.

This habitat feature is somewhat lacking within the evaluation area due to mowing and general park maintenance. Therefore, any potential future development should try to preserve these areas as much as possible. If these areas do become impacted, they should be replaced elsewhere and/or remaining areas should be improved. Land surrounding the park also contains additional areas of this habitat feature and so connectivity to surrounding land should be maintained.

Standing Water Present At Least Part of the Growing Season – The evaluation area was bounded on most sides by Morses Pond and/or Ice House Pond. These waterbodies could be suitable for non-breeding amphibians for foraging and/or rehydration. It is unlikely these waterbodies would be utilized for breeding due to likely fish presence. Turtles, geese, swans, and muskrat were observed utilizing these waterbodies.

Any potential future development of the site should avoid impacting the availability, accessibility, or quality of standing water habitat however possible.

Areas of Ice Free Open Water in Winter – Based on an analysis of available aerial imagery, it appears that at least portions of Morses Pond or Ice House Pond remain ice free during at least portions of the winter. This could provide sources of hydration for nearby wildlife.

Any potential future development of the site should avoid impacting the availability, accessibility or quality of ice free open water areas in winter however possible.

Exposed Areas of Well Drained, Sandy Soil Suitable for Turtle Nesting – The Morses Pond Beach area and some of the adjacent park areas have sandy soils which could be suitable for turtle nesting. No evidence of turtle nesting was observed during the evaluation. Due to the recreational nature of the area turtle nests would likely not survive well.

These conditions are expected to remain unchanged by any potential future development. Creation of designated turtle nesting areas that could be undisturbed by recreational activities should be considered.

Connectivity with Adjoining Natural Habitats – There is a large area of forested park land to the east of Morses Pond Beach, south of the residential areas of Halsey Ave. and Turner Rd. Additionally, Ice House Pond is connected to Morses Pond under the northern access path to the beach area, and Morses Pond is connected by a tunnel to Paintshop Pond and Lake Waban to the south.

Any potential future development of the site should avoid impacting the availability, accessibility or quality of these connections however possible.

4.0 THREATENED, ENDANGERED AND RARE SPECIES

Weston & Sampson reviewed available data from the Massachusetts Natural Heritage and Endangered Species Program (NHESP) using the Massachusetts Geographic Information System (MassGIS) to determine the presence of Priority Habitats of Rare Species, Estimated Habitats of Rare Wildlife, and Certified or Potential Vernal Pools within the evaluation area. According to these data, which are included in Appendix B. Figure 3, there are no NHESP Priority Habitats of Rare Species, Estimated Habitats of Rare Wildlife, or Certified or Potential Vernal Pools within the evaluation area.

Weston & Sampson also consulted the US Fish and Wildlife Service IPaC system for a list of threatened and endangered species that may occur within the evaluation area. This list contained the endangered northern long-eared bat (*Myotis septentrionalis*) (NLEB), the proposed endangered tricolored bat (*Perimyotis subflavus*) (TCB), and proposed threatened monarch butterfly (*Danaus plexippus*). It should be noted that this list does not guarantee the presence of these species, only indicates the possibility that these species may occur within the evaluation area due to their range or the habitat that may be present. The IPaC list is included in Appendix D.

During spring, summer, and fall NLEB and TCB may be using forested areas and tree line areas for foraging and roosting. Trees greater than 3-inches diameter at breast height (DBH) with exfoliating bark, cracks, crevices, cavities, and large clusters of live or dead leaves or needles may be used for roosting outside of hibernation season, which is estimated to last from November 1st through April 14th in Massachusetts. The hibernation season, or inactive season, is when bats leave these summer roosting areas to enter hibernacula for the winter. Any tree cutting that may be required for potential future development of the site should take place during this inactive season and any large trees containing favorable summer roosting characteristics should be preserved if possible.

Monarch butterflies rely on milkweed (*Asclepias spp.*) as a crucial component of their lifecycle as the caterpillars feed exclusively on milkweed. Any potential future development of the site should avoid mowing or removing areas where milkweed and other wildflowers are growing, if possible, and should consider adding and/or replacing pollinator friendly wildflower areas containing native milkweed species.

5.0 INVASIVE SPECIES

An additional survey was conducted throughout the entire evaluation area to determine the location, density, and species list for all invasive species on site. The survey revealed a high concentration and diversity of invasive species throughout the site. Please refer to Appendix B, Figure 5. Invasive species identified included:

- tree of heaven (*Ailanthus altissima*)
- Norway maple (*Acer platanoides*)
- black locust (*Robinia pseudoacacia*)
- border privet (*Ligustrum obtusifolium*)
- multiflora rose (*Rosa multiflora*)
- glossy buckthorn (*Frangula alnus*)
- common buckthorn (*Rhamnus cathartica*)
- burning bush (*Euonymus alatus*)
- Japanese barberry (*Berberis thunbergii*)
- Morrow's honeysuckle (*Lonicera morrowii*)
- purple loosestrife (*Lythrum salicaria*)
- Japanese knotweed (*Polygonum cuspidatum*)
- garlic mustard (*Alliaria petiolata*)
- Japanese honeysuckle (*Lonicera japonica*)
- Asian bittersweet (*Celastrus orbiculatus*)

The most common invasive species observed were Norway maple (*Acer platanoides*), black locust (*Robinia pseudoacacia*), Asian bittersweet (*Celastrus orbiculatus*), multiflora rose (*Rosa multiflora*), and glossy and common buckthorn (*Frangula alnus, Rhamnus cathartica*). Norway maple (*Acer platanoides*) was common throughout the southern portion of the evaluation area in the form of individual saplings and seedlings, large mature trees, and two dense clusters of saplings. A black locust (*Robinia pseudoacacia*) stand was present in the southeastern corner of the evaluation area. Asian bittersweet (*Celastrus orbiculatus*) was present throughout the site in the form of young individual plants as well as larger areas of overgrowth. Some large vines several inches in diameter were observed along the slope adjacent to the commuter rail line. Multiflora rose (*Rosa multiflora*) was scattered throughout the site. Glossy and common buckthorn (*Frangula alnus, Rhamnus cathartica*) were present throughout the site and were especially prevalent in mixed stands around the edges of Ice House Pond.

6.0 CONSERVATION AREAS

The evaluation area contains land that has been designated as Article 97 land and Zone AE Special Flood Hazard Area. Any potential future development of the site could face restrictions based on these areas and they should be considered a higher priority for wildlife habitat conservation. Article 97 land is set aside to preserve open space in Massachusetts and development of these lands is restricted such that the purpose for use of the land cannot change without an application, review, and voting process.

Because it is within the 100-year flood zone, the Zone AE Special Flood Hazard Area is also considered Bordering Land Subject to Flooding (BLSF), a jurisdictional resource area under the WPA. Impacts to this resource area by any potential future development would require permitting through the Wellsley Conservation Commission and could also trigger the need for an additional WHE if impacting 10% of the total BLSF or 5,000 square feet of BLSF.

7.0 SUMMARY

It is Weston & Sampson's opinion that any potential future development within the evaluation area should carefully consider how to preserve and/or improve the wildlife habitat features observed during this survey. Food producing plant species such as red oak (*Quercus rubra*), silky dogwood (*Cornus amomum*), and red raspberry (*Rubus idaeus*) should be preserved as much as possible and should also be included in any future planting plans. Connectivity between the site and adjacent forest land should also be maintained to preserve access to additional nearby food sources. Standing dead trees that do not pose a threat to health and safety, especially those adjacent to the ponds, are important habitat features, for perching, hunting, and sheltering and should not be removed.

Areas of dense herbaceous vegetation, as well as areas with a high density of large and small woody debris, should be managed in such a way as to continue providing important shelter, den, and nesting habitat where possible while still allowing for unobstructed access for recreational and site maintenance purposes.

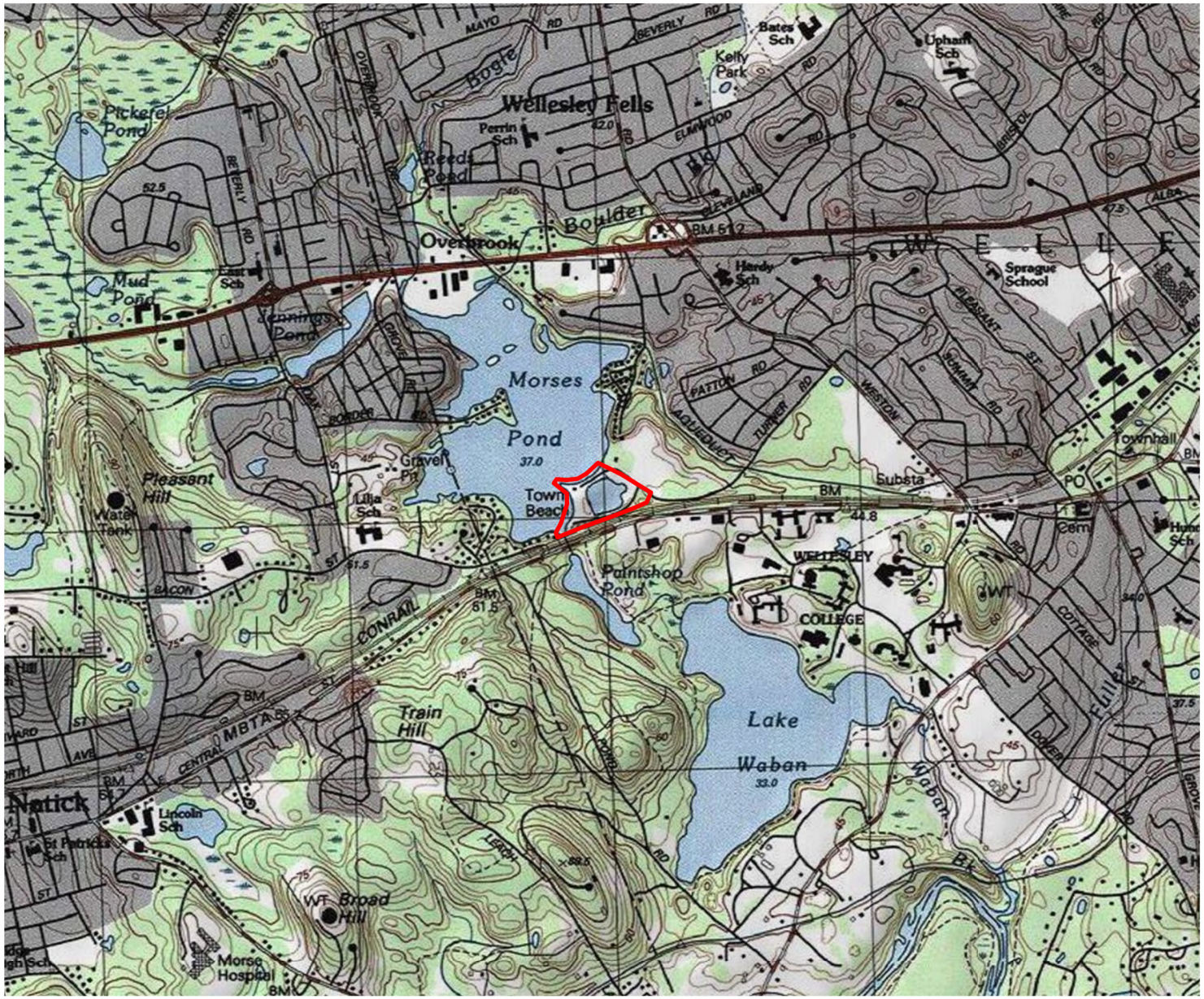
Any potential future development of the site should avoid impacting the ponds themselves as these are not only very important wildlife habitat features but also protected wetland resource areas under the jurisdiction of the Wellesley Conservation Commission, Mass DEP, and US Army Corps of Engineers.

It is important to also consider potential impacts to threatened and endangered species on site. Due to the potential for NLEB and TCB on site, any tree clearing proposed as part of potential future development should take place during the species' inactive season between November 1st and April 14th. Also, wherever possible, large trees with exfoliating bark, cracks, crevices, or cavities should be preserved. Habitat for monarch butterflies in the form of native wildflower areas that include milkweed species should also be preserved, replaced, or created.

Finally, any potential future development of the site should include an invasive species management plan. Removal and management of invasive species and replacement with native species that provide additional wildlife habitat value would be an important and valuable component in preserving the quality of the habitat on this site in the future.

APPENDIX B
PROJECT MAPS

Default Folder: \\wse03.local\WSE\Projects\MA\Wellesley MA\25-1067-Morses Pond Beach Area & Bathhouse Supplemental Feasibility Study\09-Permitting\Wetland Delineation 2025\GIS\Shapefiles\Morses Pond 2025 User: Russo.Gregory Date: 9/10/2025 2:21 PM



Legend

Investigation Area

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1,000 500 0 1,000 Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Copyright:© 2013 National Geographic Society, i-cubed

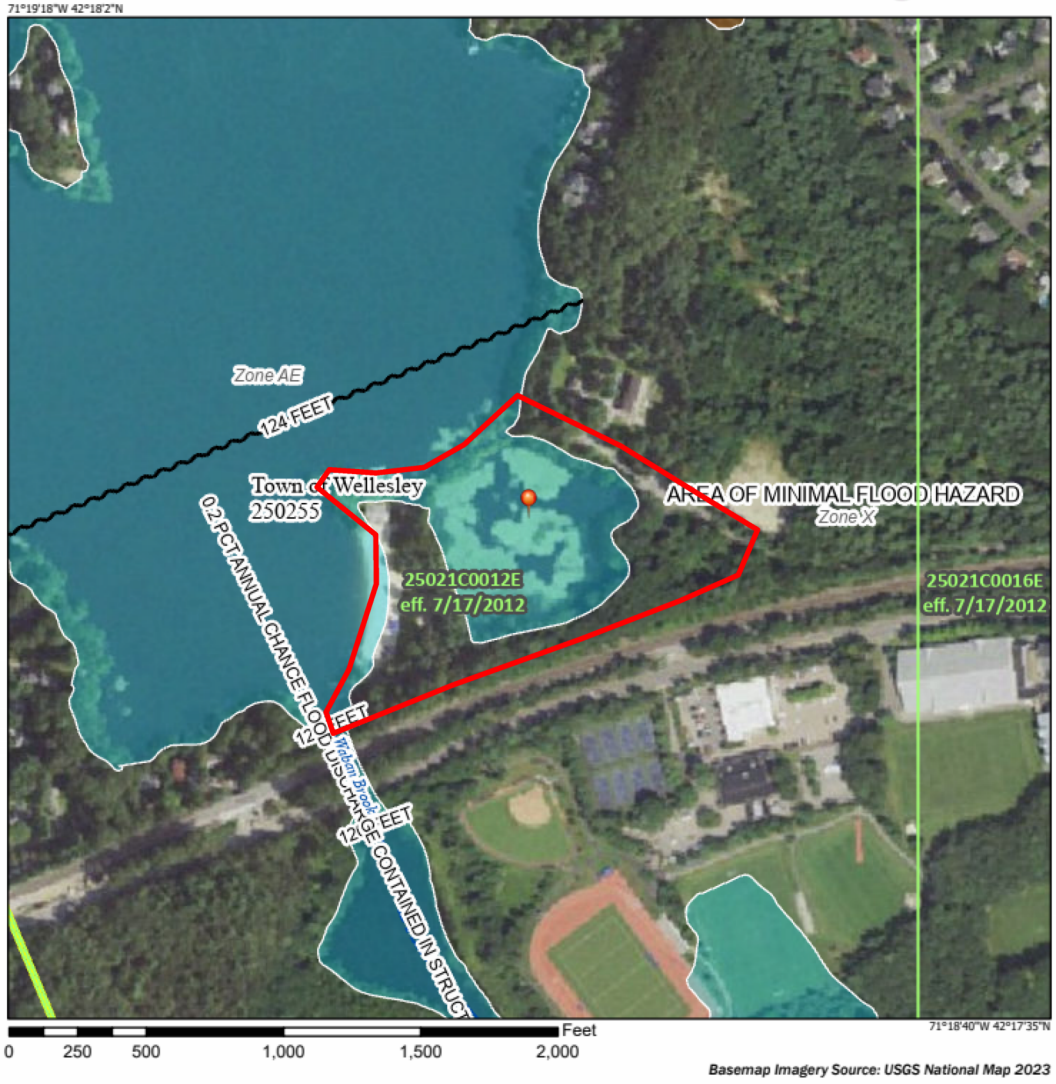
FIGURE 1

Morses Pond
Beach & Bathhouse Improvements
Wellesley, MA

USGS Topographic Map

Weston & Sampson

National Flood Hazard Layer FIRMette



Basemap Imagery Source: USGS National Map 2023

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS
  - Without Base Flood Elevation (BFE) Zone A, V, A99
  - With BFE or Depth Zone AE, AO, AH, VE, AR
  - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD
  - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
  - Future Conditions 1% Annual Chance Flood Hazard Zone X
  - Area with Reduced Flood Risk due to Levee. See Notes. Zone X
  - Area with Flood Risk due to Levee Zone D
- OTHER AREAS
  - NO SCREEN Area of Minimal Flood Hazard Zone X
  - Effective LOMRs
  - Area of Undetermined Flood Hazard Zone D
- GENERAL STRUCTURES
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- OTHER FEATURES
  - 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- MAP PANELS
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/13/2025 at 6:45 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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Data Source: FEMA, USGS National Map 2023

Legend

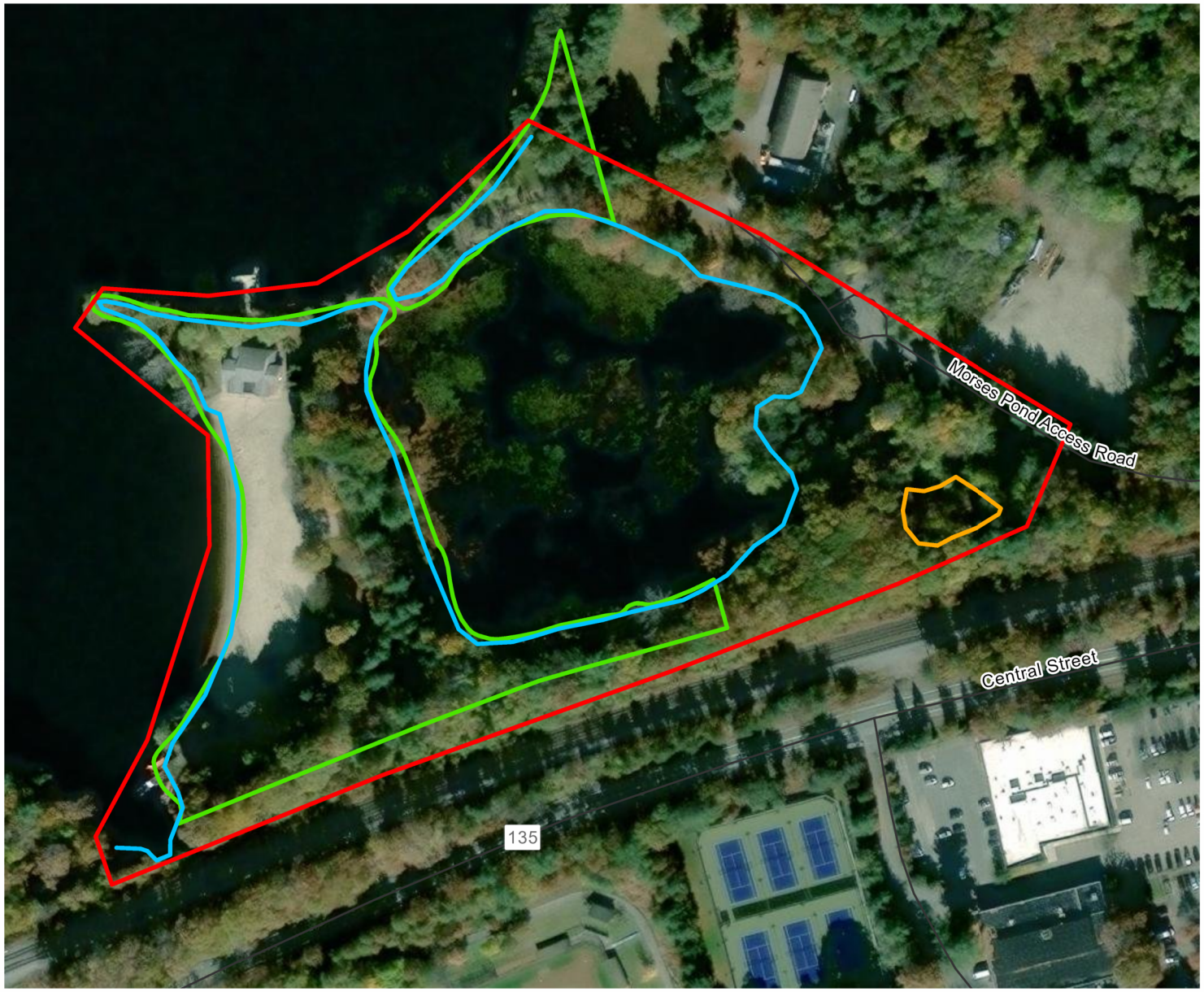
Investigation Area

FIGURE 2
Morses Pond
Beach & Bathhouse Improvements
Wellesley, MA

FEMA Map

Weston & Sampson

Default Folder: \\wse03.local\WSE\Projects\MA\Wellesley MA\25-1067-Morses Pond Beach Area & Bathhouse Supplemental Feasibility Study\09-Permitting\Wetland Delineation 2025\GIS\Shapefiles\Morses Pond 2025 User: Russo.Gregory Date: 10/7/2025 3:22 PM



Legend

- Investigation Area
- TOB-Lake
- Isolated Vegetated Wetland
- Article 97 Land
- ACECs
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Priority Habitats of Rare Species
- NHESP Certified Vernal Pools
- NHESP Potential Vernal Pools
- Cold Water Fisheries

Outstanding Resource Waters

- Public Water Supply Contributor
- ORW for ACEC
- ORW for both Water Supply and Other

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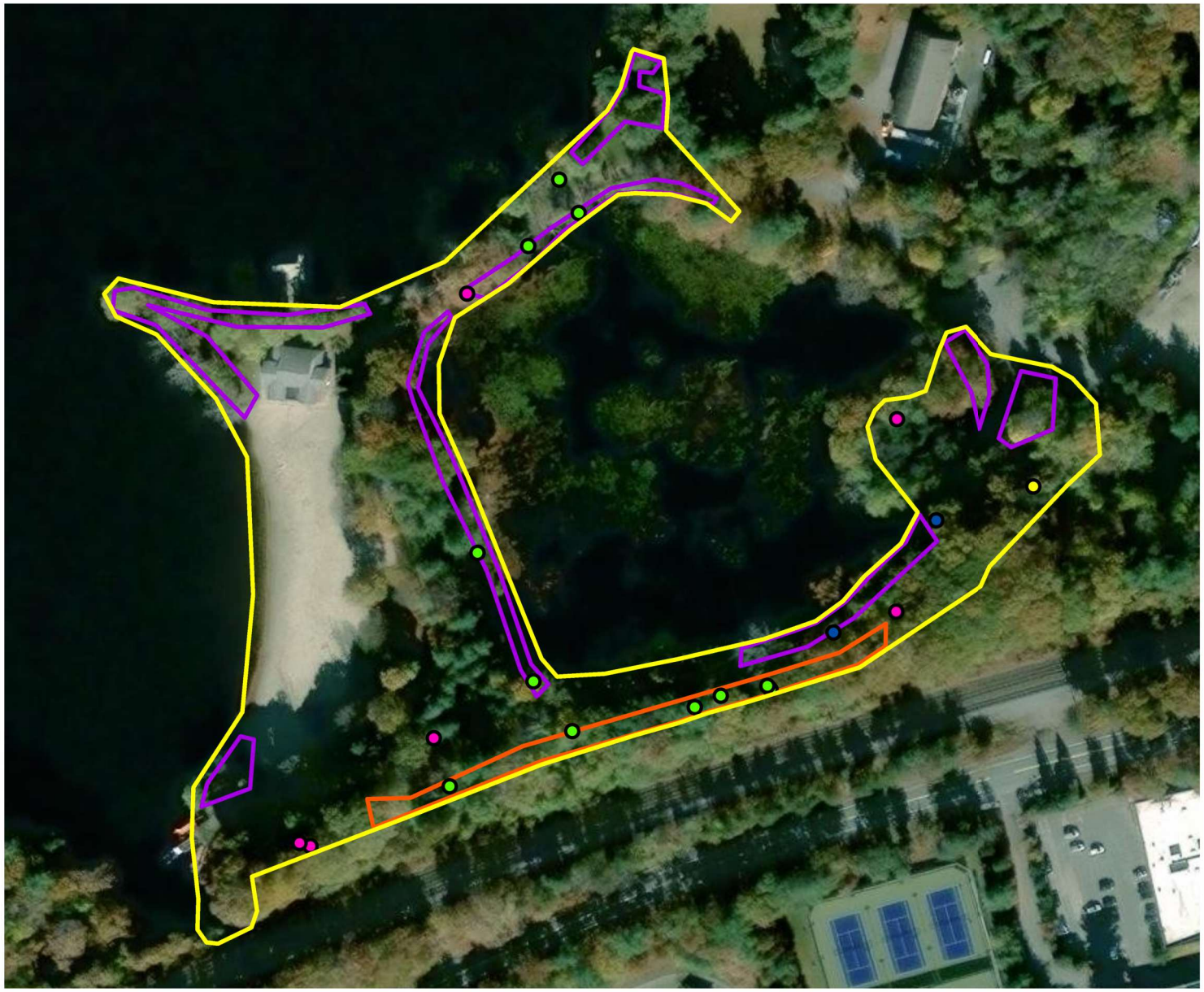
Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Maxar, Microsoft, NHESP, MassGIS

FIGURE 3
Morses Pond
Beach & Bathhouse Improvements
Wellesley, MA

Environmental Receptors Map

Weston & Sampson



Legend

- Evaluation Area
- Standing Dead Tree
- Rock Pile
- Burrow
- Bat House
- Dense Herbaceous Cover
- Large and Small Woody Debris

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Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Maxar

FIGURE 4

Morses Pond
Beach & Bathhouse Improvements
Wellesley, MA

Wildlife Habitat Evaluation

Weston & Sampson

Legend

- Evaluation Area
- Tree of Heaven
- Purple Loosestrife
- Border Privet
- Norway Maple
- Multiflora Rose
- Japanese Knotweed
- Morrow's Honeysuckle
- Glossy Buckthorn
- Common Buckthorn
- Burning Bush
- Black Locust
- Asian Bittersweet
- Japanese Barberry
- Japanese Knotweed Cluster
- Purple Loosestrife Cluster
- Norway Maple Cluster
- Garlic Mustard Cluster
- Common and Glossy Buckthorn Cluster
- Glossy Buckthorn Cluster
- Multiflora Rose Cluster
- Japanese Honeysuckle Cluster
- Common Buckthorn Cluster
- Asian Bittersweet Cluster

N
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150 75 0 150
Feet

Data Source: Office of Geographic and Environmental Information (MassGIS), Maxar

FIGURE 5
Morses Pond
Beach & Bathhouse Improvements
Wellesley, MA

Invasive Species

Weston & Sampson

APPENDIX C
PHOTOGRAPHS

Photo 1: View of Morses Pond Beach.

Photo 2: View of grass and pavilions adjacent to the sand beach area.

Photo 3: View of paved access path connecting the southern access road to the beach area and existing bathhouse.

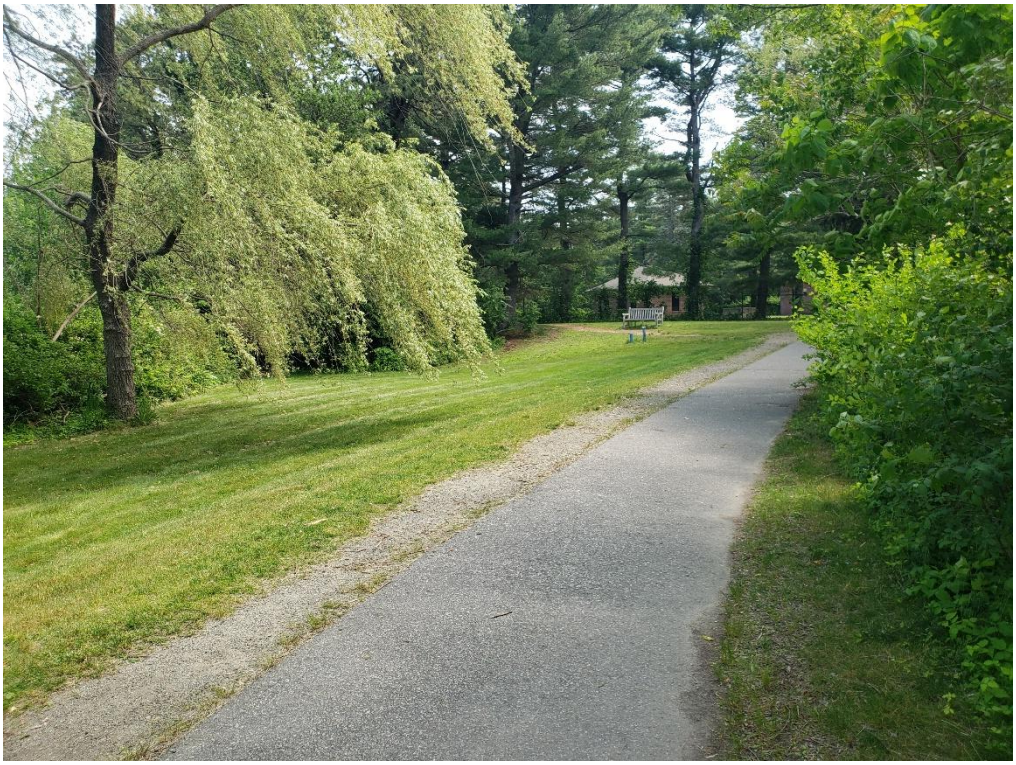


Photo 4: View of paved northern access path and surrounding mowed grass, trees, and shrubs.

Photo 5: View of paved northern access path and surrounding mowed grass, trees, and shrubs.

Photo 6: View of an observed small mammal burrow.

Photo 7: View of an observed small mammal burrow.

Photo 8: View of the observed rock pile.

Photo 9: View of woody debris observed between the southern access road and commuter rail tracks.

Photo 10: View of woody debris observed between the southern access road and commuter rail tracks.

Photo 11: View of woody debris observed between the southern access road and commuter rail tracks.

Photo 12: View of woody debris observed between the southern access road and commuter rail tracks.

Photo 13: View of woody debris and overhanging vegetation along the bank of Ice House Pond.

Photo 14: View of woody debris and overhanging vegetation along the bank of Ice House Pond.

Photo 15: View of a standing dead tree on the bank of Morses Pond.

Photo 16: View of a standing dead tree between the southern access road and commuter rail tracks.

Photo 17: View of a standing dead tree with cavities on the bank of Ice House Pond.

Photo 18: View of a band of dense herbaceous vegetation along the bank of Morses Pond.

Photo 19: View of a band of dense herbaceous vegetation along the bank of Ice House Pond.

Photo 20: View of a patch of dense herbaceous vegetation.

Photo 21: View of a patch of dense herbaceous vegetation along the bank of Morses Pond.

APPENDIX D
IPaC SPECIES LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: 09/09/2025 18:35:15 UTC
Project Code: 2025-0146988
Project Name: Morses Pond Beach & Bathhouse Improvements

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (**Updated 4/12/2023**) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2025-0146988
Project Name: Morses Pond Beach & Bathhouse Improvements
Project Type: Recreation - Maintenance / Modification
Project Description: Park Improvements
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.2965878,-71.31642597587813,14z

Counties: Norfolk County, Massachusetts

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency:	Weston & Sampson
Name:	Gregory Russo
Address:	427 Main Street
Address Line 2:	Suite 400
City:	Worcester
State:	MA
Zip:	01608
Email	russo.gregory@wseinc.com
Phone:	7742983095

APPENDIX L

Morses Pond Bathhouse Asbestos Assessment

Asbestos Identification Laboratory

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentifcationlab.com
Email: mikemanning@asbestosidentificationlab.com

NVLAP Testing Lab Code: 200919-0

Batch: 251204061

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Bathhouse Building

99 Morses Pond Access Rd., Wellesley, MA

Method: PLM Bulk, EPA 600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is PLM Bulk. The information and analysis contained in this report have been generated using the EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or prodcuts that contain more than 1% of any kind or combination of asbestos are considered as asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

The EPA recommends you should assume vermiculite contains asbestos and not to disturb it. Airborne asbestos fibers present a health risk through inhalation, so the first step is to not disturb the material, which could release fibers into the air. If you disturb the insulation, you may inhale some asbestos fibers. The degree of health risk depends on how much and how often this occurred. If you choose to remove the vermiculite insulation, this work should be done by a trained and accredited asbestos abatement contractor that is separate and independent from the company that performed the assessment of the vermiculite insulation to avoid any conflict of interest. https://www.epa.gov/asbestos/my-attic-has-vermiculite-insulation-it-am-i-risk-should-i-take-it-out | US EPA.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volcume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director
781-932-9600

Sampled: December 4, 2025 **Received:** December 4, 2025 **Analyzed:** 12/04/2025 **Report Date:** December 5, 2025

Analyzed by:
Cassandra Bradley

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Bathhouse Building

99 Morses Pond Access Rd., Wellesley, MA

Method: PLM Bulk, EPA 600/R-93/116

Field ID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 251204061-001	Shingle	Roof	Black	Fiberglass 20 Non-Fibrous 80	None Detected
2 251204061-002	Paper Underlayment	Under Shingle	Black	Cellulose 65 Non-Fibrous 35	None Detected
3 251204061-003	Shingle	Roof	Black	Fiberglass 20 Non-Fibrous 80	None Detected
4 251204061-004	Paper Underlayment	Under Shingle	Black	Cellulose 65 Non-Fibrous 35	None Detected
5 251204061-005	Shingle	Roof	Black	Fiberglass 20 Non-Fibrous 80	None Detected
6 251204061-006	Paper Underlayment	Under Shingle	Black	Cellulose 65 Non-Fibrous 35	None Detected
7 251204061-007	Shingle	Roof	Black	Fiberglass 20 Non-Fibrous 80	None Detected
8 251204061-008	Paper Underlayment	Under Shingle	Black	Cellulose 65 Non-Fibrous 35	None Detected
9 251204061-009	Roof Core	Rubber Roof	Multi	Fiberglass 5 Cellulose 50 Non-Fibrous 45	None Detected

Sampled: December 4, 2025 **Received:** December 4, 2025 **Analyzed:** 12/04/2025 **Report Date:** December 5, 2025

Analyzed by:
Cassandra Bradley

Batch: 251204061

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Wellesley, MA Building Name Bathhouse Building 99 Morses Pond Access Road

Sample	Description of Material	Sample Location
1	shingle	roof
2	paper underlayment	under shingle
3	shingle	roof
4	paper underlayment	under shingle
5	shingle	roof
6	paper underlayment	under shingle
7	shingle	roof
8	paper underlayment	under shingle
9	roof core	rubber roof

Reported By: Sydney Towne Date: 12/2/25

Received By: [signature] Date: 12/4/25

Due Date: 24-Hours

PLM

OrderID: 132507135

132507135

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Wellesley, MA Building Name Morses Pond Bathhouse

Sample	Description of Material	Sample Location
1	Black sink coating	First Aid Room
2	1 1	1 1
3	Transite panel	First Aid Room
4	1 1	water meter Room
5	Hard Joint Pipe Insulation	First Aid closet
6	1 1	mens Bath room
7	1 1	water meter Room

Reported By: Jason Becote Date: 12-3-25 Due Date: 24-Hours

Received By: REC'D EMSL-BOSTON DEC 04 2025 Date: SM 830

drop box

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132507135
Customer ID:	UEC63
Customer PO:	
Project ID:	

Attention:	Ammar Dieb	**Phone:**	(617) 984-9772
	Universal Environmental Consultants	**Fax:**	(508) 628-5488
	12 Brewster Road	**Received Date:**	12/04/2025 8:30 AM
	Framingham, MA 01702	**Analysis Date:**	12/04/2025
		Collected Date:	12/03/2025
Project:	Morses Pond Bathhouse; Wellesley, MA		

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1 *132507135-0001*	First Aid Room - Black Sink Coating	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	**3% Chrysotile**
2 *132507135-0002*	First Aid Room - Black Sink Coating	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	**3% Chrysotile**
3 *132507135-0003*	First Aid Room - Transite Panel	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	**20% Chrysotile**
4 *132507135-0004*	Water Meter Room - Transite Panel	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	**20% Chrysotile**
5 *132507135-0005*	First Aid Room - Hard Joint Pipe Insulation	Gray Fibrous Homogeneous	15% Min. Wool	82% Non-fibrous (Other)	**3% Chrysotile**
6 *132507135-0006*	Mens Bathroom - Hard Joint Pipe Insulation	Gray Fibrous Homogeneous	15% Min. Wool	82% Non-fibrous (Other)	**3% Chrysotile**
7 *132507135-0007*	Water Meter Room - Hard Joint Pipe Insulation	Gray Fibrous Homogeneous	15% Min. Wool	81% Non-fibrous (Other)	**4% Chrysotile**

Analyst(s)

Kevin McKenzie (7)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 “Interim Method”) but augmented with procedures outlined in the 1993 (”final”) version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI PLM00139, VT AL998919, ME LB-0039

Initial report from: 12/04/2025 15:36:11

APPENDIX M

Building Location Analysis

MORSES POND BEACH & BATHHOUSE IMPROVEMENTS

SUPPLEMENTARY FEASIBILITY STUDY
BUILDING LOCATION ANALYSIS

MARYANN THOMPSON ARCHITECTS
www.maryannthompson.com

Weston & Sampson SM

TABLE OF CONTENTS

1 Introduction 3

2 Existing Site Conditions 10

3 Current Master Plan Analysis 21

4 Modified Project Criteria 29

5 Alternative A: Modified South Side Building Design 33

6 Alternative B: New North Side Building Design 41

7 Alternates Comparison Summaries 49

INTRODUCTION

PROJECT BACKGROUND

At the direction of ATM 2024, the NRC created the Morses Pond Beach Advisory Committee (MoPoBAC) to address both the concerns raised by the NRC in January 2024, and to review the overall project for potential issues prior to the Design Phase.

The Committee held site visits and conducted 6 meetings over the Summer of 2024. In August 2024, the MOPOBAC produced a Recommendations Report, which was then accepted by the NRC.

The Committee's findings included recommendations regarding:

- Program changes,
- Scope/cost changes,
- Required site investigations, and
- Environmental/permitting/mitigation concerns

PROJECT TIMELINE

January 18, 2024	Rec Commission presents feasibility study to NRC
January 31, 2024	NRC responds to feasibility study with concerns to be addressed
February 2, 2024	NRC votes to support request from CPC for design funds, contingent on issues being addressed in Design Phase.
March 2024	Town Meeting approves $925K CPC appropriation for design
May 9, 2024	NRC appoints Morses Pond Beach Advisory Committee. Site walk and 6 meetings between May and December 2024.
August 2024	MOPO Beach Advisory Committee finalizes recommendations
October 2024	NRC votes to carry capital request as Proponent and appoints FMD to manage a supplemental feasibility study.
December 2024	CPC votes to approve $168k request to NRC for supplemental study
January 2025	PBC advises Designphase funds (previously appropriated) not available to address Feasibilityphase issues.
March 2025	Advisory Committee votes 12-0 in support of supplemental study

PROJECT TIMELINE

April 1, 2025	Annual Town Meeting
May 21, 2025	Kick- Off Meeting & Site Walk
June 6, 2025	MoPo Beach Advisory Committee Meeting #1
July 29, 2025	MoPo Beach Advisory Committee Meeting #2
August 5, 2025	Invasive species and wildlife assessment performed by W&S
August 6, 2025	Tree inventory performed by Hartney Greymont
August 21, 2025	Phase 1 Environmental Site Assessment field observation
August 21, 2025	Test pits performed by the Town and observed by W&S for stormwater, environmental, and geotechnical analysis
September 3, 2025	Walden Pond Site Visit
September 15, 2025	MoPo Beach Advisory Committee Meeting #3
September 29, 2025-TBD	MoPo Beach Advisory Committee Meeting #4
October 9, 2025	NRC reviews recommendations from MoPoBAC
October 23, 2025	NRC votes on MoPoBAC recommendations

The public is encouraged to provide input at any and all of these meetings

PROJECT GOALS AND OBJECTIVES

The site is very much loved as it is, so a master plan tenet should include preserving and enhancing all that is great.

The bathhouse has outlived its practical and functional life and given the extent of repairs and upgrades required in order to bring the building into full code compliance and functionality, it is more cost effective and practical to demolish the existing building and create a new building.

The design shall improve universal access for site amenities, walkways and paths.

Designs should be simple and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.

Through the establishment of meadows and native landscape plantings, wildlife habitat can be improved.

New building enhancements should be attractive, low-intensity, and supportive of neighborhood and town-wide use during the summer swimming season.

Improvements to Morses Pond Beach will be designed in a cost-effective and sustainable manner.

MoPoBAC GOAL AND MEMBERSHIP

“Take a collaborative approach amongst all stakeholders to develop an ADA-compliant outcome that meets the programmatic needs for Recreation, environmental impact needs for NRC, operational needs for Recreation staff and customer experience needs for patrons and the Wellesley community at large, while at the same time enhancing the overall natural and aesthetic qualities of the site with a design that is simple, safety oriented and sustainable, and in keeping with the inherent historical, environmental, cultural, and social site character.”

The MoPoBAC includes representation from NRC, Recreation, Select Board, Community Preservation Committee and Citizens.

Committee:

- Jay McHale, Chair
- Tripp Sheehan, ViceChair
- Tom Ulfelder, Select Board
- Stephen Murphy, Community Preservation Committee
- Mark Wolfson, Recreation Commission
- Michelle Jacobs, Precinct B
- Maura Renzella, Youth Commission and Precinct B
- Staff support from NRC, Recreation, DPW, and FMD

SUPPLEMENTARY FEASIBILITY STUDY TASK SUMMARY

MAY 2025
Study Kickoff

TASK 1: Evaluate Site
Existing Conditions Plan and Report Analysis, Permitting Offsets

TASK 2: Analyze MoPoBAC / NRC Issues Raised
Current Master Plan Analysis

TASK 3: Establish Modified Project Criteria
Operations and Programming Document
MoPoBAC Meeting #1 (incl. Citizen Speak)

TASK 4: Test New Criteria on Site in Two Locations
Modified South Side Building Design (Alt A) and New North Side Building Design (Alt B)

TASK 5: MoPoBAC Preliminary Review of Building Location Analysis / Data and Feedback
MoPoBAC Meeting #2 (incl. Citizen Speak)

TASK 6: Evaluate Soil Conditions and Preliminary Wetlands Discussions

- *Grading analysis to inform extent of ADA/MAAB impact and overall site disturbance*
- *Stormwater test pits to understand infiltration and loading / geotechnical capacity of the soil, depth of groundwater, and to evaluate the potential presence of oil and/or hazardous materials*
- *Tree inventory and health assessment*
- *Invasive vegetation inventory and wildlife assessment*

Task 7: MoPoBAC Reviews and Recommends Building Location to NRC *MoPoBAC Meeting #3 (incl. Citizen Speak)*

WE ARE HERE!

Task 8: Finalize Project Scope, Conceptual Building Design, Project Budget and Schedule for the PBC

Task 9: Public Presentation

Task 10: Complete Suppl. Feasibility Report

EXISTING SITE CONDITIONS

Photo of the Existing Bathhouse, July 2019

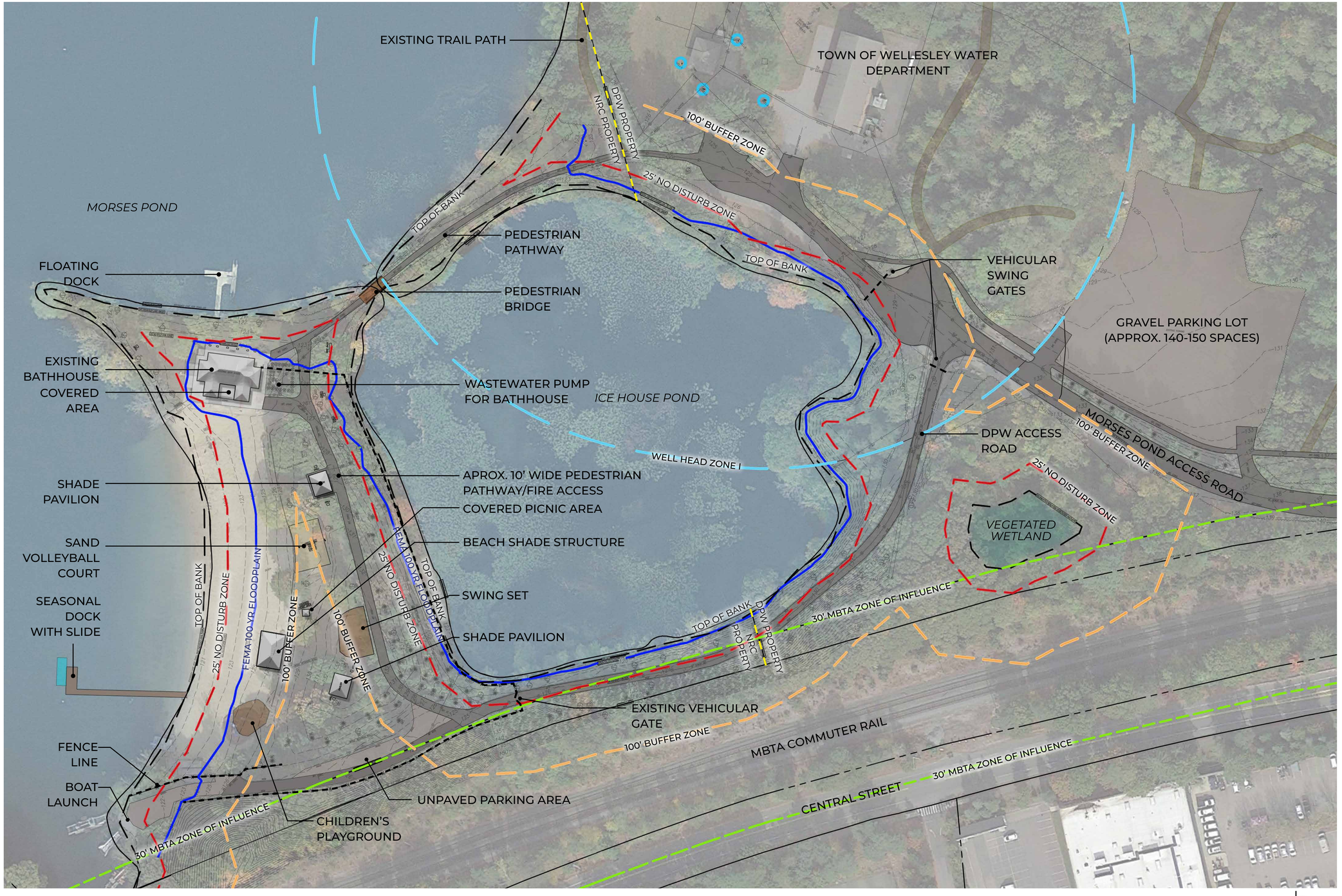
EXISTING CONDITIONS PLAN: **SITE HISTORY AS A TOWN BEACH**

EXISTING CONDITIONS PLAN: **BUILDING AND AMENITIES INVENTORY**

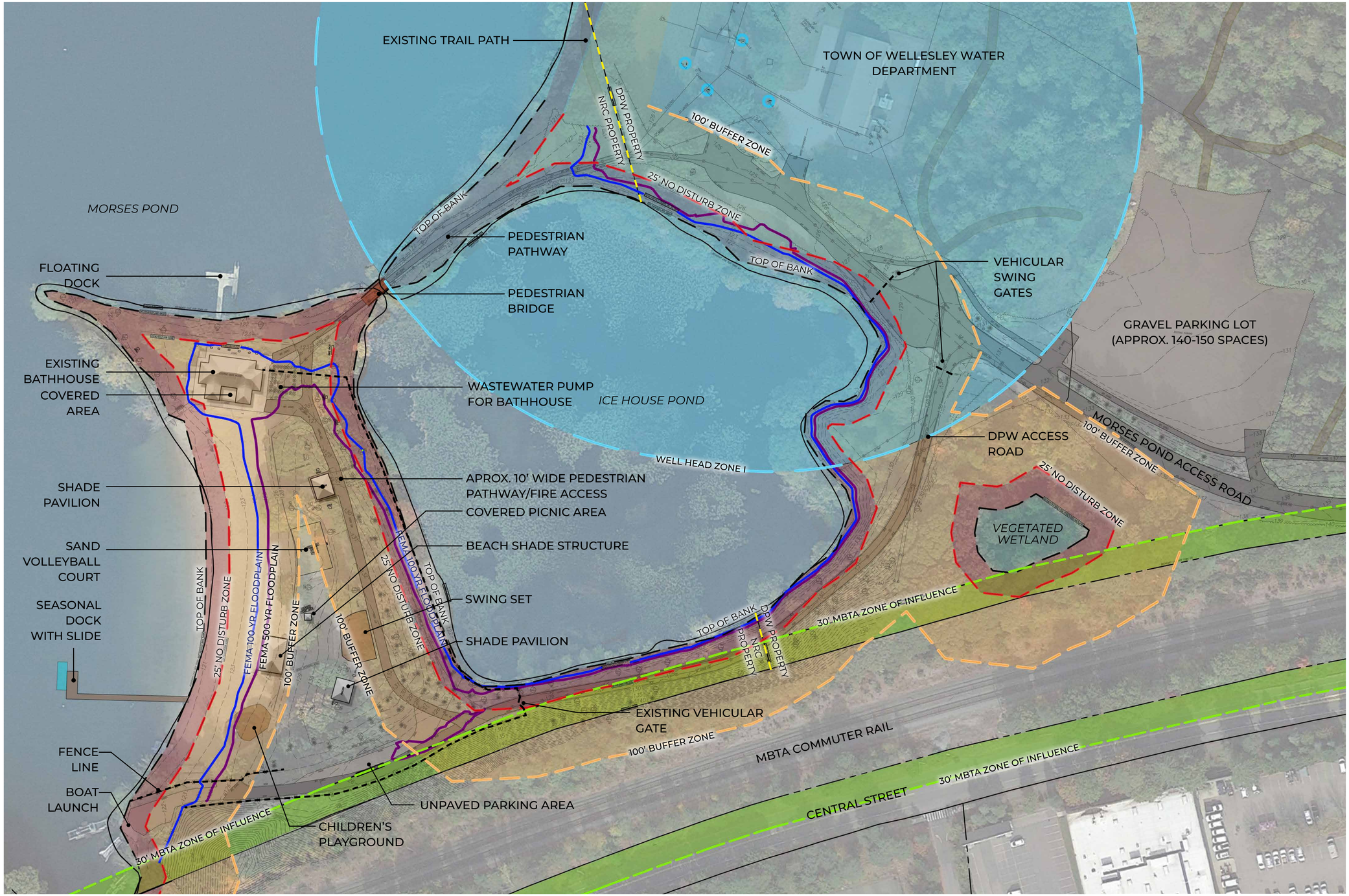
TASK 1

Evaluate Site

Existing Conditions Plan and Report Analysis



EXISTING CONDITIONS PLAN: **PERMITTING OFFSETS**

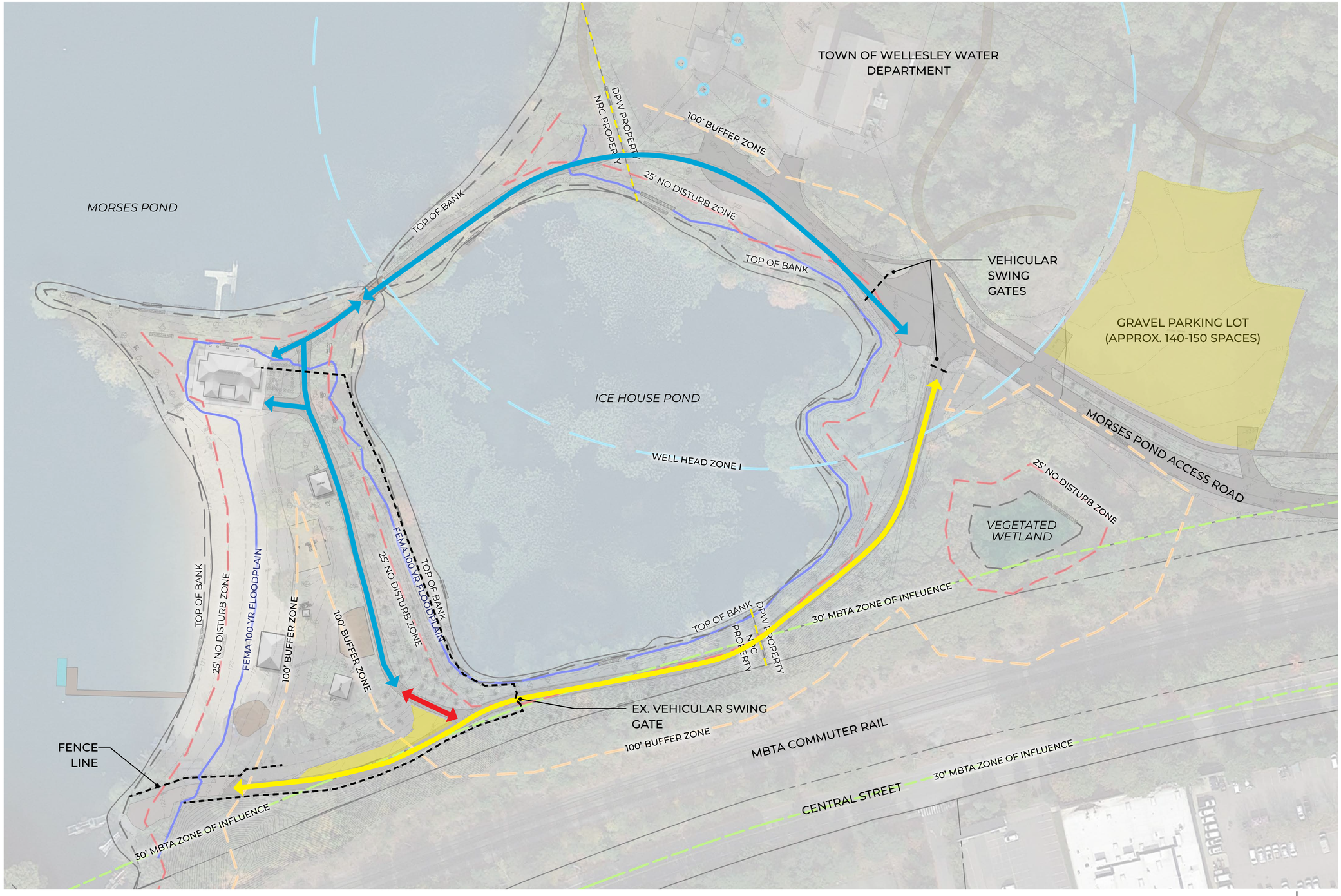


0 50 100 150

SCALE 1" = 50'-0"

PERMIT / REGS.	KEY OUTCOMES
Zone I Wellhead Zone	**Avoid Work in zone.** No new land uses are permitted unless they are for water supply or shown to have no significant impact. Occasional parking may be allowable with precautions.
MBTA Zone of Influence	**Avoid Work in Zone.** Work within 30' of MBTA property requires a license and extensive coordination with MBTA.
Wetlands	**Local Notice of Intent (NOI) for work in the Bordering Land Subject to Flooding (BLSF).** Required under WPA and Wellesley Wetlands Bylaw for work in the BLSF and buffer zones. • Compensatory flood storage is required if fill occurs below **100 -year FEMA flood elevation** (124.2' NAVD88). Must match floodwater displacement volume. • **25-foot No Disturb Zone** must remain intact. • Work in 1**00-foot buffer zone** must preserve habitat; tree removal requires native species replacement or mitigation plan.
Article 97 Land	**No Change In Use.** Project must maintain recreational use. Continued use as a beach is assumed not to require new Article 97 legislation unless advised otherwise.
MA Architectural Access Board (AAB) Parking Requirements	**No Onsite Parking Required and Building Location not Restricted.** No requirement for parking within 200' or drop off with 100' of buildings applies.
500-year FEMA flood elevation	**Potential Building Construction Consideration.** For climate change / resiliency consideration (0.2 chance of flooding annually)

EXISTING CONDITIONS PLAN: **PEDESTRIAN AND VEHICULAR CIRCULATION**



LEGEND

- EX. FENCE LINE
- ACCESSIBLE PEDESTRIAN ROUTE (< 5%)
- NON-ACCESSIBLE PEDESTRIAN ROUTE (> 5%)
- VEHICULAR ROUTE

0 50 100 150

SCALE 1" = 50'-0"

EXISTING CONDITIONS PLAN: **EXISTING SIGNIFICANT TREES**

LEGEND

- **149** EX. INVENTORIED DECIDUOUS TREES - INSIDE THE 100' WETLAND BUFFER
- **66** EX. INVENTORIED EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER
- **8** EX. INVENTORIED DECIDUOUS TREES - OUTSIDE 100' WETLAND BUFFER
- **7** EX. INVENTORIED EVERGREEN TREES - OUTSIDE 100' WETLAND BUFFER

CALIPER	# OF DECIDUOUS	# OF EVERGREEN
< 6	3	0
6 - 18	107	50
> 18	47	23
TOTAL:	**157**	**73**

The tree inventory was conducted by Hartney Greymont on August 6, 2025 by a Massachusetts Certified Arborist.

0 50 100 150
SCALE 1" = 50'-0"

EXISTING CONDITIONS PLAN: **EXISTING TREE CONDITIONS**

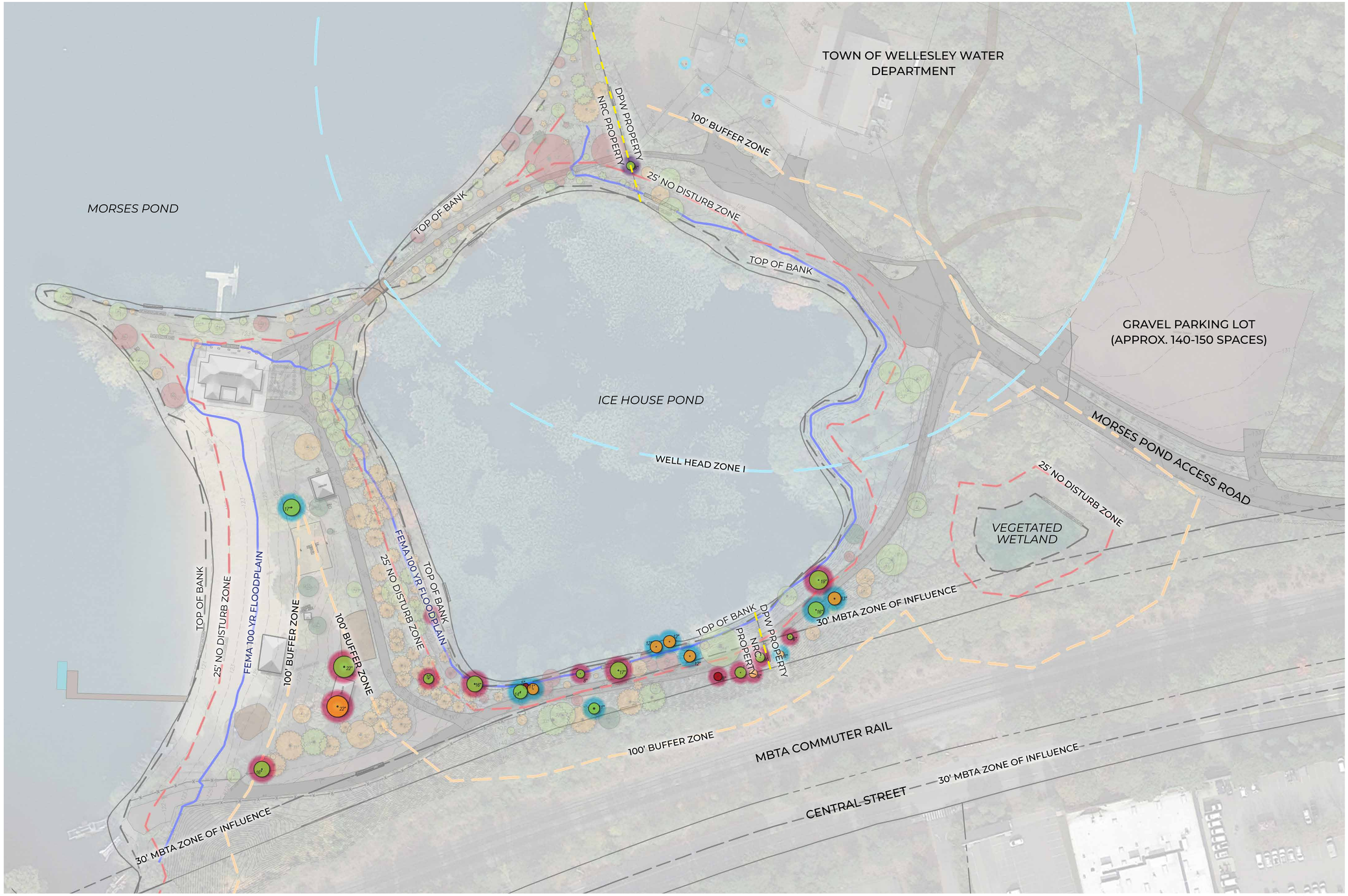
LEGEND

1	EX. EVERGREEN TREE: EXCELLENT CONDITION
13	EX. EVERGREEN TREE: GOOD CONDITION
56	EX. EVERGREEN TREE: FAIR CONDITION
3	EX. EVERGREEN TREE: POOR CONDITION
8	EX. DECIDUOUS TREE: EXCELLENT CONDITION
78	EX. DECIDUOUS TREE: GOOD CONDITION
49	EX. DECIDUOUS TREE: FAIR CONDITION
22	EX. DECIDUOUS TREE: POOR CONDITION

CONDITION KEY	# OF DECIDUOUS
EXCELLENT	Tree is in excellent condition. May have unique value or be aesthetically desirable.
GOOD	Tree is desirable and in moderately good health.
FAIR	Tree may show some signs of minor health issues
POOR	Tree is unsound, high risk, unhealthy, or undesirable.

0 50 100 150
SCALE 1" = 50'-0"

EXISTING CONDITIONS PLAN: **EXISTING INVASIVE TREES**



LEGEND

INVASIVE SPECIES IDENTIFICATION

- 11 EXISTING BLACK LOCUST (BL)
- 14 EXISTING NORWAY MAPLE (NM)
- 1 EXISTING TREE OF HEAVEN (TOH)

INVASIVE TREE CONDITION

- 0 EX. TREE: EXCELLENT CONDITION
- 16 EX. TREE: GOOD CONDITION
- 8 EX. TREE: FAIR CONDITION
- 2 EX. TREE: POOR CONDITION

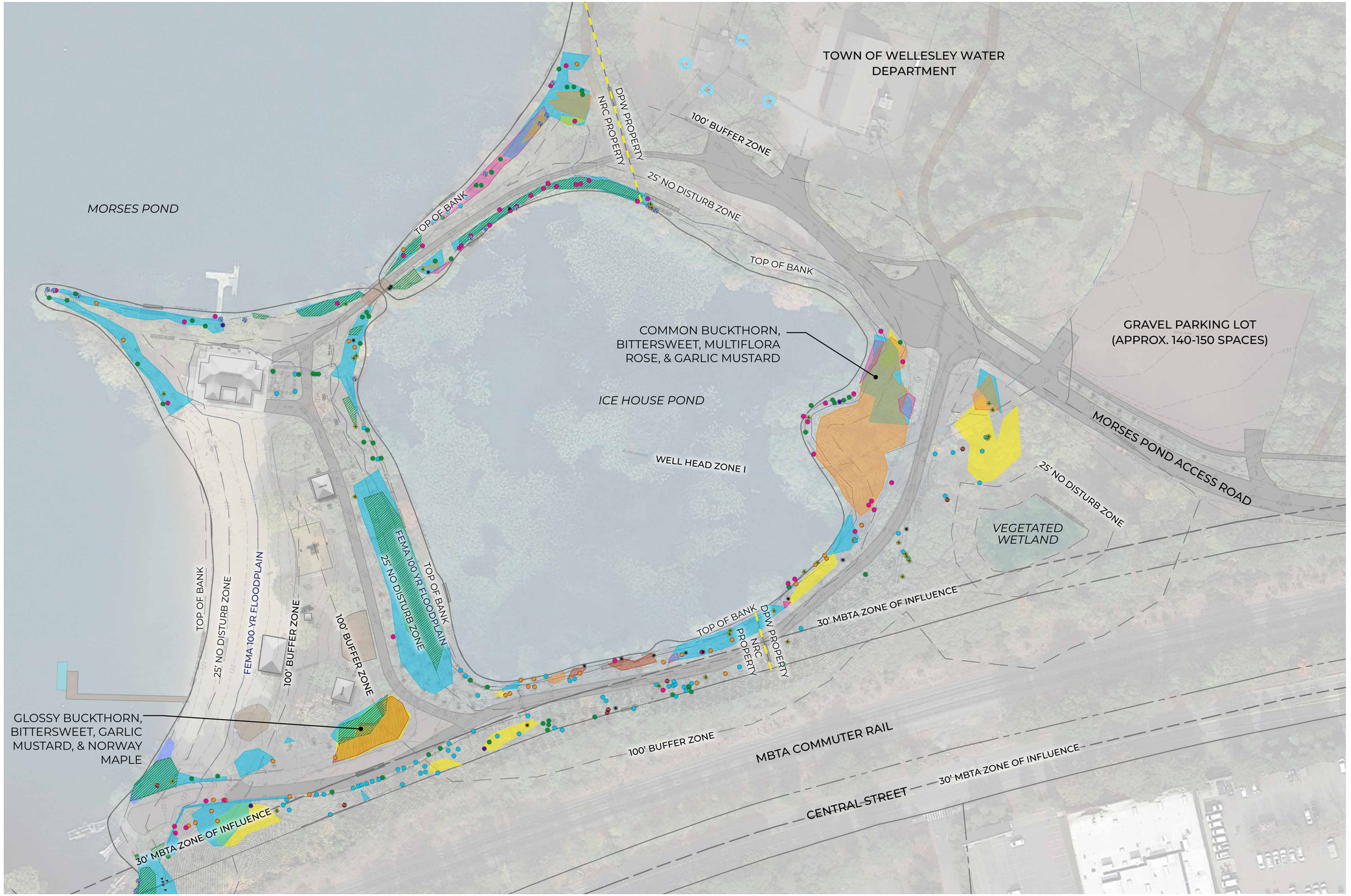
CONDITION	# OF BL	# OF NM	# OF TOH
EXCELLENT	0	0	0
GOOD	4	11	1
FAIR	6	2	0
POOR	1	1	0
TOTAL:	**11**	**14**	**1**

CONDITION KEY	# OF DECIDUOUS
EXCELLENT	Tree is in excellent condition. May have unique value or be aesthetically desirable.
GOOD	Tree is desirable and in moderately good health.
FAIR	Tree may show some signs of minor health issues
POOR	Tree is unsound, high risk, unhealthy, or undesirable.

Invasive trees were inventoried by Weston & Sampson on August 6, 2025. Additional invasive trees were identified during this effort that were located beyond the project limits and/or had a dbh of 3" or less.

0 50 100 150
SCALE 1" = 50'-0"

EXISTING CONDITIONS PLAN: **EXISTING INVASIVE PLANTS**



LEGEND

INDIVIDUAL PLANTS

- BARBERRY
- BITTERSWEET
- BURNING BUSH
- COMMON BUCKTHORN
- GLOSSY BUCKTHORN
- JAPANESE HONEYSUCKLE
- KNOTWEED
- MULTIFLORA ROSE
- PRIVET
- PURPLE LOOSESTRIFE

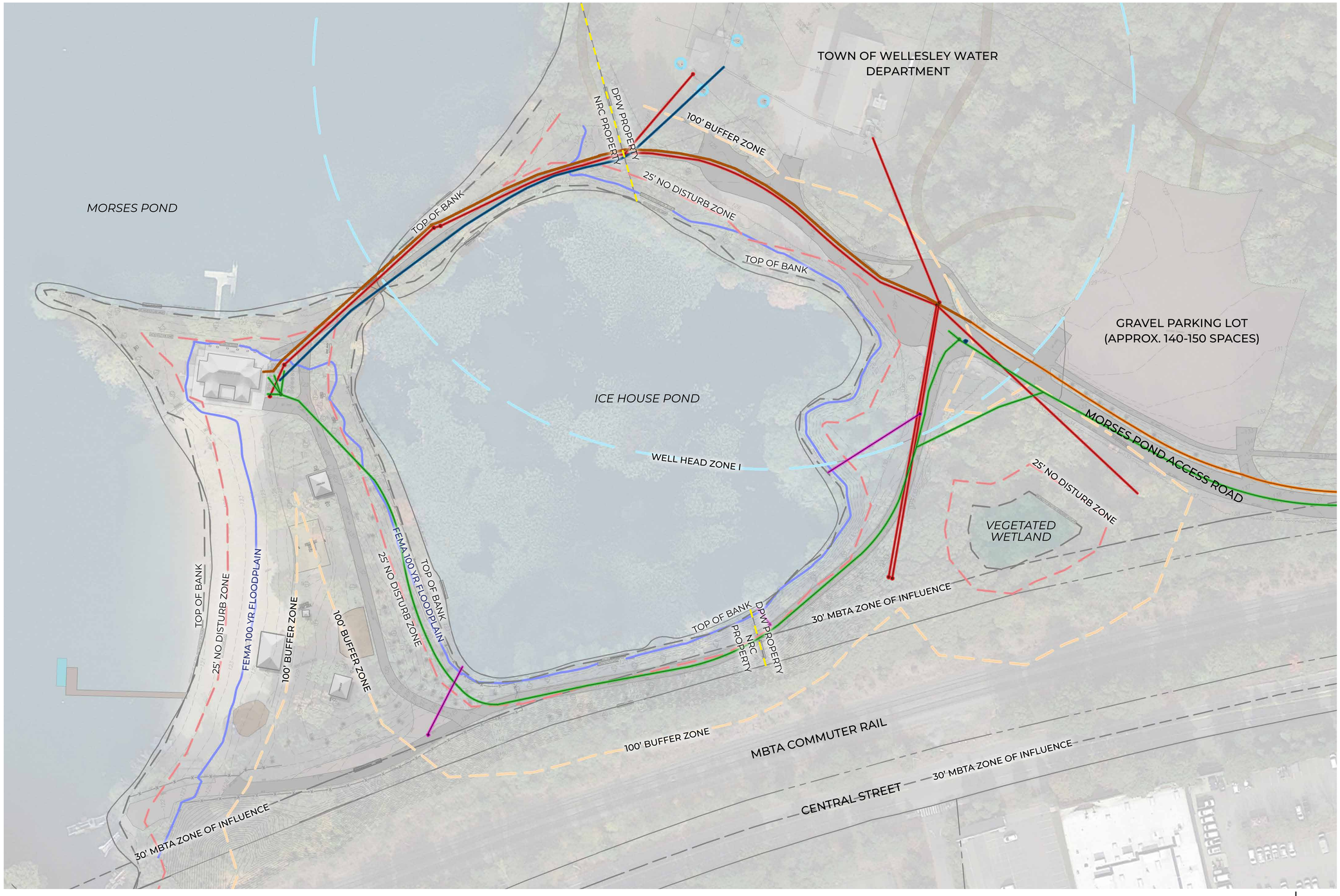
PLANT SWATHS

- BITTERSWEET
- COMMON BUCKTHORN
- GLOSSY BUCKTHORN
- GARLIC MUSTARD
- JAPANESE HONEYSUCKLE
- KNOTWEED
- MULTIFLORA ROSE
- NORWAY MAPLE
- PURPLE LOOSESTRIFE

0 50 100 150

SCALE 1" = 50'-0"

EXISTING CONDITIONS PLAN: **EXISTING UTILITIES**



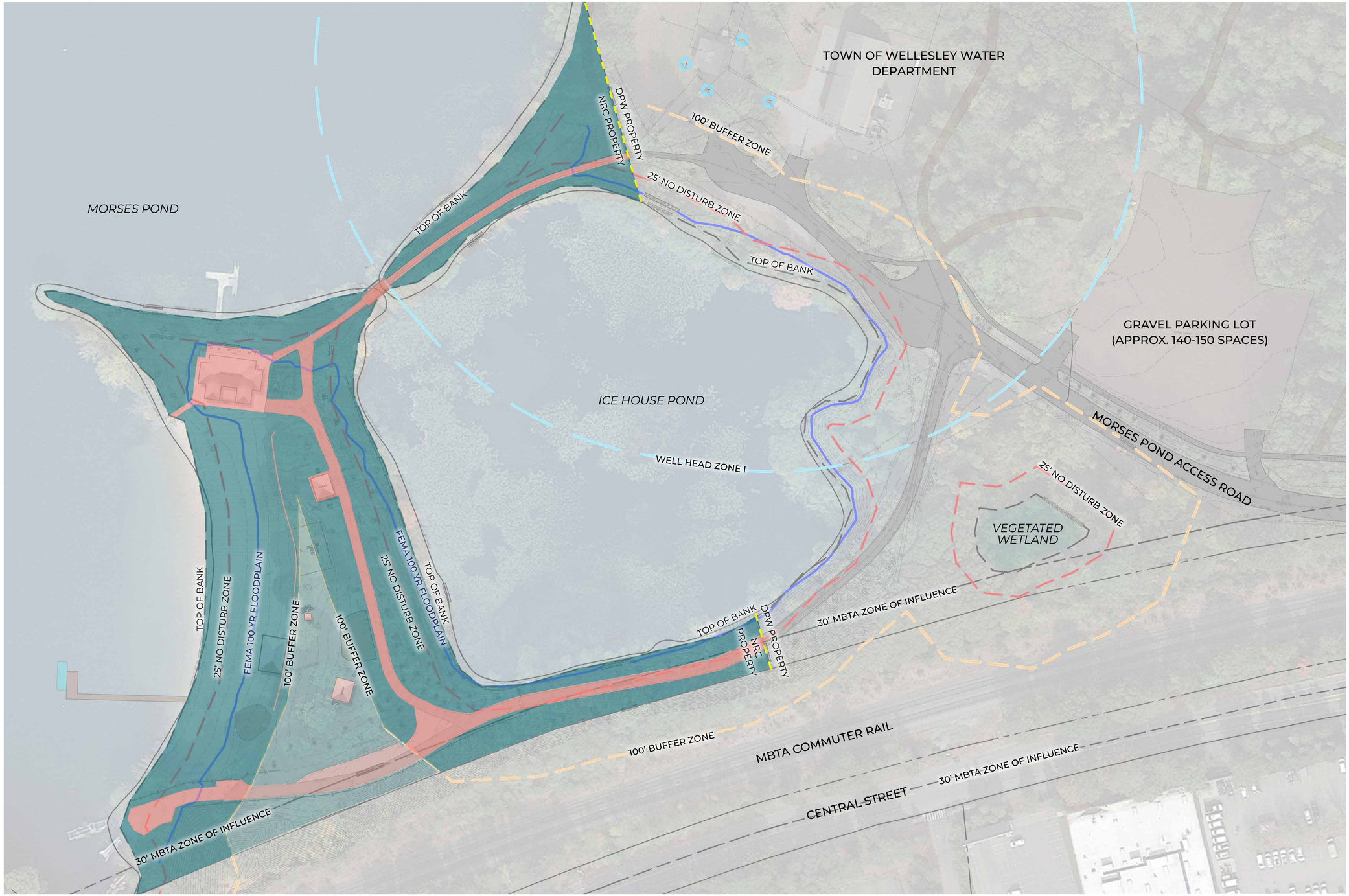
LEGEND

WATER	EX. WATER LINE
SEWER	EX. SANITARY SEWER LINE
STORM	EX. STORM DRAINAGE
ELECTRICAL	EX. ELECTRICAL CONDUIT
COMMUNICATIONS	EX. COMMUNICA-TIONS LINE
CABLE	EX. CABLE LINE FOR INTERNET

0 50 100 150

SCALE 1" = 50'-0"

EXISTING CONDITIONS PLAN: **IMPERVIOUS / PERVIOUS COVER**



LEGEND

24,074 sf	**IMPERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
4,641 sf	**IMPERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER
134,501 sf	**PERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
24,144 sf	**PERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER

0 50 100 150

SCALE 1" = 50'-0"

CURRENT MASTER PLAN ANALYSIS

Illustrative Rendering of the Current Master Plan, from 2024

CURRENT MASTER PLAN

TASK 2

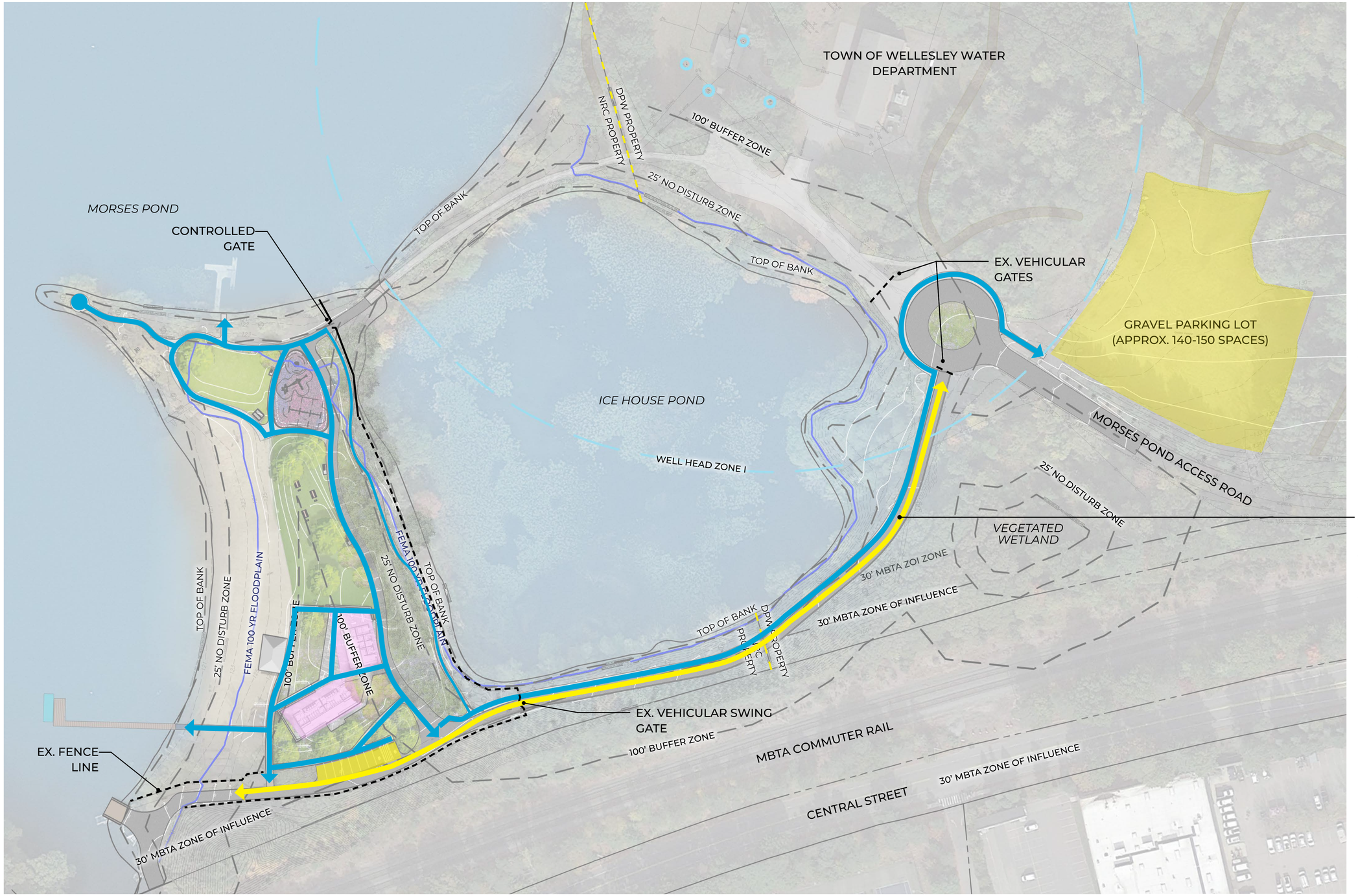
Analyze MoPoBAC / NRC Issues Raised

Current Master Plan Analysis

The Master Plan produced during the 2024 study was completed prior to the realignment of the seasonal dock location. Additionally, the boardwalk along the beach was value engineered out of the design after the study was finalized.

The Master Plan to the left reflects the new location of the seasonal dock and the removal of the previously proposed boardwalk to make up what is now referred to as the Current Master Plan. Permitting offsets have also been included on this plan.

CURRENT MASTER PLAN: **PEDESTRIAN AND VEHICULAR CIRCULATION**



LEGEND

- EX. FENCE LINE
- ACCESSIBLE PEDESTRIAN ROUTE (< 5%)
- NON-ACCESSIBLE PEDESTRIAN ROUTE (> 5%)
- VEHICULAR ROUTE
- EX. PARKING AREA
- PROPOSED ACCESSIBLE PARKING
- PR. FENCELINE

Adding sidewalk along the DPW Access Drive and milling the roadway falls within the MBTA's Zone of Influence and will require approval from the MBTA to be completed. The approval process has historically taken anywhere between 9 and 12+ months, and requires a financial obligation.

0 50 100 150

SCALE 1' = 50'-0"

CURRENT MASTER PLAN: **TREE IMPACTS**

CONDITION KEY	# OF DECIDUOUS
EXCELLENT	Tree is in excellent condition. May have unique value or be aesthetically desirable.
GOOD	Tree is desirable and in moderately good health.
FAIR	Tree may show some signs of minor health issues
POOR	Tree is unsound, high risk, unhealthy, or undesirable.

TOWN OF WELLESLEY WATER DEPARTMENT
DPW PROPERTY
NRC PROPERTY
100' BUFFER ZONE
25' NO DISTURB ZONE
TOP OF BANK
MORSES POND
ICE HOUSE POND
GRAVEL PARKING LOT (APPROX. 140-150 SPACES)
MORSES POND ACCESS ROAD
VEGETATED WETLAND
WELL HEAD ZONE I
FEMA 100 YR FLOODPLAIN
100' BUFFER ZONE
30' MBTA ZOI ZONE
30' MBTA ZONE OF INFLUENCE
MBTA COMMUTER RAIL
CENTRAL STREET

0 50 100 150
SCALE 1' = 50'-0"

LEGEND

TREES REMOVED WITH IN THE 100' BUFFER

- 0 / 1 — EX. EVERGREEN & DECIDUOUS TREES: EXCELLENT CONDITION
- 0 / 20 — EX. EVERGREEN & DECIDUOUS TREES: GOOD CONDITION
- 21 / 3 — EX. EVERGREEN & DECIDUOUS TREES: FAIR CONDITION
- 0 / 2 — EX. EVERGREEN & DECIDUOUS TREES: POOR CONDITION

TREES REMOVED OUTSIDE THE 100' BUFFER

- 0 / 1 — EX. EVERGREEN & DECIDUOUS TREES: EXCELLENT CONDITION
- 1 / 1 — EX. EVERGREEN & DECIDUOUS TREES: GOOD CONDITION
- 6 / 4 — EX. EVERGREEN & DECIDUOUS TREES: FAIR CONDITION
- 0 / 0 — EX. EVERGREEN & DECIDUOUS TREES: POOR CONDITION

INVASIVE TREE SPECIES INCLUDED IN REMOVAL WITH IN 100' BUFFER

- 1 — EX. BLACK LOCUST
- 2 — EX. NORWAY MAPLE
- 0 — EX. TREE OF HEAVEN

INVASIVE TREE SPECIES INCLUDED IN REMOVAL WITH IN 100' BUFFER

- 0 — EX. BLACK LOCUST
- 2 — EX. NORWAY MAPLE
- 0 — EX. TREE OF HEAVEN

CURRENT MASTER PLAN: **UTILITIES**

LEGEND

- WATER — EX. WATER LINE
- SEWER — EX. SANITARY SEWER LINE
- STORM — EX. STORM DRAINAGE
- ELECTRICAL — EX. ELECTRICAL CONDUIT
- COMMUNICATIONS — EX. COMMUNICA-TIONS LINE
- CABLE — EX. CABLE LINE FOR INTERNET
- WATER — PROPOSED WATER LINE
- SEWER — PROPOSDED SANITARY SEWER LINE
- ELECTRICAL — PROPOSED ELECTRICAL CONDUIT
- CABLE — PROPOSED CABLE LINE FOR INTERNET

0 50 100 150

SCALE 1' = 50'-0"

CURRENT MASTER PLAN: **IMPERVIOUS / PERVIOUS COVER**

LEGEND

28,560 sf	**IMPERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
11,280 sf	**IMPERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER
130,015 sf	**PERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
17,505 sf	**PERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER

0 50 100 150

SCALE 1" = 50'-0"

CURRENT MASTER PLAN: **DISTURBANCE**

LEGEND

87,764 sf	**DISTURBED** AREA - INSIDE 100' WETLAND BUFFER*
29,158 sf	**DISTURBED** AREA - OUTSIDE 100' WETLAND BUFFER

0 50 100 150

SCALE 1" = 50'-0"

CURRENT MASTER PLAN: **ANALYSIS SUMMARY**

	EXISTING CONDITIONS PLAN	CURRENT MASTER PLAN	NET CHANGE
BUILDING LOCATION	North side	South side	N/A
BUILDING SQUARE FOOTAGE	2,572 sf	3,191 sf	+619 sf
IMPERVIOUS AREA - INSIDE 100' WET-LAND BUFFER	24,074 sf	28,560 sf	+4,486 sf
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	130,015 sf	-4,486 sf
TOTAL IMPERVIOUS AREA	28,715 sf	39,840 sf	+11,125 sf
TOTAL PERVIOUS AREA	158,645 sf	147,520 sf	-11,125 sf
OVERALL CUT / FILL	N/A	7,050.9 cy cut / 1,201.3 cy fill	5,849.6 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	458.8 cy cut / 68 cy fill	390.9 cy net cut
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	Peninsula Lawn: 15,380 sf, Beach Lawn: 21,384 sf, Total: 36,764 sf	-5,108 sf
RELOCATED AMENITIES	N/A	N/A	N/A
PARKING	• Gravel pull off area • No ADA parking	• 7 parking spaces • 2 ADA parking spaces	+9 spaces
DECIDUOUS TREES - INSIDE THE 100' WET-LAND BUFFER	149	123	-26
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	2	-6
TOTAL DECIDUOUS TREES	157(existing)	125 (remain)	-32 (5 invasive)
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	45	-21
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	0	-7
TOTAL EVERGREEN TREES	73 (existing)	45 (remain)	-28
UTILITY IMPACTS	N/A	Additional water line & electrical conduit from the north to the southern location	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)
VEHICULAR CIRCULATION	Southern path	Southern path	N/A
PEDESTRIAN CIRCULATION	• Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end	• Beach access is through the southern bathhouse • Northern access would be gated • Full access to Ice House Pond loop path year round through fenced off secondary pond path • All paths are accessible	• 1 access point at the south end • Full access to Ice House Pond loop path only during off season • All paths are accessible
AREA OF DISTURBANCE	N/A	116,922 sf (87,764 sf inside 100' wetland buffer)	+116,922 sf
PERMITTING IMPACTS	N/A	• Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report is required (net increase in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree re-moved - 47 Native Trees Total • Zone of Influence permit required (project schedule to accomo-date review periods)	N/A

MODIFIED PROJECT CRITERIA

View of the beach,
June 2019

BUILDING PROGRAM	EX. BATHHOUSE PROGRAM (nsf)	CURRENT MASTER PLAN BATHHOUSE PROGRAM (nsf)	REVISED BATHHOUSE PROGRAM FOR NEW CRITERIA TESTING (nsf)	NET REDUCTION - CURRENT TO REVISED (nsf)	NET REDUCTION - CURRENT TO REVISED (%)	
Interior Spaces						
Public Uses	**825**	**1200**	**720**	**480**	**40%**	
Women's Bathroom	426	465	300	165	35%	6 stalls + 3 changing areas to 3 stalls + 2 changing areas
Men's Bathroom	325	465	300	165	35%	3 stalls, 3 urinals + 3 changing areas to 3 stalls/urinals + 2 changing areas
Accessible / Family Bathrooms	74	140	120	20	14%	Includes 2 separate Family toilets
Concession		130		130	100%	eliminated, vending remains
Staff Uses	**732**	**825**	**620**	**205**	**25%**	
Guardroom	206	265	250	15	6%	
Lifeguard changing rooms	242	included in the Guardroom nsf				consolidated into the Guardroom
First Aid	110	295	130	165	56%	
Office/Gatekeeper	174	165	160	5	3%	
Beach manager's office (formerly: Town)		100	80	20	20%	
Mechanical	**62**	**144**	**100**	**44**	**31%**	
Storage	**444**	**740**	**644**	**96**	**13%**	
Grossing Factor		**290.9**	**146**	**82.5**	**28%**	
TOTAL INTERIOR SPACES	**2063**	**3199.9**	**2230**	**907.5**	**28%**	
TOTAL EXTERIOR SPACES	**868**	**3450**	**2540**	**910**	**26%**	

Exterior space is considered the deck area, which includes a water fountain, rinse station, and lifeguard break area

blue = Previously proposed as conditioned spaces, TBD
* included but no associated nsf

TASK 4

Test New Criteria on Site in Two Locations

ALTERNATIVE A: **MODIFIED SOUTH SIDE BUILDING DESIGN**

Reduced square footage buildings located in the same orientation and location (south side) as the Current Master Plan

ALTERNATIVE B: **NEW NORTH SIDE BUILDING DESIGN**

Reduced square footage buildings located generally in the same location as the existing bathhouse building (north side)

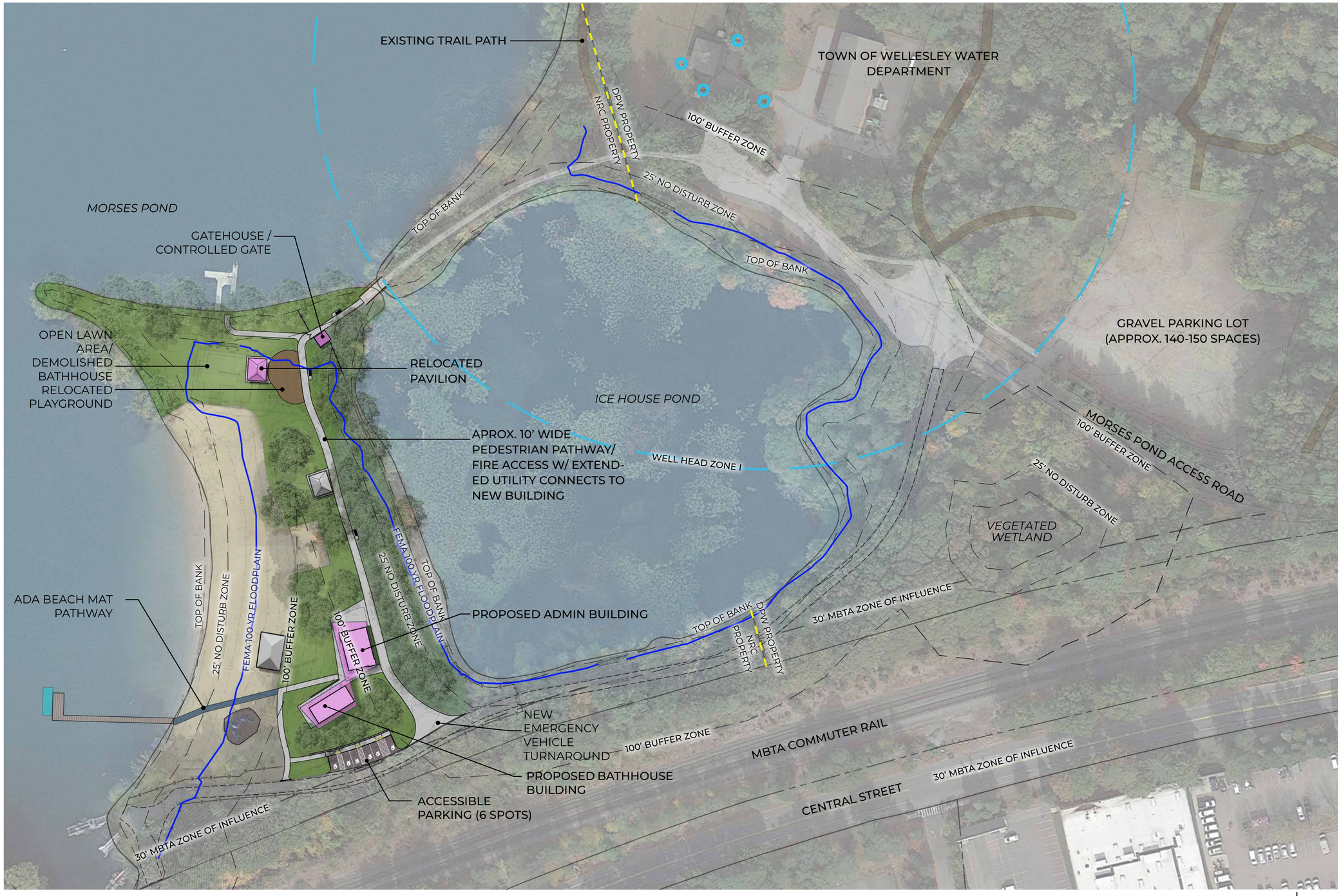
MODIFIED PROJECT CRITERIA: **BOTH ALTERNATIVE A AND B ADDRESS ISSUES RAISED**

	MoPoBAC Recs	Supplemental Study Schemes: Alternative A and B	How Recommendations are Addressed
1.	**Remove Ice House Pond footpaths**	Removed N/S path along the west side of Ice House Pond and the sidewalk along the South drive. Made pedestrian access to the Beach from the North path and ADA vehicular access (only) from South drive.	Reduces Project scope/cost and environmental impact.
2.	**Reduce impervious surface footprint of the buildings**	Reduced size of Building by having less toilets (still above Code minimun) and removed built indoor boat storage	Less impact on stormwater and preserves more natural open space.
3.	**Reduce impervious surface footprint of the uncovered patio area**	Reduced built patio area around buildings.	Less impact on stormwater and preserves more natural open space.
4.	**Minimize site grading requirements**	Alt A and B test smaller footprint options with different degrees of grading requirement.	Smaller footprint of disturbed area reduces grading requirements from the Current Master Plan.
5.1.	**Wetlands considerations and mitigation**	Alt A and B test smaller footprint options with different degrees of wetlands impact and mitigation requirements	• Native tree replacements • Wildlife assessment required • Minor compensatory storage requirements • A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer)
5.2.	**Low-impact sustainable design**	This is the Design intent and will be pursued as part of Design Phase work.	**TBD.** To be reviewed with NRC in the Design Phase.
5.3.	**Impact of the potential increase beyond current seasonal use**	No Change in Use. Replacing current functions and seasonal use (only).	No special permitting or additional studies required for extended hours or seasons.
5.4.	**Ownership, Maintenance and Budgeting**	NRC proposed NRC Ownership but leased to Recreation for maintenance	**TBD.** Decision not part of this Study and will be based on discussions between NRC/DPW and Recreation/FMD.
5.5.	**NRC engagement with Recreation**	Recreation part of MoPoBAC.	Supplemental Study benefits from more input.
6.	**Determine whether any 'Change in Use' is planned**	No Change in Use. Replacing current functions.	No special permitting or additional studies required for extended hours or seasons.
7.	**Evaluate Accommodations for Food Trucks**	MoPoBAC to determine if part of Project scope.	Lockable power hook ups will be provided at the exterior of each building.

ALTERNATIVE A:
MODIFIED SOUTH SIDE BUILDING DESIGN

View from the south side of Morses Pond Beach toward the water

ALTERNATIVE A: **MODIFIED SOUTH SIDE BUILDING DESIGN**



0 50 100 150

SCALE 1" = 50'-0"

ALTERNATIVE A: **PEDESTRIAN AND VEHICULAR CIRCULATION**

LEGEND

- EX. FENCE LINE
- ACCESSIBLE PEDESTRIAN ROUTE (< 5%)
- NON-ACCESSIBLE PEDESTRIAN ROUTE (> 5%)
- VEHICULAR ROUTE
- EX. PARKING AREA
- PROPOSED ACCESSIBLE PARKING
- PR. FENCELINE

0 50 100 150

SCALE 1" = 50'-0"

ALTERNATIVE A: **TREE IMPACTS**

CONDITION KEY	# OF DECIDUOUS
EXCELLENT	Tree is in excellent condition. May have unique value or be aesthetically desirable.
GOOD	Tree is desirable and in moderately good health.
FAIR	Tree may show some signs of minor health issues
POOR	Tree is unsound, high risk, unhealthy, or undesirable.

EVG = EVERGREEN
DEC = DECIDUOUS

0 SCALE 1" = 50'-0" 50 100 150

LEGEND

TREES REMOVED WITH IN THE 100' BUFFER

EVG	DEC	
0	0	EX. EVERGREEN & DECIDUOUS TREES: EXCELLENT CONDITION
0	3	EX. EVERGREEN & DECIDUOUS TREES: GOOD CONDITION
2	1	EX. EVERGREEN & DECIDUOUS TREES: FAIR CONDITION
0	0	EX. EVERGREEN & DECIDUOUS TREES: POOR CONDITION
2	**4**	TOTAL

TREES REMOVED OUTSIDE THE 100' BUFFER

EVG	DEC	
0	0	EX. EVERGREEN & DECIDUOUS TREES: EXCELLENT CONDITION
0	1	EX. EVERGREEN & DECIDUOUS TREES: GOOD CONDITION
1	2	EX. EVERGREEN & DECIDUOUS TREES: FAIR CONDITION
0	0	EX. EVERGREEN & DECIDUOUS TREES: POOR CONDITION
1	**3**	TOTAL

INVASIVE TREE SPECIES INCLUDED IN REMOVAL WITH IN 100' BUFFER

0	EX. BLACK LOCUST
0	EX. NORWAY MAPLE
0	EX. TREE OF HEAVEN

INVASIVE TREE SPECIES INCLUDED IN REMOVAL WITH IN 100' BUFFER

0	EX. BLACK LOCUST
2	EX. NORWAY MAPLE
0	EX. TREE OF HEAVEN

ALTERNATIVE A: **UTILITIES**

LEGEND

WATER	EX. WATER LINE
SEWER	EX. SANITARY SEWER LINE
STORM	EX. STORM DRAINAGE
ELECTRICAL	EX. ELECTRICAL CONDUIT
COMMUNICATIONS	EX. COMMUNICA-TIONS LINE
CABLE	EX. CABLE LINE FOR INTERNET
WATER	PROPOSED WATER LINE
SEWER	PROPOSDED SANITARY SEWER LINE
ELECTRICAL	PROPOSED ELECTRICAL CONDUIT
CABLE	PROPOSED CABLE LINE FOR INTERNET

0 50 100 150

SCALE 1" = 50'-0"

ALTERNATIVE A: **IMPERVIOUS / PERVIOUS COVER**

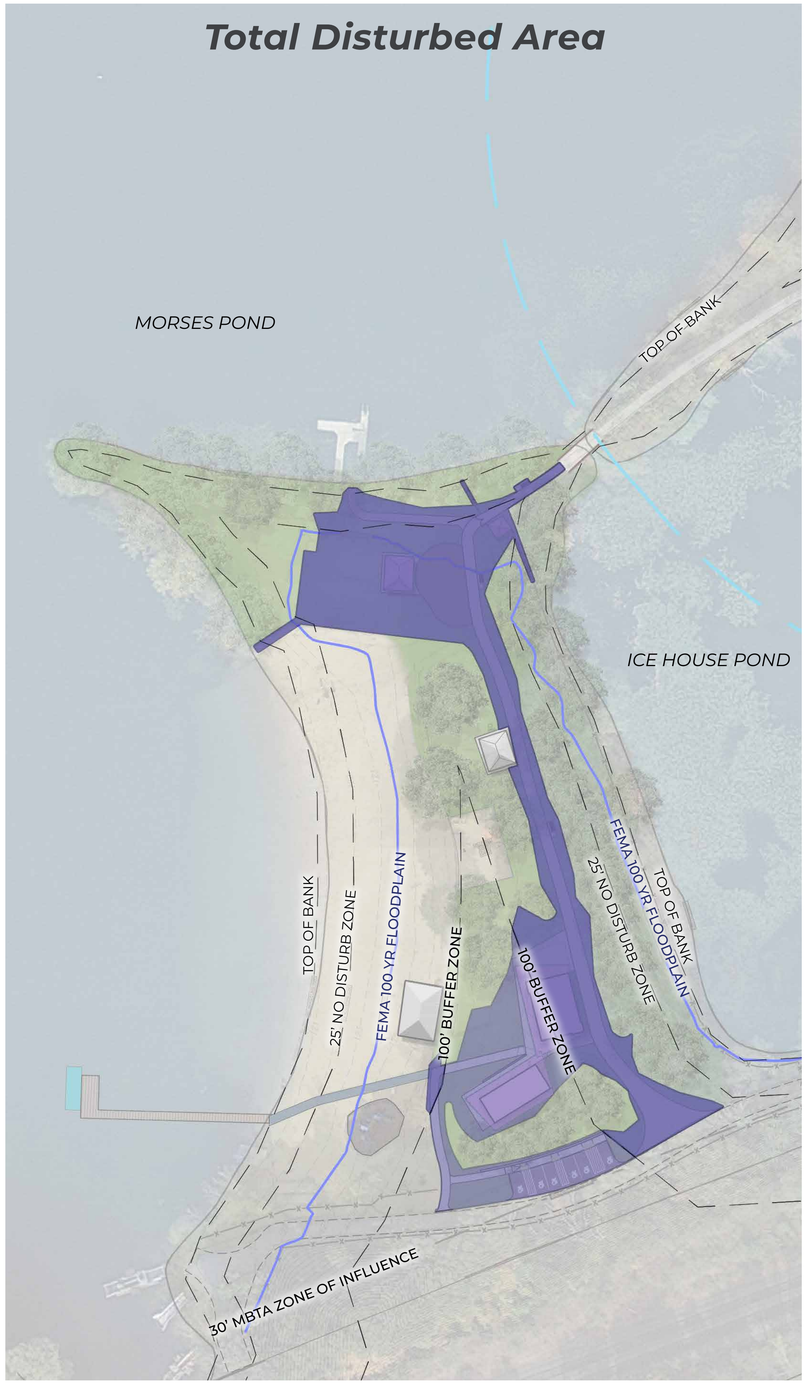
LEGEND

20,034 sf	**IMPERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
8,384 sf	**IMPERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER
138,541 sf	**PERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
20,401 sf	**PERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER

0 50 100 150
SCALE 1" = 50'-0"

ALTERNATIVE A: **OVERALL DISTURBANCE SUMMARY**

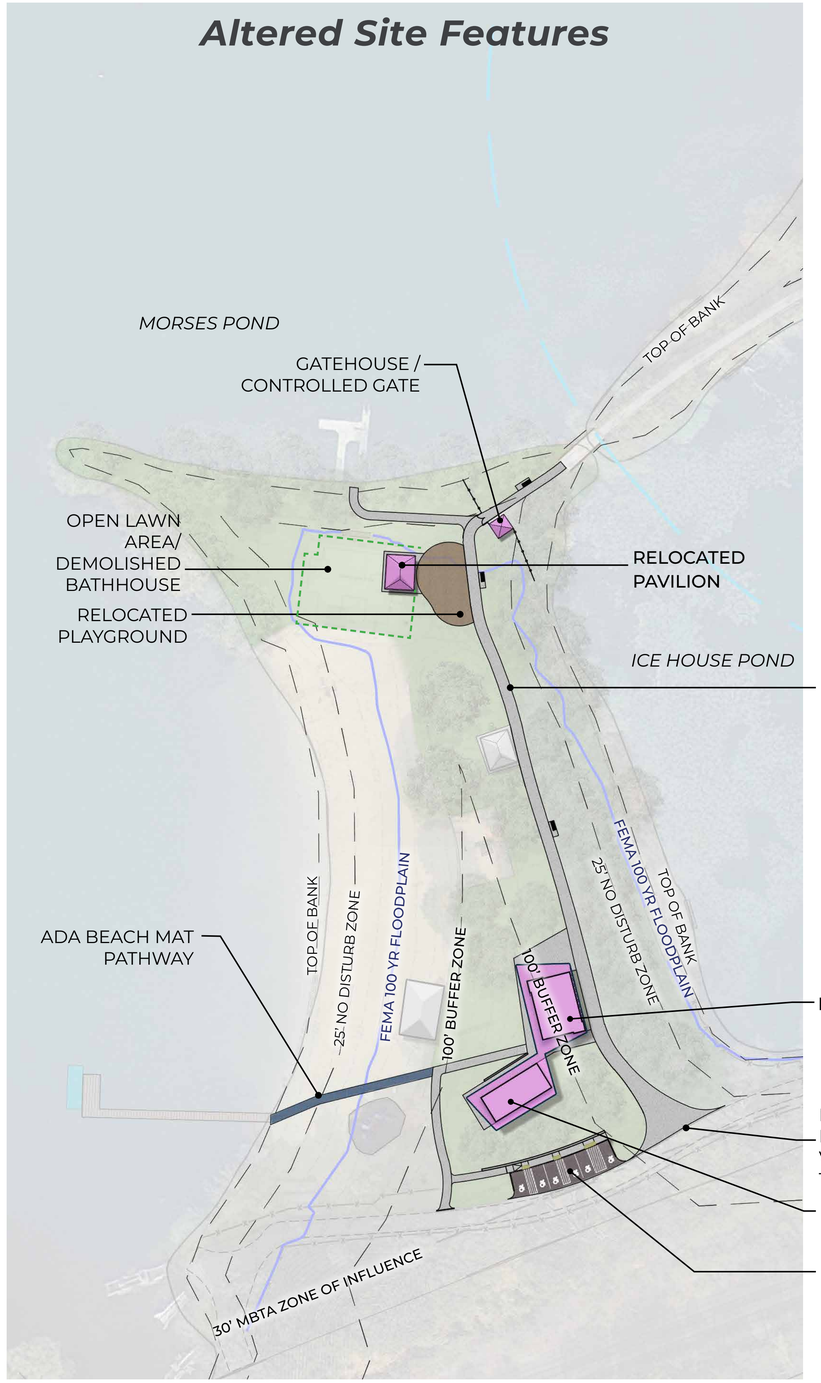
Total Disturbed Area



24,254 sf **DISTURBED** AREA - INSIDE 100' WETLAND BUFFER

10,668 sf **DISTURBED** AREA - OUTSIDE 100' WETLAND BUFFER

Altered Site Features



0 50 100 150

SCALE 1' = 50'-0"

ALTERNATIVE A: **ANALYSIS SUMMARY**

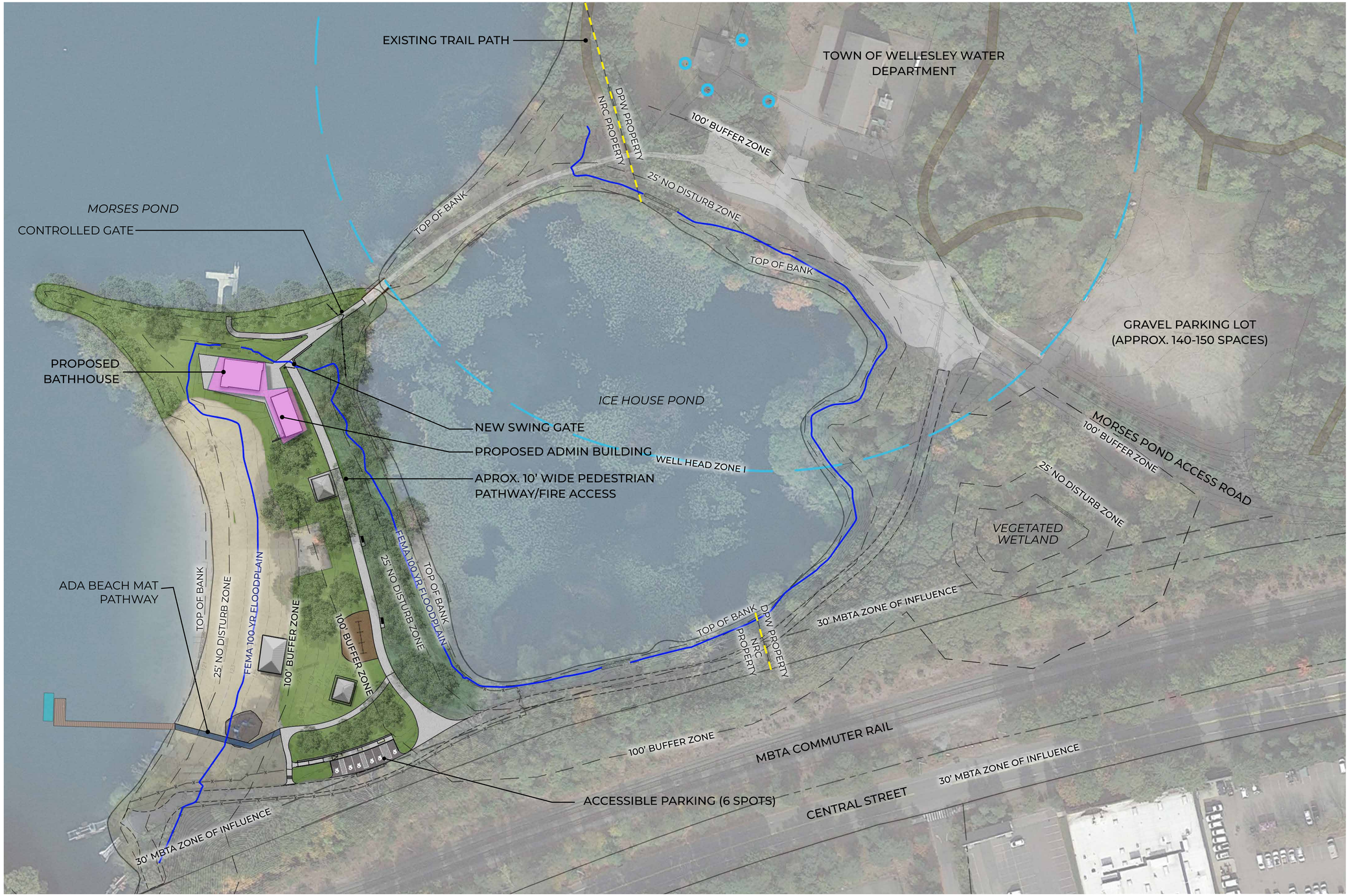
	EXISTING CONDITIONS PLAN	ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING	NET CHANGE
BUILDING LOCATION	North side	South side	N/A
BUILDING SQUARE FOOTAGE	2,572 sf	2,230 sf	-342 sf
IMPERVIOUS AREA - INSIDE 100' WET-LAND BUFFER	24,074 sf	20,034 sf	-4,040 sf
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	138,541 sf	+4,040 sf
TOTAL IMPERVIOUS AREA	28,715 sf	28,418 sf	-297 sf
TOTAL PERVIOUS AREA	158,645 sf	158,942 sf	+297 sf
OVERALL CUT / FILL	N/A	885.5 cy cut / 79.8 cy fill	805.7 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	27.8 cy cut/ 71.9 cy fill	44.1 cy net fill
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	Peninsula Lawn: 18,056 sf, Beach Lawn: 23,860 sf, Total: 41,916 sf	+44 sf
RELOCATED AMENITIES	N/A	• Swing set • Southern permanent pavilion	• Swing set • Southern permanent pavilion
PARKING	• Gravel pull off area • No ADA parking	• 6 ADA parking spaces	+6 spaces
DECIDUOUS TREES - INSIDE THE 100' WET-LAND BUFFER	149	145	-4
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	5	-3
TOTAL DECIDUOUS TREES	157(existing)	150 (remain)	-7(2 invasive)
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	64	-2
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	6	-1
TOTAL EVERGREEN TREES	73 (existing)	70 (remain)	-3
UTILITY IMPACTS	N/A	Additional water line & electrical conduit from the north to the southern location	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)
VEHICULAR CIRCULATION	Southern path	Southern path	N/A
PEDESTRIAN CIRCULATION	• Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end	• Pedestrian access is through the northern gatehouse • Southern access is monitored by the bathhouse / re-stricted by fencing and gates • Restricted access to Ice House Pond loop path during beach season • Accessible path provided from parking to the building plaza and pathway system within the beach	• Main access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site amenities
AREA OF DISTURBANCE	N/A	34,922 sf (24,254 sf inside 100' wetland buffer)	+34,922 sf
PERMITTING IMPACTS	N/A	• Wildlife assessment is required (greater than 5,000 sf of alter-ation within the 100' wetland buffer) • A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree re-moved - 6 native trees total	N/A

ALTERNATIVE B:

NEW NORTH SIDE BUILDING DESIGN

View from the north side of Morses Pond Beach toward the water

ALTERNATIVE B: **NEW NORTH SIDE BUILDING DESIGN**



0 50 100 150

SCALE 1' = 50'-0"

ALTERNATIVE B: **PEDESTRIAN AND VEHICULAR CIRCULATION**

LEGEND

- EX. FENCE LINE
- ACCESSIBLE PEDESTRIAN ROUTE (< 5%)
- NON-ACCESSIBLE PEDESTRIAN ROUTE (> 5%)
- VEHICULAR ROUTE
- EX. PARKING AREA
- PROPOSED ACCESSIBLE PARKING
- PR. FENCELINE

0 50 100 150

SCALE 1' = 50'-0"

ALTERNATIVE B: **TREE IMPACTS**

CONDITION KEY	# OF DECIDUOUS
EXCELLENT	Tree is in excellent condition. May have unique value or be aesthetically desirable.
GOOD	Tree is desirable and in moderately good health.
FAIR	Tree may show some signs of minor health issues
POOR	Tree is unsound, high risk, unhealthy, or undesirable.

EVG = EVERGREEN
DEC = DECIDUOUS

LEGEND

TREES REMOVED WITH IN THE 100' BUFFER

EVG	DEC	
0	0	EX. EVERGREEN & DECIDUOUS TREES: EXCELLENT CONDITION
0	0	EX. EVERGREEN & DECIDUOUS TREES: GOOD CONDITION
0	2	EX. EVERGREEN & DECIDUOUS TREES: FAIR CONDITION
0	0	EX. EVERGREEN & DECIDUOUS TREES: POOR CONDITION
0	**2**	TOTAL

TREES REMOVED OUTSIDE THE 100' BUFFER

EVG	DEC	
0	0	EX. EVERGREEN & DECIDUOUS TREES: EXCELLENT CONDITION
0	0	EX. EVERGREEN & DECIDUOUS TREES: GOOD CONDITION
1	0	EX. EVERGREEN & DECIDUOUS TREES: FAIR CONDITION
0	0	EX. EVERGREEN & DECIDUOUS TREES: POOR CONDITION
1	**0**	TOTAL

INVASIVE TREE SPECIES INCLUDED IN REMOVAL WITH IN 100' BUFFER

0	EX. BLACK LOCUST
0	EX. NORWAY MAPLE
0	EX. TREE OF HEAVEN

INVASIVE TREE SPECIES INCLUDED IN REMOVAL WITH IN 100' BUFFER

0	EX. BLACK LOCUST
0	EX. NORWAY MAPLE
0	EX. TREE OF HEAVEN

0 50 100 150
SCALE 1" = 50'-0"

ALTERNATIVE B: **UTILITIES**

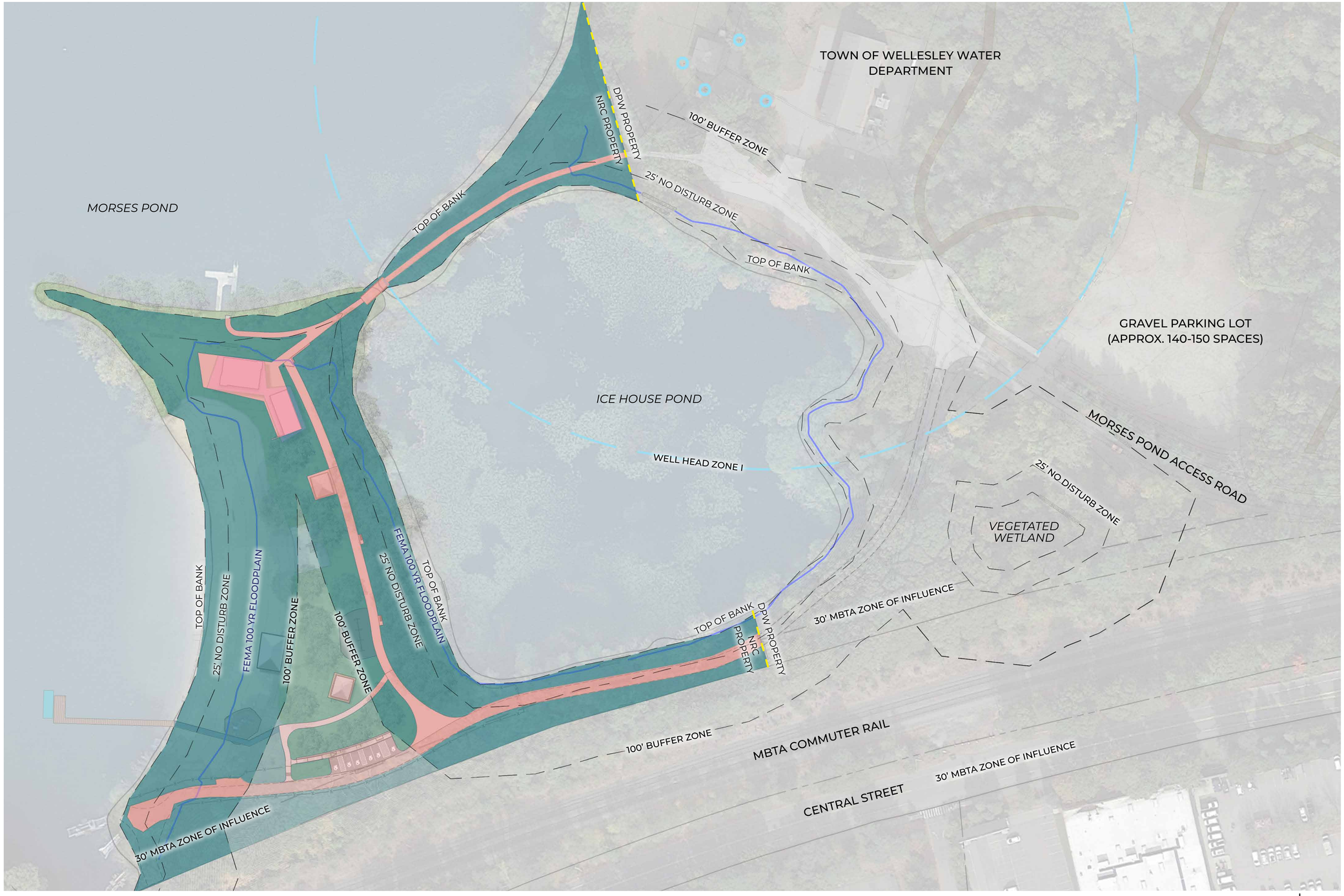
LEGEND

- WATER — EX. WATER LINE
- SEWER — EX. SANITARY SEWER LINE
- STORM — EX. STORM DRAINAGE
- ELECTRICAL — EX. ELECTRICAL CONDUIT
- COMMUNICATIONS — EX. COMMUNICATIONS LINE
- CABLE — EX. CABLE LINE FOR INTERNET

0 50 100 150

SCALE 1" = 50'-0"

ALTERNATIVE B: **IMPERVIOUS / PERVIOUS COVER**



LEGEND

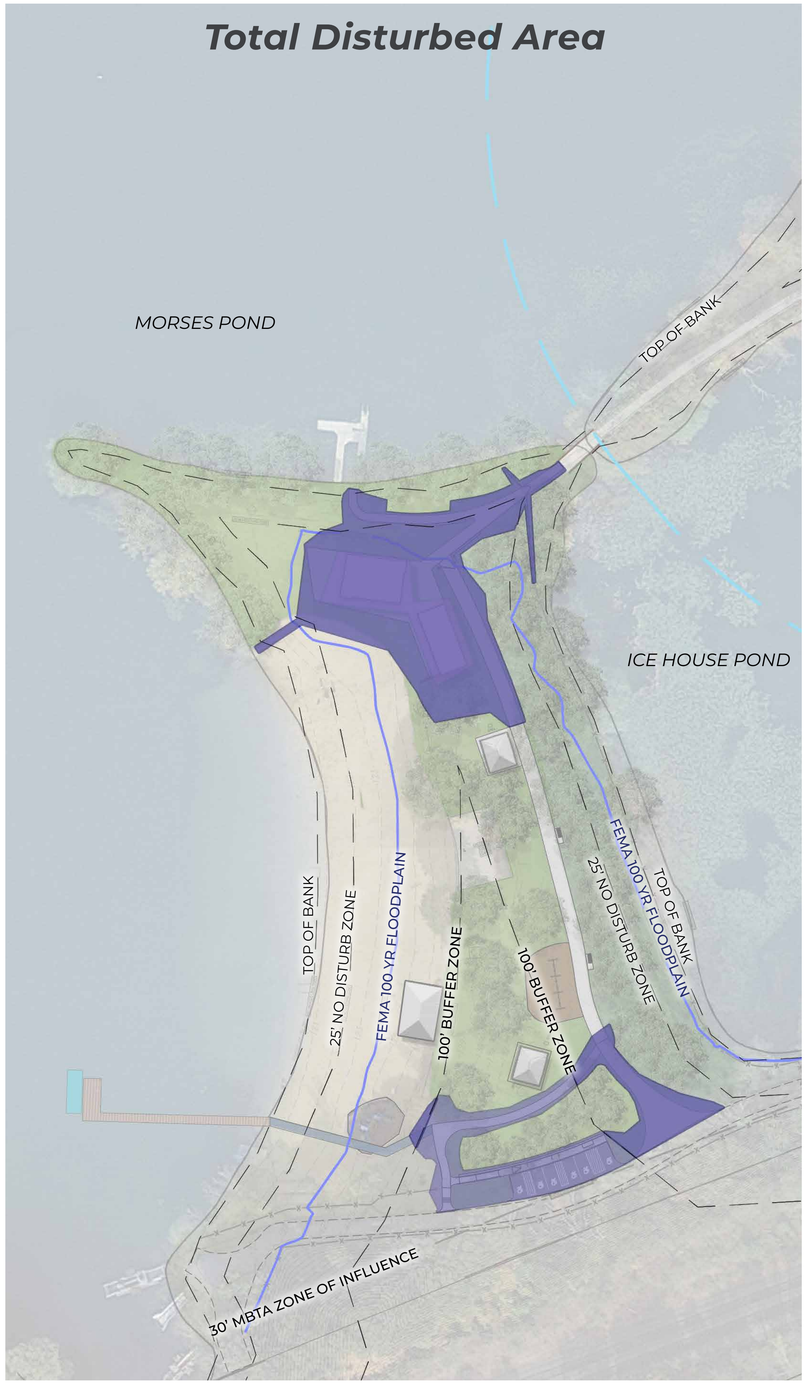
22,881 sf	**IMPERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
6,518 sf	**IMPERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER
135,694 sf	**PERVIOUS** AREA - INSIDE 100' WETLAND BUFFER
22,267 sf	**PERVIOUS** AREA - OUTSIDE 100' WETLAND BUFFER

0 50 100 150

SCALE 1' = 50'-0"

ALTERNATIVE B: **OVERALL DISTURBANCE SUMMARY**

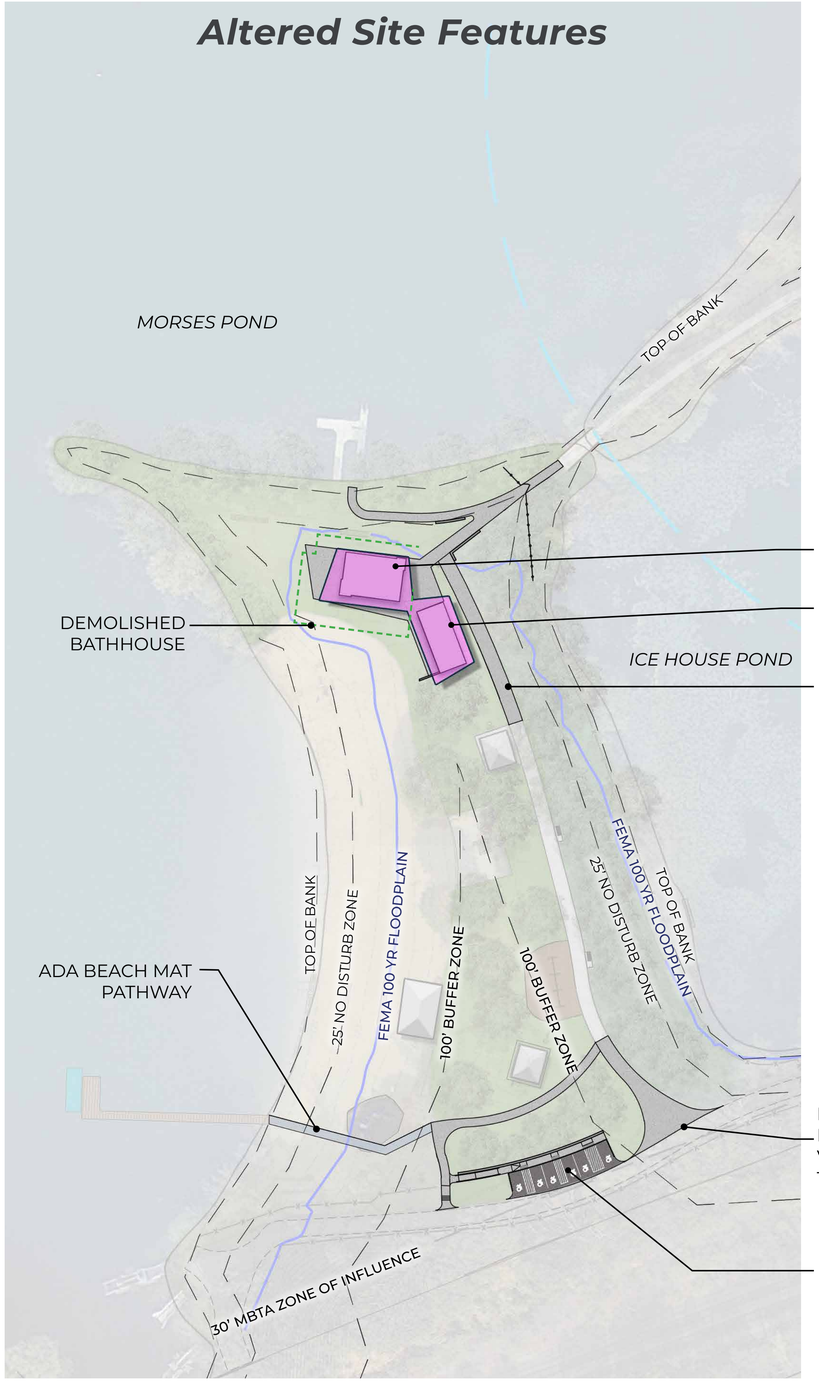
Total Disturbed Area



19,638 sf **DISTURBED** AREA - INSIDE 100' WETLAND BUFFER

5,877 sf **DISTURBED** AREA - OUTSIDE 100' WETLAND BUFFER

Altered Site Features



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SCALE 1' = 50'-0"

ALTERNATIVE B: **ANALYSIS SUMMARY**

	EXISTING CONDITIONS PLAN	ALTERNATIVE B: NEW NORTH SIDE BUILDING	NET CHANGE
BUILDING LOCATION	North side	North side	N/A
BUILDING SQUARE FOOTAGE	2,572 sf	2,230 sf	-342 sf
IMPERVIOUS AREA - INSIDE 100' WET-LAND BUFFER	24,074 sf	22,881 sf	-1,193 sf
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	135,694 sf	+1,193 sf
TOTAL IMPERVIOUS AREA	28,715 sf	29,399 sf	+684 sf
TOTAL PERVIOUS AREA	158,645 sf	157,961 sf	-684 sf
OVERALL CUT / FILL	N/A	438 cy cut / 82 cy fill	356 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	55.4 cy cut, 14.2 cy fill	41.2 cy net cut
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	Peninsula Lawn: 14,821 sf, Beach Lawn: 26,106 sf, Total: 40, 927 sf	-945 sf
RELOCATED AMENITIES	N/A	N/A	N/A
PARKING	• Gravel pull off area • No ADA parking	• 6 ADA parking spaces	+6 spaces
DECIDUOUS TREES - INSIDE THE 100' WET-LAND BUFFER	149	147	-2
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	8	0
TOTAL DECIDUOUS TREES	157(existing)	155 (remain)	-2
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	66	0
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	6	-1
TOTAL EVERGREEN TREES	73 (existing)	72(remain)	-1
UTILITY IMPACTS	N/A	Minimal: Hookups to new buildings	Minimal
VEHICULAR CIRCULATION	Southern path	Southern path	N/A
PEDESTRIAN CIRCULATION	• Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end	• Pedestrian access is through the northern bath-house • Southern access is restricted by fencing and gates • Restricted access to Ice House Pond loop path during beach season • Accessible path provided from parking to the main beach path	• Main access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site ame-nities
AREA OF DISTURBANCE	N/A	25,515 sf (19,638 inside 100' wetland buffer)	+25,515 sf
PERMITTING IMPACTS	N/A	• Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report may not be needed (net de-crease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 2 Native Trees Total	N/A

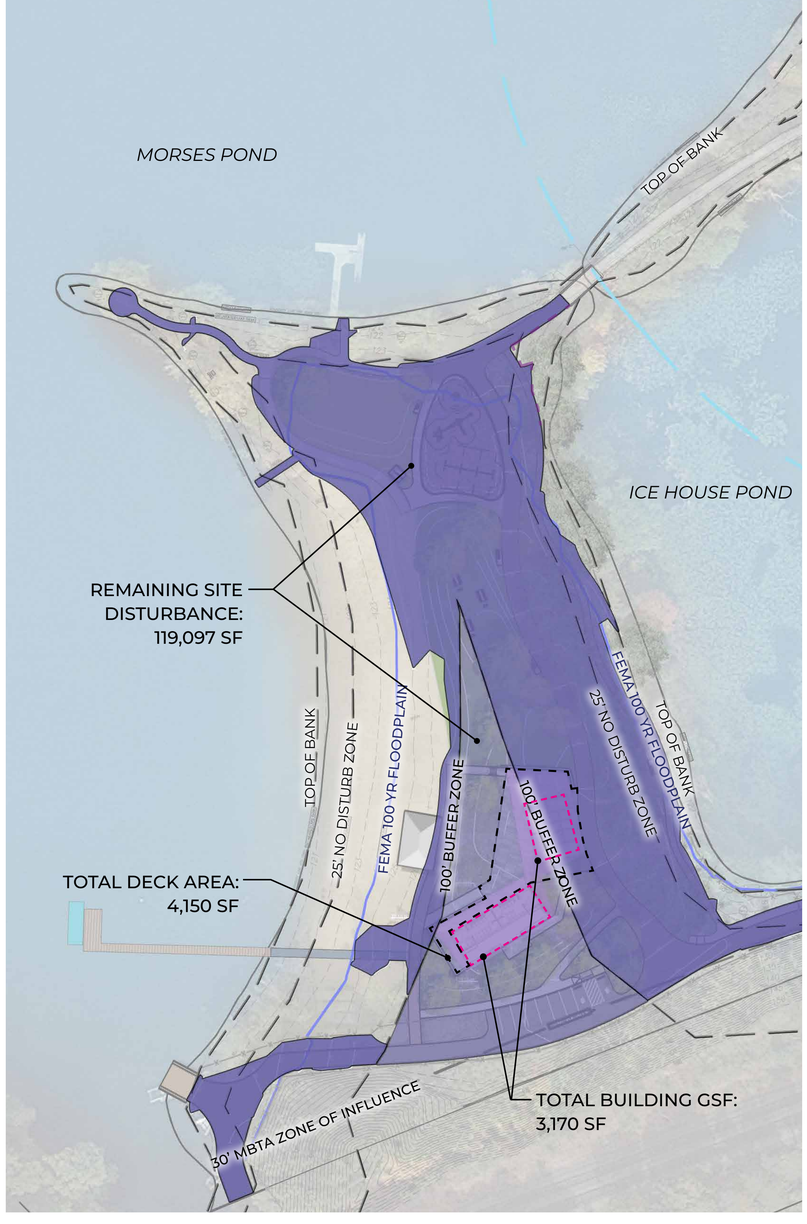
ALTERNATES COMPARISON SUMMARY

Test pits performed in August 2025

ALTERNATES COMPARISON: **OVERALL PROJECT AREA REDUCTION**

Current Master Plan

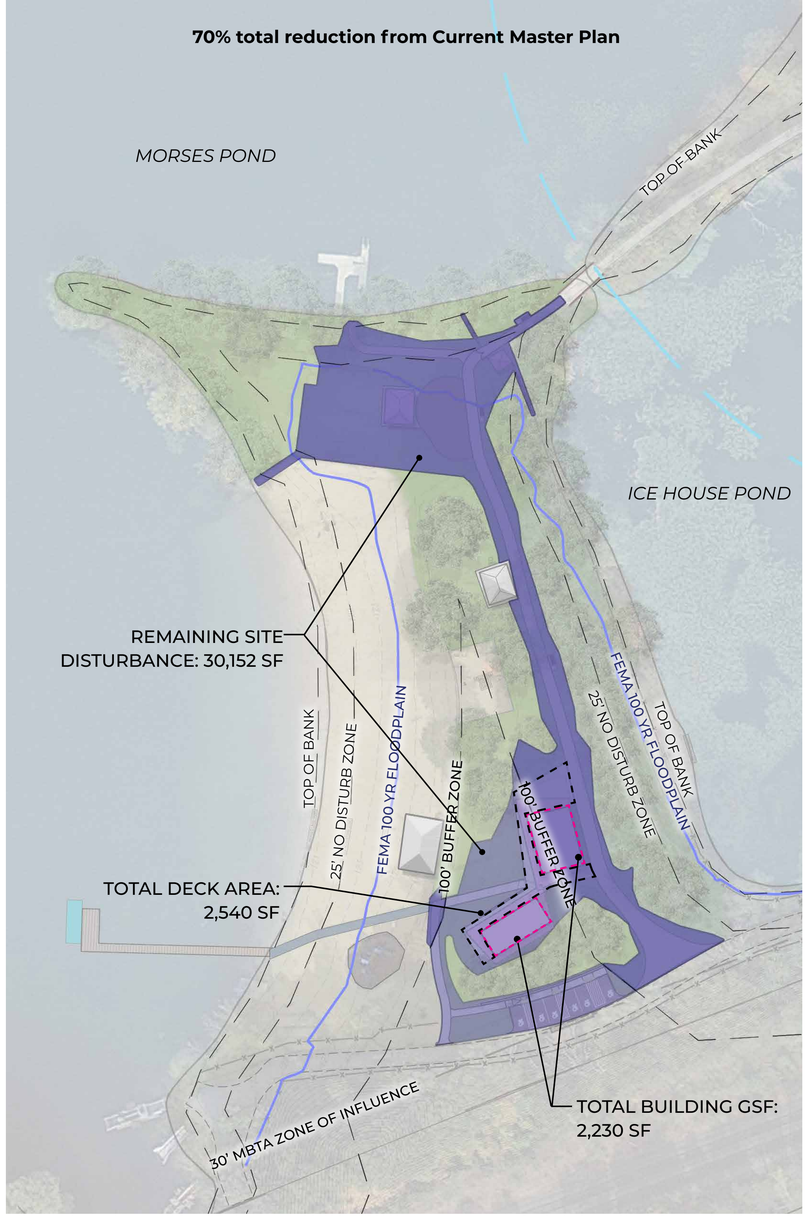
Total Building GSF:	**3,170 SF**
Site Disturbance (less deck area):	**109,602 SF**
Total Deck Area:	**4,150 SF**
Total Disturbance:	**116,922 SF**



Alternative A

Total Building GSF:	**2,230 SF (30% reduction)**
Site Disturbance (less deck area):	**30,152 SF (73% reduction)**
Total Deck Area:	**2,540 SF (39% reduction)**
Total Disturbance:	**34,922 SF**

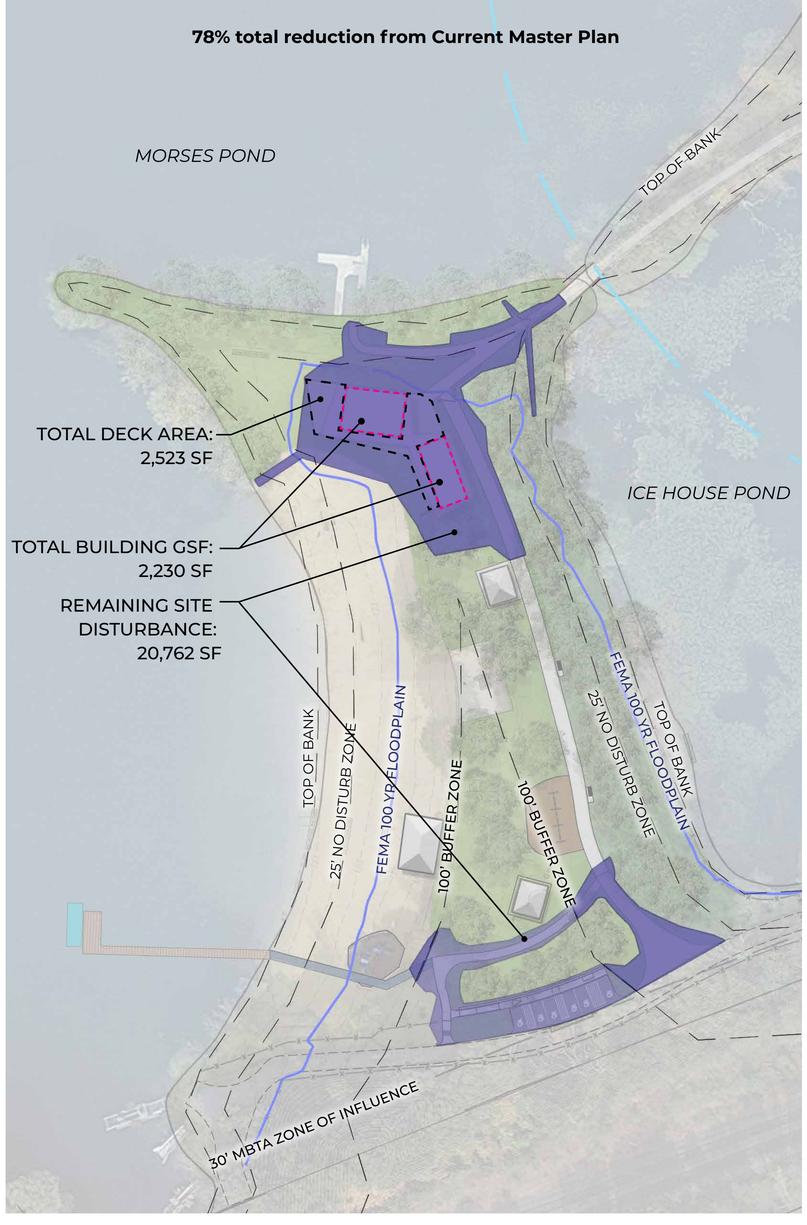
70% total reduction from Current Master Plan



Alternative B

Total Building GSF:	**2,230 SF (30% reduction)**
Site Disturbance (less deck area):	**20,762 SF (81% reduction)**
Total Deck Area:	**2,523 SF (39% reduction)**
Total Disturbance:	**25,515 SF**

78% total reduction from Current Master Plan

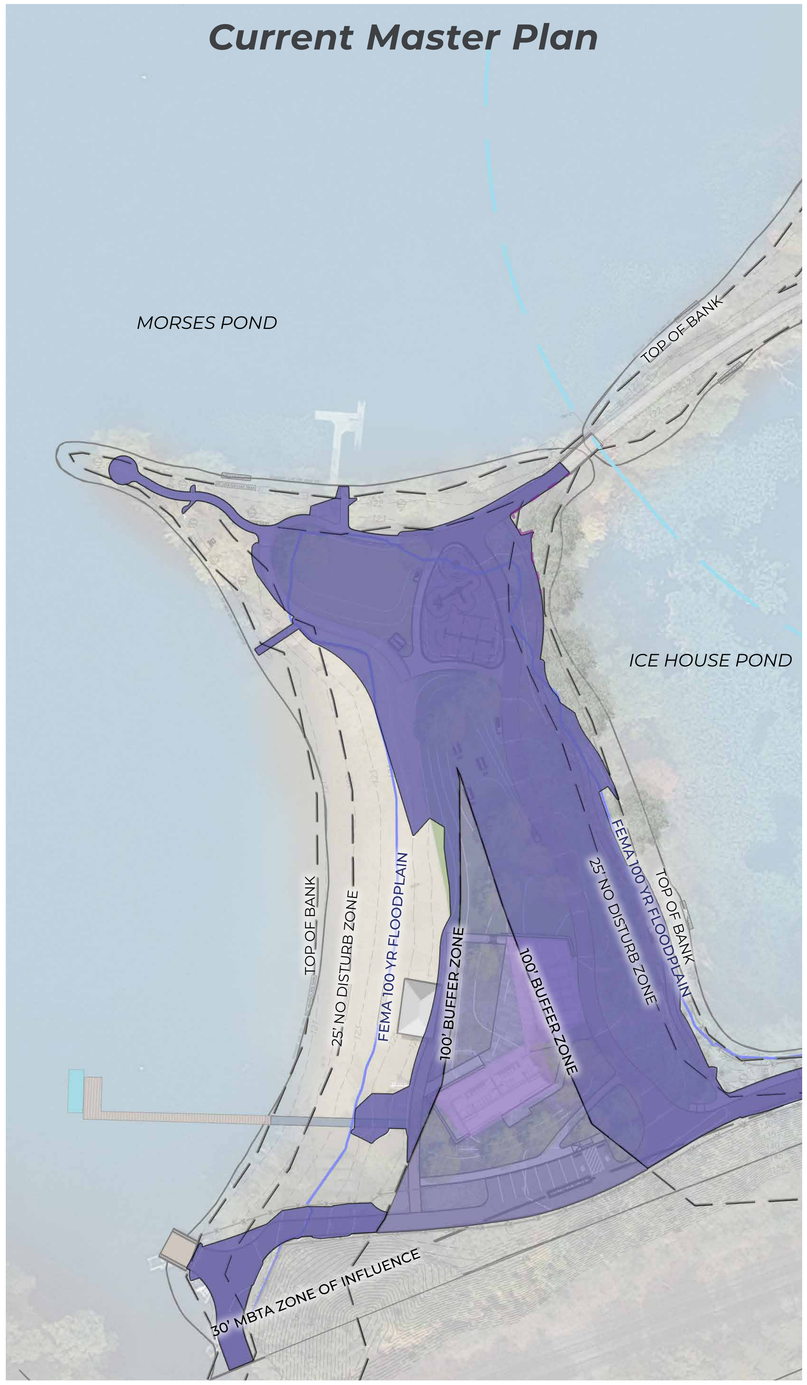


0 50 100 150
SCALE 1" = 50'-0"

MARYANN THOMPSON ARCHITECTS
www.maryannthompson.com
Weston & Sampson

ALTERNATES COMPARISON: **OVERALL SITE DISTURBANCE**

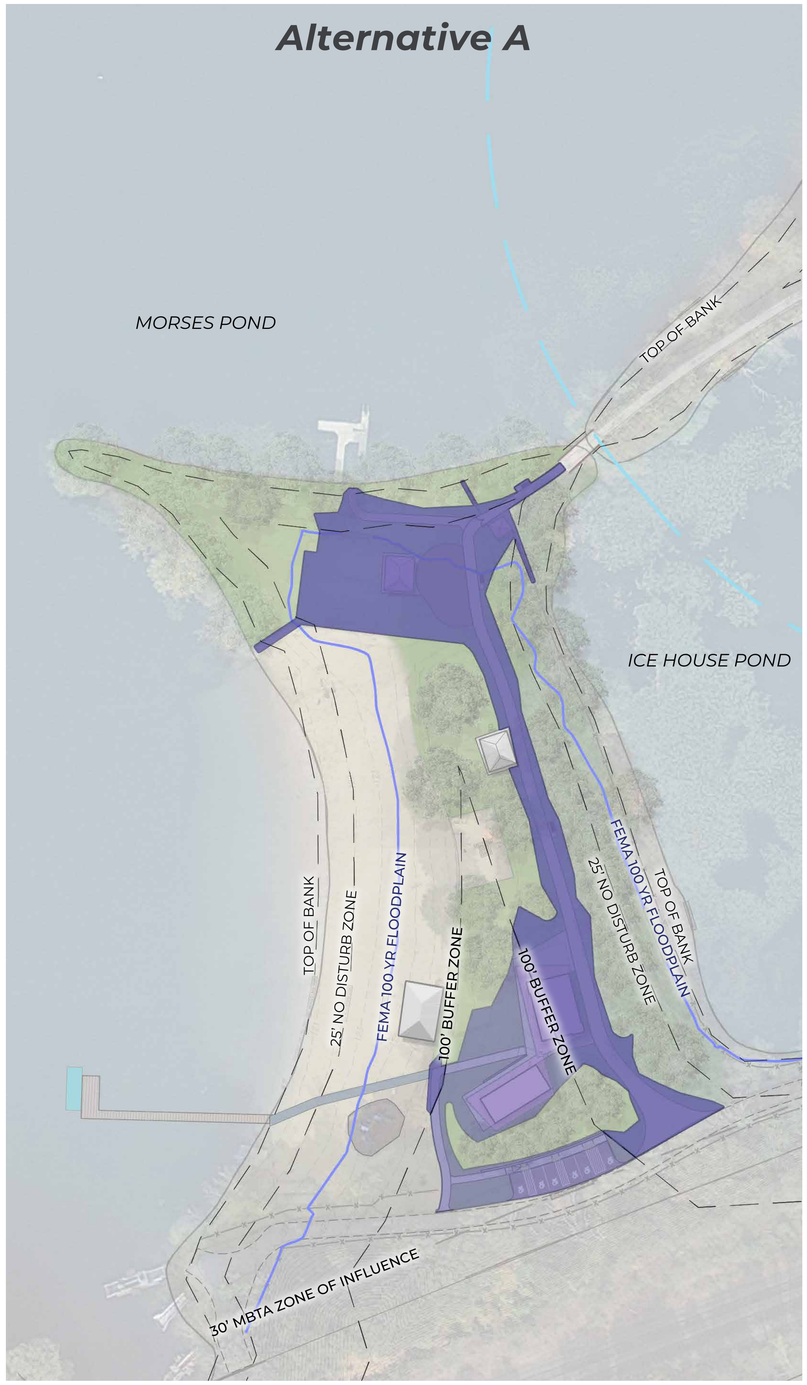
Current Master Plan



87,764 sf **DISTURBED** AREA - INSIDE 100' WETLAND BUFFER*

29,158 sf **DISTURBED** AREA - OUTSIDE 100' WETLAND BUFFER

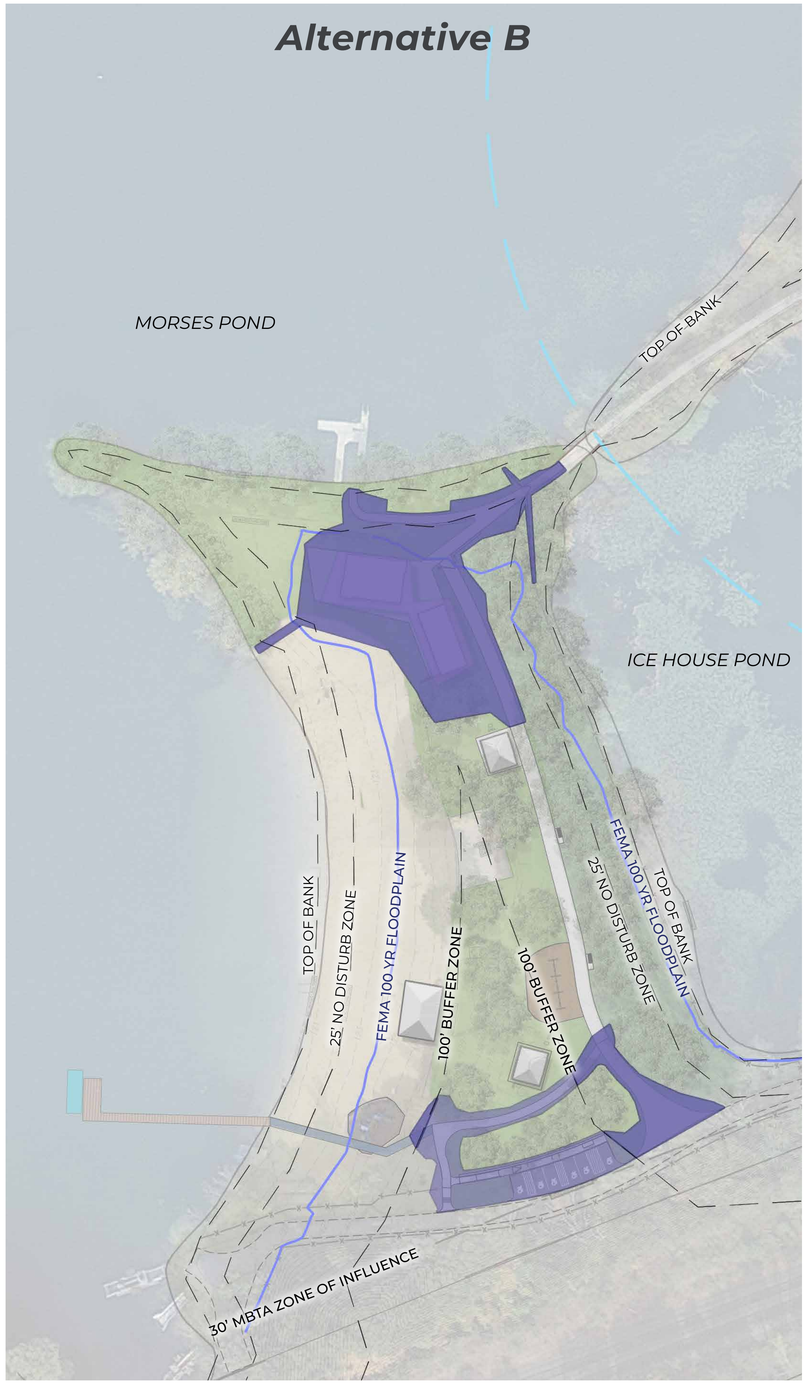
Alternative A



22,254 sf **DISTURBED** AREA - INSIDE 100' WETLAND BUFFER

10,668 sf **DISTURBED** AREA - OUTSIDE 100' WETLAND BUFFER

Alternative B



19,638 sf **DISTURBED** AREA - INSIDE 100' WETLAND BUFFER

5,877 sf **DISTURBED** AREA - OUTSIDE 100' WETLAND BUFFER

** INCLUDES DISTURBANCE AREAS OF VEHICULAR DROP OFF AND ACCESS ROAD*

SUMMARY COMPARISON: **ALL CONCEPTS VS. EXISTING SITE CONDITIONS**

	EXISTING CONDITIONS PLAN	CURRENT MASTER PLAN	ALTERNATIVE A: MODIFIED SOUTH SIDE BUILDING	ALTERNATIVE B: NEW NORTH SIDE BUILDING
BUILDING LOCATION	North side	South side	South side	North side
BUILDING SQUARE FOOTAGE	2,572 sf	3,191 sf (+619 sf)	2,230 sf (-342 sf)	2,230 sf (-342 sf)
IMPERVIOUS AREA - INSIDE 100' WET-LAND BUFFER	24,074 sf	28,560 sf (+4,486 sf)	20,034 sf (-4,040 sf)	22,881 sf (-1,193 sf)
PERVIOUS AREA - INSIDE 100' WETLAND BUFFER	134,501 sf	130,015 sf (-4,486 sf)	138,541 sf (+4,040 sf)	135,694 sf (+1,193 sf)
TOTAL IMPERVIOUS AREA	28,715 sf	39,840 sf (+11,125 sf)	28,418 sf (-297sf)	29,399 sf (+684 sf)
TOTAL PERVIOUS AREA	158,645 sf	147,520 sf (-11,125 sf)	158,942 sf (+297 sf)	157,961 sf (-684 sf)
OVERALL CUT / FILL	N/A	5,849.6 cy net cut	805.7 cy net cut	356 cy net cut
CUT / FILL WITHIN THE 100 YR. FEMA FLOODPLAIN	N/A	458.8 cy cut, 68 cy fill = 390.9 cy net cut	27.8 cy cut, 71.9 cy fill, 44.1 cy net fill	55.4 cy cut, 14.2 cy fill, 41.2 cy net cut
DEDICATED LAWN AREA	Peninsula Lawn: 13,274 sf, Beach Lawn: 28, 598 sf, Total: 41,872 sf	36,764 sf (-5,108 sf)	41,916 sf (+44 sf)	40,927 sf (-945 sf)
RELOCATED AMENITIES	N/A	N/A	• Swing set • Southern permanent pavilion	N/A
PARKING	• Gravel pull off area • No ADA parking	+9 spaces (7 parking spaces, 2 ADA spaces)	+6 ADA spaces	+6 ADA spaces
DECIDUOUS TREES - INSIDE THE 100' WET-LAND BUFFER	149	123 (-26 from existing)	145 (-4 from existing)	147 (-2 from existing)
DECIDUOUS TREES - OUTSIDE THE 100' WETLAND BUFFER	8	2 (-6 from existing)	5 (-3 from existing)	8 (0 change from existing)
TOTAL DECIDUOUS TREES	157(existing)	125 (-32 from existing)	150 (-7 from existing)	155 (-2 from existing)
EVERGREEN TREES - INSIDE THE 100' WETLAND BUFFER	66	45 (-21 from existing)	64 (-2 from existing)	66 (0 change from existing)
EVERGREEN TREES - OUTSIDE THE 100' WETLAND BUFFER	7	0 (-7 from existing)	6 (-1 from existing)	6 (-1 from existing)
TOTAL EVERGREEN TREES	73 (existing)	45 (-28 from existing)	70 (-3 from existing)	72 (-1 from existing)
UTILITY IMPACTS	N/A	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)	+/- 300 linear feet (Electrical) +/- 300 linear feet (Water)	Minimal
VEHICULAR CIRCULATION	Southern path	Southern path	Southern path	Southern path
PEDESTRIAN CIRCULATION	• Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Main beach path is not accessible at southern end	• 1 access point at the south end • Full access to Ice House Pond loop path only during off sea-son • All paths are accessible	• Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site amenities	• Main pedestrian access at the northern end • Restricted access to Ice House Pond loop path during beach season • Accessible paths to all site amenities
AREA OF DISTURBANCE	N/A	116,922 sf (87,764 sf inside 100' wetland buffer)	34,922 sf (24,254sf inside 100' wetland buffer)	25,515 sf (19,638 inside 100' wetland buffer)
PERMITTING IMPACTS	N/A	• Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report is required (net increase in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 47 Native Trees Total • Zone of Influence permit required (project schedule to accomodate review periods)	• Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report may not be needed (net decrease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 6 native trees total	• Wildlife assessment is required (greater than 5,000 sf of alteration within the 100' wetland buffer) • A stormwater report may not be needed (net de-crease in impervious within the 100' wetland buffer) • Minor compensatory storage is necessary within the 100 Yr. FEMA Floodplain (greater than 5,000 sf of alteration) • Planting one native replacement tree for each tree removed - 2 Native Trees Total

SUMMARY COMPARISON: **ALTERNATIVE A AND B FOR RECOMMENDATION / SELECTION**

TASK 5

MoPoBAC Preliminary Review of Building Location Analysis /Data and Feedback

CRITERIA	ALTERNATIVE A: South Side Building Location	ALTERNATIVE B: North Side Building Location
Patrons		
Beach Character	Transformational. New beach front area opens up panaramic views/site to the North for patrons.	Existing patron beach experience to remain largely unchanged. Slightly more view to the North past building.
Shade Trees and Lawn	Adds an open lawn area at existing demolished building (beach level). Reduces current tree/shade lawn area at the South.	No significant shade tree and lawn impact for patrons.
Main Public Entry (North)	Building located on opposite side of site from main public entrance (gatekeeper control required at remote entry). Requires patrons to traverse site to purchase passes/rentals and to use bathhouse.	Building with integral gatehouse located at main entry on the North.
ADA / MAAB Access (South)	Building adjacent to accessible entrance/parking. Requires sloped walkways to access elevated building.	Building located on opposite side from accessible entrance/parking. Requires traversing site to access building. Requires separate monitoring of South entrance by staff/guard.
View from Bathhouse Deck	Deck has elevated view of beach and view to the North, with sun at patron's back.	Low (beach elevation) panaramic view from deck located at bend in site.
View from Beach	Parental view to Bathhouse from beach (towards sun).	Parental view to Bathhouse from beach (away from sun).
Amenities	Requires relocating/eliminating/replacing a shade structure and the swing set.	All current amenities can remain.
Staff		
Programming	Meets all program requirements for staff.	Meets all program requirements for staff.
Gatekeeper	Requires remote staffing at North entry.	Requires monitoring of South accessible entry by staff/guards.
View from Building	Building is on South end of beach with full view to the North.	Building is at bend in site, with views in two directions.
Potential Food Trucks	Food trucks can be accommodated near building (or adjacent to accessible parking area).	Food trucks can be accommodated near building.
Building		
Buildings (Quantity)	Requires separate minimal gatehouse structure at North entry.	Gatehouse located as part of main Bathhouse.
Flood Zone	Building floor elevations are approximately 7 feet above the 100-year FEMA floodplain. Also above FEMA 500-year floodplain.	Building floor elevations are approximately 12" above the 100-year FEMA floodplain (EL 125.2) and also 9.6" above current floor elevation of the existing building (EL 124.4).
Building Foundations & Soil-Loading / Geotechnical Considerations	Requires deeper excavation of unstable soil on man-made hill for foundations. Dewatering is unlikely. Geotechnically, undocumented fill (1-4 ft deep) and some buried topsoil layers were found in the vicinity.	Requires some excavation and dewatering for foundations at its lower elevation. Geotechnically, low quantities of unsuitable soil were found at foundation depths. Groundwater was found closer to foundation depth.

SUMMARY COMPARISON: **ALTERNATIVE A AND B FOR RECOMMENDATION / SELECTION**

TASK 6
Evaluate Soil Conditions

CRITERIA	ALTERNATIVE A: South Side Building Location	ALTERNATIVE B: North Side Building Location
Environmental Impact		
Site Disturbance	Excavates South end of site for new parking/building, demolishes building on North side, and trenches utilities between. Total disturbance 34,922 SF	Excavates South end of site for new parking/paths and excavates North side for building (at demolished building site). Total disturbance 25,515 SF
Wetlands	Approximately half the building is located outside the 100-foot wetlands buffer zone.	Entire building located within the 100-foot wetlands buffer zone (current building site)
Stormwater	Soils generally transmit water well (sandy/gravelly with high infiltration). Seasonal high groundwater is of low concern.	Soils generally transmit water well (sandy/gravelly with high infiltration). Seasonal high groundwater appears relatively shallow in some locations (as close as 46–60 in), which will need to be managed in the design.
Impervious	Similar total impervious area proposed for both Alternates. Within Wetlands, there is a net reduction of 4,040 SF of impervious area compared to current existing conditions.	Similar total impervious area proposed for both Alternates. Within Wetlands, there is a net reduction of 1,193 SF of impervious area compared to current existing conditions.
Mitigation	Wildlife assessment and minor compensatory storage required (requires 6 native tree replacements)	Wildlife assessment and minor compensatory storage required (requires 2 native tree replacement)
Cost Deltas		
Utilities	Utilities need to be extended to South side of site (+$235,000)	Current utilities exist to building location.
Bathhouse Building	Requires a minimal Gatekeeper structure at North entry (+$30,000), replace existing building footprint with lawn (+$75,000)	May require more durable materials and additional design elements because of lower elevation and proximity to water (+$105,000).
Amenities	Building location requires swing set relocation (+$50,000), relocating the shade shelter (+$130,000)	All amenities can remain.
Site Disruption / Excavation	Less disruption / excavation than Current Master Plan but more than Alternate B (+$30,000)	Less disruption/excavation than Current Master Plan and Alternate A. Assume some road repair will be needed on the north / south pathway due to construction activities (+15,000)
Tree Mitigation	Replace 6 trees (+$2,400 per tree = $14,400)	Replace 2 trees (+$2,400 per tree = $4,800)
Soil Loading Capacity / Geotechnical Considerations	Overexcavation and lightweight fill would be required for +/- 6 ft depth (+125,000), no dewatering required	Overexcavation and lightweight fill of +/-2 feet may be needed for half of the building footprint (+25,000), dewatering would be needed due to high groundwater (+15,000)

Cost deltas included in this chart are high-level order-of-magnitude numbers and are intended to be used for cost comparative purposes only.

APPENDIX N

Building Code Compliance

MARYANN THOMPSON ARCHITECTS
741 Mount Auburn St Watertown MA 02472 | t: 617 744 5187 f: 617 491 3844

MORSES POND BATHHOUSE CODE COMPLIANCE APPROACH

DRAFT 01: 6/30/2025

Project Description

The Project involves the design and construction of new bathhouse and administration facilities at Morses Pond in Wellesley, Massachusetts. The proposed buildings are to have one level with an area of approximately 2,300 gsf spread across two structures. The structures are seasonally used during the summer.

Applicable Codes

The following primary codes are applicable to this project:

- **Accessibility** - Massachusetts Architectural Access Board, 521-CMR and the Americans with Disabilities Act Guidelines (ADAAG).
- **Building** - Massachusetts State Building Code (780 CMR) 10th Edition. 780 CMR is an amended version of the 2021 International Building Code.
- **Energy** - International Energy Conservation Code (IECC) 2021, plus certain amendments in 780 CMR 115.AA
- **Electrical** - Massachusetts Electrical Code, 527 CMR §12.00. The Massachusetts Electrical Code is an amended version of the 2023 National Electrical Code (NFPA 70).
- **Fire Prevention** - Massachusetts Fire Prevention Regulations, 527 CMR.
- **Mechanical** - International Mechanical Code, 2021, as adopted and amended by 780 CMR (IMC).
- **Plumbing** - Massachusetts Fuel Gas and Plumbing Codes, 248 CMR

Assumptions

The code review and this report have been prepared based on the following specific assumptions:

1. The Building will not be equipped throughout with an automatic sprinkler system. The building will have a fire alarm system.
2. If any hazardous materials are to be located within the buildings now or in the future, the amounts will be limited to the exempt amounts permitted by 780 CMR §307.1.
3. There will be no Hydrogen Cutoff rooms, paint shops or similar incidental uses.

Use and Occupancy Classification

The following Uses are considered included in the Admin & Safety Building:

1. Changing rooms, breakroom and first aid room (Utility and Miscellaneous Group U per 780 CMR §312)
2. Office spaces (Business Group B per 780 CMR §304.1)

The following Uses are considered included in the Bathhouse:

1. Restroom Areas (Utility and Miscellaneous Group U per 780 CMR §312)
2. Moderate Hazard Storage (Storage Use S-1 per 780 CMR §311)

Mixed Use Approach

Because two or more occupancies are provided in each building, compliance with Section 508.1 Mixed Use and Occupancy is required.

508.1 Mixed occupancies. Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy group, the portion thereof shall comply with the applicable provisions of Section 508.2, 508.3 or 508.4, or a combination of these sections.

Admin & Safety Building:
Given the uses present and proposed total gsf, a non-separated mixed-use approach is recommended. The building is addressed as a non-separated mixed use with Utility and Miscellaneous Group (U) and Business (B) areas present.

Bathhouse:
Given the uses present and proposed total gsf, a non-separated mixed-use approach is recommended. The building is addressed as a non-separated mixed use with Utility and Miscellaneous Group (U) and Moderate Hazard Storage (S-1) areas present.

Construction Classification
Type V-B construction is proposed where in the structural elements, exterior wall and interior walls can be of any material allowable by code for both the Admin & Safety Building and the Bathhouse. Occupancy classification U allows for a maximum one-story building with up to 5,500 gsf of area.

Means of Egress
At least one (1) accessible means of egress is provided from an accessible room or space. There are no spaces where more than one (1) means of egress or exit is required. Accessible means of egress must provide a continuous path of travel to a public way (780 CMR §1009.2).

Exits are located such that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed line of travel does not exceed 200-feet (780 CMR §1017.2).

Fire Protection Systems

- *Sprinkler Systems - An NFPA 13 compliant sprinkler system is not required (780 CMR §903.2).*
- *Fire Extinguishers - Portable fire extinguishers are required in accordance with 780 CMR §906 and the 527 CMR. All fire extinguishers to be provided are to be in accordance with NFPA 10, Standard for the Installation of Portable Fire Extinguishers (780 CMR §906.0).*
- *Fire Alarm System - A fire alarm system is required to be provided per 780 CMR §907.2.*

Fire Department Access
527 CMR addresses fire department access requirements and states that the head of the fire department shall require and designate public or private fire lanes as deemed necessary for the efficient and effective use of fire apparatus. The arrangement of fire department access to the project must be reviewed with the Wellesley Fire Department. Preliminary plans were reviewed with the Wellesley Fire Department and were found acceptable during the 2022 Feasibility Study. Additional reviews will be completed as a part of the 2025 Feasibility Study.

Plumbing Fixtures
Under the plumbing code (248 CMR), plumbing fixtures are required based on use and occupancy. Total fixtures

supplied are to comply with Section 10.10 denoting minimum plumbing facilities as required by total occupant load. The minimum fixture count is computed through 10.10 Table 1 in 248 CMR based on a max park occupancy of 1,000 people under the use classification of a Public Beach. With 500 women and 500 men the minimum fixture count is 1 toilet for women, 1 toilet for men and 2 lavatory for each. Fixtures are being provided in the proposed facility in the following quantities exceeding the minimum required in order to meet facility programmatic requirements:

Women's Room:
3 water closets
2 lavatories
1 mop sink

Men's Room:
1 water closets
2 urinals
2 lavatories
1 mop sink

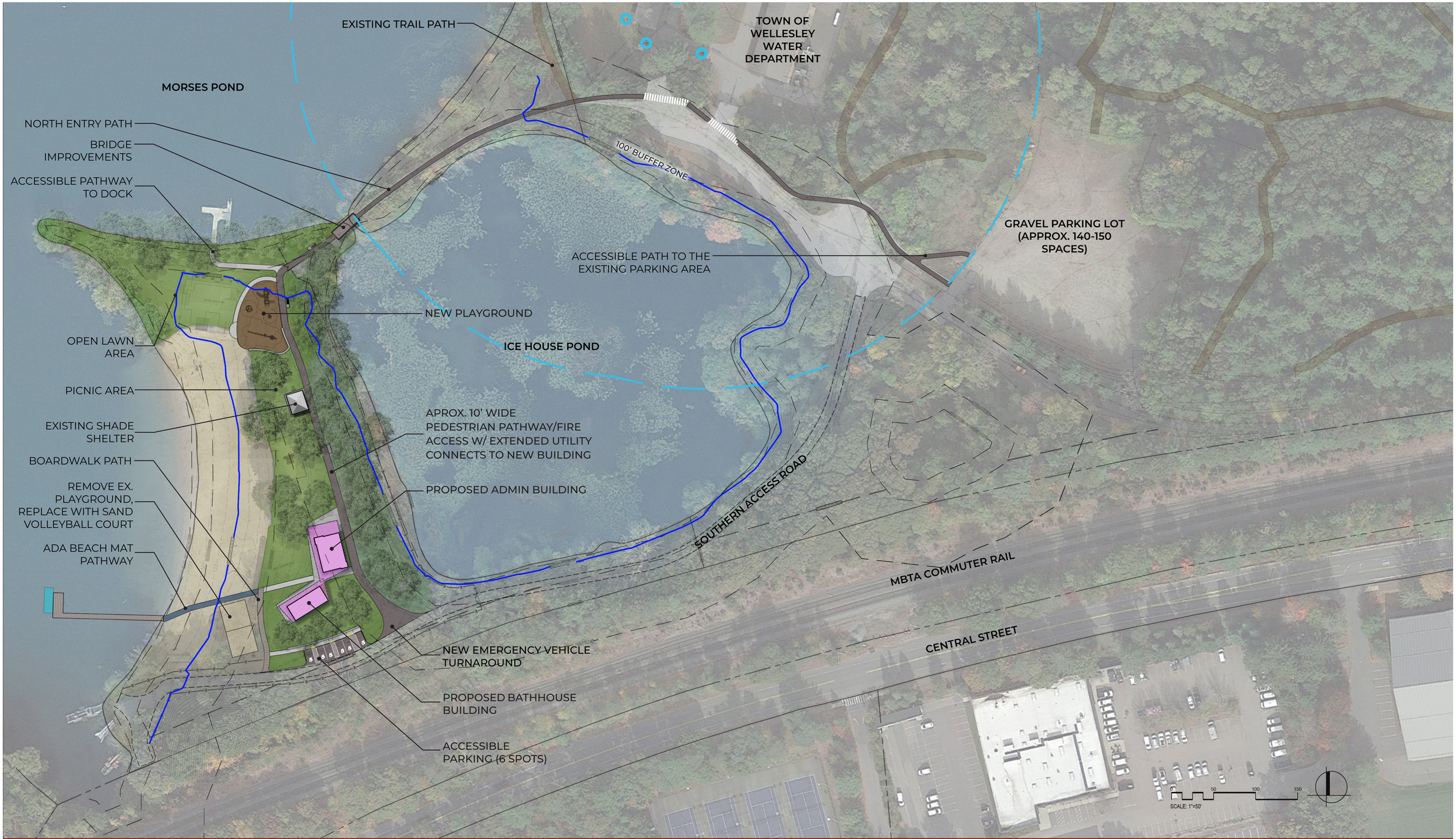
Additionally, 2 family restrooms which include one water closet and one lavatory each are provided. An exterior hi/low water fountain with a water bottle filler, and a rinse station are also provided.

Accessibility

The entire building must be designed to be accessible to, functional for and safe for use by persons with disabilities in accordance with 521 CMR and the Americans with Disabilities Act (ADA). This includes site access, entrances, bathrooms and all public spaces within the building.

APPENDIX O

Approved Conceptual Site Plan



APPROVED CONCEPTUAL SITE PLAN

APPENDIX P

Opinion of Probable Cost, PM&C, 2025

Study Cost Estimate

Morses Pond Beach
New Buildings and Sitework

Wellesley, MA

PM&C LLC
20 Downer Ave, Suite 5
Hingham, MA 02043
(T) 781-740-8007

Prepared for:

Weston and Sampson

January 21, 2026

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	$/sf	Estimated Construction Cost
TRADE COSTS	Feb-28			
NEW TOILET/CHANGING BUILDING		952	$1,586.64	$1,510,481
NEW ADMIN BUILDING		1,340	$1,705.57	$2,285,470
HAZARDOUS MATERIAL ABATEMENT[1]				NIC
SITEWORK				$2,241,575
TOTAL CONSTRUCTION COSTS				$6,037,526

[1] Inspection, Testing and Monitoring Costs are not included

ALTERNATES - including markups

Add Alt #1 - Paved drop-off turn around	ADD	$122,606
Add Alt #2 - Mill & Overlay existing access road	ADD	$140,832

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

BASIS OF ESTIMATE

This cost estimate was produced from drawings, specifications and other documentation prepared by Weston and Sampson and their design team dated July 7, 2025 . Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under:

Chapter 149 of the Massachusetts General Laws to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

If a CM at risk CH149a procurement is used costs will increase from the costs presented in this report.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment Not Explicitly Noted in Estimate Detail
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Rock excavation; special foundations (unless indicated by design engineers)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction or occupancy phasing or off hours' work, (except as noted in this estimate)

PM&C

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CONSTRUCTION COST SUMMARY IN CSI FORMAT

		BATHHOUSE BUILDING		*ADMIN BUILDING*		*SITEWORK*		*TOTAL*	
		Subtotal	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*
TOTAL PROJECT CSI SUMMARY									
DIV. 2	**EXISTING CONDITIONS**								
024116	Demolition								
028213	Abatement								
DIV. 3	**CONCRETE**		**$94,092**		**$112,567**				**$206,659**
033000	Cast-in-Place Concrete	$94,092		$112,567				$206,659	
DIV. 4	**MASONRY**		**$17,556**		**$19,285**				**$36,841**
040001	**Unit Masonry - FSB**	$17,556		$19,285				$36,841	
DIV. 5	**METALS**		**$29,898**		**$43,599**				**$73,497**
050001	**Metal Fabrications - FSB**	$29,898		$43,599				$73,497	
051200	Structural Steel Framing								
DIV. 6	**WOODS & PLASTICS**		**$237,903**		**$344,613**				**$582,516**
061000	Rough Carpentry	$91,493		$91,977				$183,470	
061800	Heavy Timber Construction	$76,480		$101,976				$178,456	
064100	Architectural Woodwork	$69,930		$150,660				$220,590	
DIV. 7	**THERMAL & MOISTURE PROTECTION**		**$160,057**		**$203,694**				**$363,751**
070001	**Waterproofing, Dampproofing and Caulking - FSB**	$10,857		$14,597				$25,454	
070002	**Roofing and Flashing - FSB**	$88,680		$125,094				$213,774	
072100	Thermal Insulation	$6,821		$9,078				$15,899	
076400	Cladding	$52,747		$53,585				$106,332	
078100	Fireproofing								
078400	Firestopping	$952		$1,340				$2,292	
DIV. 8	**DOORS & WINDOWS**		**$74,800**		**$355,660**				**$430,460**
080001	**Windows**	$42,000		$76,500				$118,500	
080002	**Glass and Glazing - FSB**	$2,000		$222,450				$224,450	
081113	Doors, Frames and Hardware	$5,400		$21,810				$27,210	
083100	Access Doors and Frames			$500				$500	
083323	Overhead Coiling Doors								
083326	Coiling Grilles								
087100	Door Hardware	$15,400		$31,400				$46,800	
089000	Louvers	$10,000		$3,000				$13,000	
DIV. 9	**FINISHES**		**$62,770**		**$65,031**				**$127,801**
090002	**Tiling - FSB**	$21,600		$4,032				$25,632	
090003	**Acoustical Ceilings - FSB**								
090005	**Resilient Flooring - FSB**								
090007	**Painting - FSB**	$13,086		$21,469				$34,555	
092900	Gypsum Board Assemblies								
096620	**Terrazzo - FSB**								
096700	Fluid-Applied Flooring	$28,084		$39,530				$67,614	
098400	Acoustic Room Components								
DIV 10	**SPECIALTIES**		**$29,450**		**$14,050**				**$43,500**
101100	Visual Display Surfaces								
101400	Signage	$3,500		$5,500				$9,000	
102100	Toilet Compartments and Cubicles	$16,700						$16,700	
102800	Toilet Accessories	$7,900		$3,000				$10,900	
104300	Fire Protection Specialties	$1,350		$1,350				$2,700	
105000	Lockers			$4,200				$4,200	
DIV. 11	**EQUIPMENT**				**$6,000**				**$6,000**
112000	Loading Dock Equipment								
113100	Appliances			$6,000				$6,000	
DIV. 12	**FURNISHINGS**				**$24,950**				**$24,950**
122113	Window Treatments			$7,500				$7,500	
123200	Fixed Casework and Equipment			$17,450				$17,450	
124813	Entrance Mats and Frames								
DIV. 21	**FIRE SUPPRESSION**								
210000	**Fire Protection - FSB**								
DIV. 22	**PLUMBING**		**$171,875**		**$77,150**				**$249,025**
220000	**Plumbing - FSB**	$171,875		$77,150				$249,025	
DIV. 23	**HVAC**		**$30,300**		**$128,500**				**$158,800**
230000	**HVAC - FSB**	$30,300		$128,500				$158,800	
DIV. 26	**ELECTRICAL**		**$66,640**		**$93,800**				**$160,440**
260000	**Electrical**	$66,640		$93,800				$160,440	
DIV. 31	**EARTHWORK**		**$41,818**		**$50,138**		**$497,776**		**$589,732**
311000	Site Preparation					$229,508		$229,508	
312000	Earthwork	$41,818		$50,138		$218,068		$310,024	
312500	Erosion and Sedimentation Control					$50,200		$50,200	
DIV. 32	**EXTERIOR IMPROVEMENTS**						**$754,811**		**$754,811**
321000	Paving's					$312,849		$312,849	
323000	Site Improvements					$337,342		$337,342	
329900	Landscaping					$104,620		$104,620	

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CONSTRUCTION COST SUMMARY IN CSI FORMAT

		BATHHOUSE BUILDING		*ADMIN BUILDING*		*SITEWORK*		*TOTAL*	
		Subtotal	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*
TOTAL PROJECT CSI SUMMARY									
DIV. 33	**UTILITIES**						**$256,891**		**$256,891**
331000	Water Utilities					$68,650		$68,650	
333000	Sanitary Utilities					$34,975		$34,975	
334000	Storm Utilities					$4,466		$4,466	
337000	Electrical Utility					$148,800		$148,800	
SUBTOTAL DIRECT (TRADE) COST			**$1,017,159**		**$1,539,037**		**$1,509,478**		**$4,065,674**

SUBCONTRACTOR BOND		In Rates	In Rates	In Rates
GENERAL CONDITIONS	14.0%	$142,402.26	$215,465.18	$211,326.92
GENERAL REQUIREMENTS	2.0%	$20,343.18	$30,780.74	$30,189.56
PHASING/WINTER CONDITIONS ALLOWANCE		NIC	NIC	NIC
BONDS	1.0%	$10,171.59	$15,390.37	$15,094.78
GENERAL LIABILITY INSURANCE	1.5%	$15,257.39	$23,085.56	$22,642.17
OVERHEAD AND PROFIT	6.0%	$61,029.54	$92,342.22	$90,568.68
PERMIT		NIC	NIC	NIC
DESIGN AND PRICING CONTINGENCY	15.0%	$152,573.85	$230,855.55	$226,421.70
ESCALATION	9.0%	$91,544.31	$138,513.33	$135,853.02
TOTAL OF ALL CONSTRUCTION		**$1,510,481**	**$2,285,470**	**$2,241,575**

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM	*SUB-TOTAL*	*TOTAL*	*$/SF*
BUILDING SUMMARY				
A10	**FOUNDATIONS**		**$138,038**	$145.00
A1010	Standard Foundations	$116,208		
A1020	Special Foundations	$0		
A1030	Lowest Floor Construction	$21,830		
B10	**SUPERSTRUCTURE**		**$99,905**	$104.94
B1010	Upper Floor Construction	$0		
B1020	Roof Construction	$99,905		
B20	**EXTERIOR CLOSURE**		**$250,434**	$263.06
B2010	Exterior Walls	$169,173		
B2020	Windows	$58,688		
B2030	Exterior Doors	$22,573		
B30	**ROOFING**		**$90,735**	$95.31
B3010	Roof Coverings	$90,735		
B3020	Roof Openings	$0		
C10	**INTERIOR CONSTRUCTION**		**$83,537**	$87.75
C1010	Partitions	$42,483		
C1020	Interior Doors	$0		
C1030	Specialties/Millwork	$41,054		
C20	**STAIRCASES**		**$0**	$0.00
C2010	Stair Construction	$0		
C2020	Stair Finishes	$0		
C30	**INTERIOR FINISHES**		**$85,695**	$90.02
C3010	Wall Finishes	$25,626		
C3020	Floor Finishes	$28,084		
C3030	Ceiling Finishes	$31,985		

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	*SUB-TOTAL*	*TOTAL*	*$/SF*
BUILDING SUMMARY			
D10 CONVEYING SYSTEMS		**$0**	$0.00
D1010 Elevator	$0		
D20 PLUMBING		**$171,875**	$180.54
D2000 Plumbing	$171,875		
D30 HVAC		**$30,300**	$31.83
D3000 HVAC	$30,300		
D40 FIRE PROTECTION		**$0**	$0.00
D4000 Fire Protection	$0		
D50 ELECTRICAL		**$66,640**	$70.00
D5040 Electrical Systems	$66,640		
E10 EQUIPMENT		**$0**	$0.00
E1010 Equipment	$0		
E20 FURNISHINGS		**$0**	$0.00
E2010 Fixed Furnishings	$0		
E2020 Movable Furnishings			
F10 SPECIAL CONSTRUCTION		**$0**	$0.00
F1000 Special Construction	$0		
F20 DEMOLITION & HAZMAT REMOVALS		**$0**	$0.00
F2010 Building Elements Demolition	$0		
F2020 Hazardous Components Abatement	$0		
TOTAL DIRECT BUILDING COST (Trade Costs)		**$1,017,159**	$1,068.44

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
	GROSS FLOOR AREA CALCULATION						
	Ground floor	**952**	sf				
	TOTAL GROSS FLOOR AREA (GFA)					**952**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
033000	*CONCRETE*						
	Strip Footings	*16*	*CY*				
	Foundation Walls	*28*	*CY*				
	Spread Footings	*14*	*CY*				
	Piers	*3*	*CY*				
	Total Foundation Concrete	*61*	*CY*				
	Strip footings						
	Formwork	**266**	sf	20.00	5,320		
	Re-bar	**1,330**	lbs.	2.00	2,660		
	Concrete material; 4,500 psi	**16**	cy	175.00	2,800		
	Placing concrete	**16**	cy	130.00	2,080		
	Foundation walls						
	Formwork	**1,064**	sf	22.00	23,408		
	Re-bar	**2,394**	lbs.	2.00	4,788		
	Concrete material; 4,500 psi	**28**	cy	175.00	4,900		
	Placing concrete	**28**	cy	130.00	3,640		
	Form shelf	**133**	lf	12.00	1,596		
	Column Footings						
	Formwork	**240**	sf	22.00	5,280		
	Re-bar	**693**	lbs.	2.00	1,386		
	Concrete material	**14**	cy	175.00	2,450		
	Placing concrete	**14**	cy	130.00	1,820		
	Set anchor bolts grout plates	**5**	ea	165.00	825		
	Piers; allow at exterior						
	Formwork	**80**	sf	24.00	1,920		
	Re-bar, 300 lbs/cy	**900**	lbs	2.00	1,800		
	Concrete material	**3**	cy	175.00	525		
	Placing concrete	**3**	cy	130.00	390		
	Concrete curb at perimeter	**157**	lf	45.00	7,065		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Bituminous dampproofing at foundation walls	**532**	sf	4.00	2,128		
072100	*THERMAL INSULATION*						
	Insulation to foundation walls	**532**	sf	4.50	2,394		
312000	*EARTHWORK*						
	Strip footings						
	Excavation	**172**	cy	18.00	3,096		
	Backfill with imported material	**156**	cy	65.00	10,140		
	Spread footings						
	Excavation	**74**	cy	18.00	1,332		
	Backfill with imported material	**60**	cy	65.00	3,900		
	SOIL DISPOSAL - conversion factor 1.7 to tons						
	Load excess soils for disposal	**246**	cy	2.50	615		
	Disposal of- assumes less than RCS-1 - clean non-regulated	**418**	tn	23.00	9,614		
	Miscellaneous						
	Gravel fill beneath footings, 12"	**32**	cy	65.00	2,080		
	Perimeter drain	**133**	lf	32.00	4,256		
	Allowance for dewatering	**1**	ls	2,000.00	2,000		
	SUBTOTAL						116,208
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						-
A1030	**LOWEST FLOOR CONSTRUCTION**						
033000	*CONCRETE*						

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Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
	New Slab on grade, 5" thick	*952*	*sf*				
	Vapor barrier	**952**	sf	1.50	1,428		
	Mesh reinforcing 15% lap	**1,095**	sf	1.85	2,026		
	Concrete - 5" thick	**16**	cy	175.00	2,800		
	Placing concrete	**16**	cy	130.00	2,080		
	Moisture mitigation admixture				NR		
	Finishing and curing concrete	**952**	sf	4.00	3,808		
	Control joints - saw cut	**952**	sf	0.10	95		
	Misc.						
	Equipment pads, allowance	**1**	ls	1,000.00	1,000		
072100	*THERMAL INSULATION*						
	Insulation, 3"	**952**	sf	4.00	3,808		
312000	*EARTHWORK*						
	Slab on grade						
	Compact existing sub-grade	**952**	sf	0.50	476		
	Compacted granular fill, 12"	**37**	cy	65.00	2,405		
	Underslab drainage				NR		
	Plumbing E&B	**952**	sf	2.00	1,904		
	SUBTOTAL					21,830	
	TOTAL - FOUNDATIONS						**$138,038**
B10	***SUPERSTRUCTURE***						
B1010	**FLOOR CONSTRUCTION**						
033000	*CONCRETE*						
	No work assumed						
	SUBTOTAL					-	
B1020	**ROOF CONSTRUCTION**						
050001	*MISCELLANEOUS METALS*						
	Misc. Metals at timber framing	**1,370**	sf	2.50	3,425		
	4" dia columns	**5**	ea	4,000.00	20,000		
061800	*TIMBER CONSTRUCTION*						
	Materials						
	Doug-fir framing 10x14 w/ 6x14 purlins: FSC	**1,370**	sf	28.00	38,360		
	2" T&G Doug-fir roof decking	**1,370**	sf	8.00	10,960		
	Allowance to frame for clearstory	**40**	lf	45.00	1,800		
	Crane/lift allowance	**1**	ls	10,000.00	10,000		
	Labor	**1**	ls	15,360.00	15,360		
	SUBTOTAL					99,905	
	TOTAL - SUPERSTRUCTURE						**$99,905**
B20	***EXTERIOR CLOSURE***	*1,518*	*sf*	Total Closure			
B2010	**EXTERIOR WALLS**	1,139	sf	Total wall			
042000	*MASONRY*						
	Cast stone panels w/ cap at wall base	**132**	sf	120.00	15,840		
	4" rigid insulation polyiso	**132**	sf	5.00	660		
	Miscellaneous flashings	**132**	sf	8.00	1,056		
	Mockup				NIC		
055000	*MISC. METALS*						
	Misc. metals at masonry including loose lintels	**132**	sf	1.50	198		
	Misc. metals at wood framing	**1,139**	sf	2.00	2,278		

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
061000	*ROUGH CARPENTRY*						
	Materials						
	2x6 SPF w/ PSL posts for roof support	**1,139**	sf	15.00	17,085		
	1/2" plywood at exterior	**1,139**	sf	7.00	7,973		
	1/2" plywood at interior side of exterior wall	**1,139**	sf	7.00	7,973		
	T&G Wood paneling	**1,139**	sf	30.00	34,170		
	Labor						
	Frame exterior walls	**1**	ls	11,520.00	11,520		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Air barrier- Tyvek	**1,139**	sf	1.50	1,709		
	Miscellaneous sealants to closure	**1,139**	sf	0.75	854		
	Air barrier/flashing at windows	**304**	lf	7.00	2,128		
072100	*THERMAL INSULATION*						
	5.5" mineral wool insulation	**1,007**	sf	5.00	5,035		
	Insulation at window openings	**304**	lf	3.00	912		
076400	*CLADDING*						
	Lap wood siding and trim; maple, thermally modified	**1,007**	sf	52.38	52,747		
	Mockup				NIC		
090007	*PAINTING*						
	Finish to maple siding and trim	**1,007**	sf	5.00	5,035		
092900	*GYPSUM BOARD ASSEMBLIES*						
	No work assumed						
101400	*SIGNAGE*						
	Exterior signage, allow	**1**	ls	2,000.00	2,000		
	SUBTOTAL						169,173
B2020	**WINDOWS**	380	sf	Total Windows			
061000	*ROUGH CARPENTRY*						
	Wood blocking at openings	**304**	lf	12.00	3,648		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Backer rod & double sealant	**304**	lf	10.00	3,040		
080001	*WOOD WINDOWS*						
	Clearstory windows; operable	**120**	sf	150.00	18,000		
	Fixed sidelights/windows w/ frosted coating	**160**	sf	150.00	24,000		
089000	*LOUVERS*						
	Wood louver system	**100**	sf	100.00	10,000		
	SUBTOTAL						58,688
B2030	**EXTERIOR DOORS**						
061000	*ROUGH CARPENTRY*						
	Wood blocking at openings	**51**	lf	12.00	612		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Backer rod & double sealant	**51**	lf	11.00	561		
081110	*WOOD DOORS*						
	Frame						
	Single	**3**	ea	600.00	1,800		
	Door						
	F, flush, single	**3**	ea	1,200.00	3,600		
083323	*OVERHEAD DOOR*						
	No work assumed						

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
087100	*DOOR HARDWARE*						
	Exterior door hardware	**3**	ea	1,800.00	5,400		
	Auto openers; allow	**2**	lvs	5,000.00	10,000		
090007	*PAINTING*						
	Paint doors and frames	**3**	ea	200.00	600		
	SUBTOTAL					22,573	
	TOTAL - EXTERIOR CLOSURE						**$250,434**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
061000	*ROUGH CARPENTRY*						
	Roof blocking	**1,370**	sf	1.50	2,055		
070002	*ROOFING AND FLASHING*						
	Cedar shake roof w/ furring	**1,370**	sf	40.00	54,800		
	Ice and water	**1,370**	sf	2.50	3,425		
	6" insulated nailboard	**1,370**	sf	16.00	21,920		
	Miscellaneous Roofing						
	Miscellaneous flashings and sealants	**1,370**	sf	0.50	685		
	Gutters				NIC		
	Downspouts				NIC		
	Roof Edge Cladding/Fascia						
	Cedar edge trim and soffit and fascia	**157**	lf	50.00	7,850		
	SUBTOTAL					90,735	
B3020	**ROOF OPENINGS**						
	No work assumed						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$90,735**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
050001	*MISCELLANEOUS METALS*						
	Misc. metals & clips/hangers to partitions	**437**	sf	2.50	1,093		
061000	*ROUGH CARPENTRY*						
	2x framing, labor and materials	**437**	sf	9.00	3,933		
	1/2" plywood at each side of partition	**874**	sf	7.00	6,118		
	T&G Wood paneling	**874**	sf	30.00	26,220		
	Misc. blocking	**952**	gsf	3.00	2,856		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Miscellaneous sealants at partitions	**437**	sf	1.00	437		
072100	*THERMAL INSULATION*						
	Batt sound insulation	**437**	sf	2.00	874		
078400	*FIRESTOPPING*						
	Firestopping at partitions	**952**	gsf	1.00	952		
	SUBTOTAL					42,483	
C1020	**INTERIOR DOORS**						
081113	*HOLLOW METAL DOORS & FRAMES*						
	No work assumed						
	SUBTOTAL					-	

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
C1030	**SPECIALTIES / MILLWORK**						
055000	*MISCELLANEOUS METALS*						
	Misc. metals as req'd throughout, allowance	**952**	gsf	2.00	1,904		
	Shelving at storage allowance	**1**	ls	1,000.00	1,000		
061000	*ROUGH CARPENTRY*						
	Backer panels in electrical closets	**1**	ls	1,500.00	1,500		
064020	*INTERIOR ARCHITECTURAL WOODWORK*						
	Window sills; solid surface	**40**	lf	60.00	2,400		
	Built in bench	**12**	lf	400.00	4,800		
080002	*GLASS AND GLAZING*						
	Mirrors	**4**	ea	500.00	2,000		
101100	*VISUAL DISPLAY SURFACES*						
	No work assumed						
101400	*SIGNAGE*						
	Code singe carried w/ exterior						
	Dedication plaque	**1**	ea	1,500.00	1,500		
102110	*TOILET COMPARTMENTS*						
	Toilet and changing partition - standard	**6**	ea	1,800.00	10,800		
	Toilet and changing partition - ADA	**2**	ea	2,500.00	5,000		
	Toilet partition - urinal screen	**1**	ea	900.00	900		
102800	*TOILET ACCESSORIES*						
	Gang bathrooms	**2**	rms	3,000.00	6,000		
	Custodial closet accessories	**1**	rms	300.00	300		
	Shower accessories				NIC		
	Changing tables; allow	**2**	loc	800.00	1,600		
104400	*FIRE PROTECTION SPECIALTIES*						
	Fire extinguisher cabinets	**2**	ea	450.00	900		
	AED cabinets - allowance	**1**	ea	450.00	450		
105000	*LOCKERS*						
	No work assumed						
	SUBTOTAL					41,054	
	TOTAL - INTERIOR CONSTRUCTION						**$83,537**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
055000	*MISCELLANEOUS METALS*						
	No work assumed						
	SUBTOTAL					-	
C2020	**STAIR FINISHES**						
090005	*RESILIENT FLOORS*						
	No work assumed						
	SUBTOTAL					-	
	TOTAL - STAIRCASES						**$0**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
090002	*TILE*						
	Wall tile wainscot at wet wall only (8')	**600**	sf	36.00	21,600		

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
090007	*PAINTING*						
	Finish interior	**2,013**	sf	2.00	4,026		
	SUBTOTAL					25,626	
C3020	**FLOOR FINISHES**						
096700	*EPOXY FLOORING*						
	EPX, resinous epoxy w/ integral base	**952**	sf	28.00	26,656		
	Floor protection	**952**	sf	1.50	1,428		
	SUBTOTAL					28,084	
C3030	**CEILING FINISHES**						
064100	*ARCHITECTURAL WOODWORK*						
#REF!	T&G Wood paneling	**952**	sf	30.00	28,560		
090007	*PAINTING*						
	Finish to exposed framing and wood roof deck	**1,370**	sf	2.50	3,425		
	SUBTOTAL					31,985	
	TOTAL - INTERIOR FINISHES						**$85,695**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	No work assumed				-		
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						**$0**
D20	***PLUMBING***						
D2000	**PLUMBING, GENERALLY**						
	Equipment						
	Domestic water service (10' from foundation wall)	**1**	ls	8,000.00	8,000		
	Water meter assembly	**1**	ea	2,800.00	2,800		
	Reduced pressure backflow preventer, 2"	**1**	ea	2,500.00	2,500		
	Point of use water heater	**7**	ea	1,200.00	8,400		
	Sewage ejector pump	**1**	ea	6,500.00	6,500		
	Plumbing Fixtures & Specialties						
	Water closet	**4**	ea	2,300.00	9,200		
	Urinal	**2**	ea	2,250.00	4,500		
	Lavatory	**4**	ea	2,100.00	8,400		
	Shower (on exterior wall)	**6**	ea	2,000.00	12,000		
	Drinking fountain- assumed	**1**	ea	3,400.00	3,400		
	Janitor sink- assumed	**2**	ea	2,300.00	4,600		
	Floor drain	**4**	ea	1,800.00	7,200		
	Hose bibb	**2**	ea	500.00	1,000		
	Freezeproof hose bibb	**2**	ea	850.00	1,700		
	Domestic Water Piping						
	Copper pipe type L w/fittings & hangers	**750**	lf	53.00	39,750		
	Valves & accessories	**1**	ls	4,800.00	4,800		
	Sanitary W&V Piping						
	Sanitary waste & vent piping	**400**	lf	57.00	22,800		
	Storm Drainage						
	Storm drain piping						NR
	Roof drain						NR
	Pipe Insulation						
	Domestic water pipe insulation	**750**	lf	11.50	8,625		
	Miscellaneous						
	Coordination & PM	**1**	ls	10,000.00	10,000		
	Coring, sleeves & fire stopping	**1**	ls	1,200.00	1,200		

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
	Hydraulic lifts/rigging	**1**	ls	1,500.00	1,500		
	Commissioning support	**1**	ls	500.00	500		
	Testing and sterilization	**1**	ls	500.00	500		
	Fees & permits	**1**	ls	2,000.00	2,000		
	SUBTOTAL					171,875	
	TOTAL - PLUMBING						**$171,875**
D30	***HVAC***						
D3000	**HVAC, GENERALLY**						
	Ventilation Equipment						
	Inline exhaust fan	**1**	ea	3,000.00	3,000		
	Sheet Metal & Accessories						
	Galvanized steel ductwork	**500**	lbs	20.00	10,000		
	Duct insulation - not required				NR		
	Louvers	**2**	ea	800.00	1,600		
	Motorized damper	**2**	ea	1,250.00	2,500		
	Registers, grilles & diffusers	**10**	ea	250.00	2,500		
	Duct accessories	**1**	ls	2,000.00	2,000		
	Automatic Temperature Controls						
	Fan controls	**1**	ls	2,000.00	2,000		
	Balancing						
	System testing & balancing	**1**	ls	1,500.00	1,500		
	Miscellaneous						
	Coring, cutting, sleeves & fire stopping	**1**	ls	1,200.00	1,200		
	Coordination & PM	**1**	ls	4,000.00	4,000		
	SUBTOTAL					30,300	
	TOTAL - HVAC						**$30,300**
D40	***FIRE PROTECTION***						
D4000	**FIRE PROTECTION, GENERALLY**						
	No work in this section				0		
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						**$0**
D50	***ELECTRICAL***						
D5010	**SERVICE & DISTRIBUTION**						
	Electrical	**952**	sf	70.00	66,640		
	SUBTOTAL					66,640	
	TOTAL - ELECTRICAL						**$66,640**
E10	***EQUIPMENT***						
110000	*EQUIPMENT*						
	No work assumed						
	SUBTOTAL					-	
	TOTAL - EQUIPMENT						**$0**
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
122100	*WINDOW TREATMENT*						
	No work assumed						

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
New Bathroom/ Changing Building							
123000	*CASEWORK*						
	No work assumed						
	SUBTOTAL					-	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner				NIC		
	SUBTOTAL					-	
	TOTAL - FURNISHINGS						**$0**
F10	***SPECIAL CONSTRUCTION***						
F1000	**SPECIAL CONSTRUCTION**						
	No work assumed						
	SUBTOTAL					-	
	TOTAL - SPECIAL CONSTRUCTION						**$0**
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See summary						
	SUBTOTAL					-	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See summary						
	SUBTOTAL					-	
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$0**

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Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*
BUILDING SUMMARY				
A10	**FOUNDATIONS**		**$165,057**	$173.38
A1010	Standard Foundations	$134,902		
A1020	Special Foundations	$0		
A1030	Lowest Floor Construction	$30,155		
B10	**SUPERSTRUCTURE**		**$134,891**	$141.69
B1010	Upper Floor Construction	$0		
B1020	Roof Construction	$134,891		
B20	**EXTERIOR CLOSURE**		**$304,392**	$319.74
B2010	Exterior Walls	$174,724		
B2020	Windows	$88,322		
B2030	Exterior Doors	$41,346		
B30	**ROOFING**		**$128,043**	$134.50
B3010	Roof Coverings	$128,043		
B3020	Roof Openings	$0		
C10	**INTERIOR CONSTRUCTION**		**$390,378**	$410.06
C1010	Partitions	$127,490		
C1020	Interior Doors	$239,398		
C1030	Specialties/Millwork	$23,490		
C20	**STAIRCASES**		**$0**	$0.00
C2010	Stair Construction	$0		
C2020	Stair Finishes	$0		
C30	**INTERIOR FINISHES**		**$85,876**	$90.21
C3010	Wall Finishes	$11,888		
C3020	Floor Finishes	$39,530		
C3030	Ceiling Finishes	$34,458		

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	*SUB-TOTAL*	*TOTAL*	*$/SF*
BUILDING SUMMARY			
D10 CONVEYING SYSTEMS		**$0**	$0.00
D1010 Elevator	$0		
D20 PLUMBING		**$77,150**	$81.04
D2000 Plumbing	$77,150		
D30 HVAC		**$128,500**	$134.98
D3000 HVAC	$128,500		
D40 FIRE PROTECTION		**$0**	$0.00
D4000 Fire Protection	$0		
D50 ELECTRICAL		**$93,800**	$98.53
D5040 Electrical Systems	$93,800		
E10 EQUIPMENT		**$6,000**	$6.30
E1010 Equipment	$6,000		
E20 FURNISHINGS		**$24,950**	$26.21
E2010 Fixed Furnishings	$24,950		
E2020 Movable Furnishings			
F10 SPECIAL CONSTRUCTION		**$0**	$0.00
F1000 Special Construction	$0		
F20 DEMOLITION & HAZMAT REMOVALS		**$0**	$0.00
F2010 Building Elements Demolition	$0		
F2020 Hazardous Components Abatement	$0		
TOTAL DIRECT BUILDING COST (Trade Costs)		**$1,539,037**	$1,616.64

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
Admin Building							
	GROSS FLOOR AREA CALCULATION						
	Ground floor	**1,340**	sf				
	TOTAL GROSS FLOOR AREA (GFA)				**1,340**	***sf***	
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
033000	*CONCRETE*						
	Strip Footings	*17*	*CY*				
	Foundation Walls	*30*	*CY*				
	Spread Footings	*20*	*CY*				
	Piers	*4*	*CY*				
	Total Foundation Concrete	*71*	*CY*				
	Strip footings						
	Formwork	**294**	sf	20.00	5,880		
	Re-bar	**1,470**	lbs.	2.00	2,940		
	Concrete material; 4,500 psi	**17**	cy	175.00	2,975		
	Placing concrete	**17**	cy	130.00	2,210		
	Foundation walls						
	Formwork	**1,176**	sf	22.00	25,872		
	Re-bar	**2,646**	lbs.	2.00	5,292		
	Concrete material; 4,500 psi	**30**	cy	175.00	5,250		
	Placing concrete	**30**	cy	130.00	3,900		
	Form shelf	**147**	lf	12.00	1,764		
	Column Footings						
	Formwork	**336**	sf	20.00	6,720		
	Re-bar	**970**	lbs.	2.00	1,940		
	Concrete material	**20**	cy	175.00	3,500		
	Placing concrete	**20**	cy	130.00	2,600		
	Set anchor bolts grout plates	**7**	ea	165.00	1,155		
	Piers; allow at exterior						
	Formwork	**112**	sf	24.00	2,688		
	Re-bar, 300 lbs/cy	**1,200**	lbs	2.00	2,400		
	Concrete material	**4**	cy	175.00	700		
	Placing concrete	**4**	cy	130.00	520		
	Concrete curb at perimeter	**182**	lf	45.00	8,190		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Bituminous dampproofing at foundation walls	**588**	sf	4.00	2,352		
072100	*THERMAL INSULATION*						
	Insulation to foundation walls	**588**	sf	4.50	2,646		
312000	*EARTHWORK*						
	Strip footings						
	Excavation	**191**	cy	18.00	3,438		
	Backfill with existing material	**174**	cy	65.00	11,310		
	Spread footings						
	Excavation	**104**	cy	18.00	1,872		
	Backfill with existing material	**84**	cy	65.00	5,460		
	SOIL DISPOSAL - conversion factor 1.7 to tons						
	Load excess soils for disposal	**295**	cy	2.50	738		
	Disposal of- assumes less than RCS-1 - clean non-regulated	**502**	tn	23.00	11,546		
	Miscellaneous						
	Gravel fill beneath footings, 12"	**36**	cy	65.00	2,340		
	Perimeter drain	**147**	lf	32.00	4,704		
	Allowance for dewatering	**1**	ls	2,000.00	2,000		
	SUBTOTAL						134,902
	A1020 SPECIAL FOUNDATIONS						
	No Work in this section						
	SUBTOTAL						-
	A1030 LOWEST FLOOR CONSTRUCTION						
033000	*CONCRETE*						
	New Slab on grade, 5" thick	*1,340*	*sf*				

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
Admin Building							
	Vapor barrier	**1,340**	sf	1.50	2,010		
	Mesh reinforcing 15% lap	**1,541**	sf	1.85	2,851		
	Concrete - 5" thick	**22**	cy	175.00	3,850		
	Placing concrete	**22**	cy	130.00	2,860		
	Moisture mitigation admixture				NR		
	Finishing and curing concrete	**1,340**	sf	4.00	5,360		
	Control joints - saw cut	**1,340**	sf	0.10	134		
	Misc.						
	Equipment pads, allowance	**1**	ls	1,000.00	1,000		
072100	*THERMAL INSULATION*						
	Insulation, 3"	**1,340**	sf	4.00	5,360		
312000	*EARTHWORK*						
	Slab on grade						
	Compact existing sub-grade	**1,340**	sf	0.50	670		
	Compacted granular fill, 12"	**52**	cy	65.00	3,380		
	Underslab drainage				NR		
	Plumbing E&B	**1,340**	sf	2.00	2,680		
	SUBTOTAL					30,155	
	TOTAL - FOUNDATIONS						**$165,057**
B10	***SUPERSTRUCTURE***						
B1010	**FLOOR CONSTRUCTION**						
033000	*CONCRETE*						
	No work assumed						
	SUBTOTAL					-	
B1020	**ROOF CONSTRUCTION**						
050001	*MISCELLANEOUS METALS*						
	Misc. Metals at timber framing	**1,966**	sf	2.50	4,915		
	4" dia columns	**7**	ea	4,000.00	28,000		
061800	*TIMBER CONSTRUCTION*						
	Materials						
	Doug-fir framing 10x14 w/ 6x14 purlins: FCS	**1,966**	sf	28.00	55,048		
	2" T&G Doug-fir roof decking	**1,966**	sf	8.00	15,728		
	Crane/lift allowance	**1**	ls	12,000.00	12,000		
	Labor	**1**	ls	19,200.00	19,200		
	SUBTOTAL					134,891	
	TOTAL - SUPERSTRUCTURE						**$134,891**
B20	***EXTERIOR CLOSURE***	*1,668*	*sf*	Total Closure			
B2010	**EXTERIOR WALLS**	1,168	sf	Total wall			
042000	*MASONRY*						
	Cast stone panels w/ cap at wall base	**145**	sf	120.00	17,400		
	4" rigid insulation polyiso	**145**	sf	5.00	725		
	Miscellaneous flashings	**145**	sf	8.00	1,160		
	Mockup				NIC		
055000	*MISC. METALS*						
	Misc. metals at masonry including loose lintels	**145**	sf	1.50	218		
	Misc. metals at wood framing	**1,168**	sf	2.00	2,336		
061000	*ROUGH CARPENTRY*						
	Materials						

	CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
	Admin Building							
129		2x6 SPF w/ PSL posts for roof support	**1,168**	sf	15.00	17,520		
130		1/2" plywood at exterior	**1,168**	sf	7.00	8,176		
131		1/2" plywood at interior side of exterior wall (maple finish)	**1,168**	sf	7.00	8,176		
132		T&G Wood paneling	**1,168**	sf	30.00	35,040		
132		**Labor**						
133		Frame exterior walls	**1**	ls	11,520.00	11,520		
134								
135	*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
136		Air barrier- Tyvek	**1,168**	sf	1.50	1,752		
137		Miscellaneous sealants to closure	**1,168**	sf	0.75	876		
138		Air barrier/flashing at windows	**401**	lf	7.00	2,807		
139								
140	*072100*	*THERMAL INSULATION*						
141		5.5" mineral wool insulation	**1,023**	sf	5.00	5,115		
142		Insulation at window openings	**401**	lf	3.00	1,203		
143								
144	*076400*	*CLADDING*						
145		Lap wood siding and trim; maple, thermally modified	**1,023**	sf	52.38	53,585		
146		Mockup				NIC		
147								
148	*090007*	*PAINTING*						
149		Finish to maple siding and trim	**1,023**	sf	5.00	5,115		
150								
151	*092900*	*GYPSUM BOARD ASSEMBLIES*						
152		No work assumed						
153								
154	*101400*	*SIGNAGE*						
155		Exterior signage, allow	**1**	ls	2,000.00	2,000		
156								
157		SUBTOTAL					174,724	
158								
159	**B2020**	**WINDOWS**	500	sf	Total Windows			
160								
161	*061000*	*ROUGH CARPENTRY*						
162		Wood blocking at openings	**401**	lf	12.00	4,812		
163								
164	*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
165		Backer rod & double sealant	**401**	lf	10.00	4,010		
166								
167	*080001*	*WOOD WINDOWS*						
168		Clearstory windows; operable	**120**	sf	150.00	18,000		
169		Windows	**380**	sf	150.00	57,000		
170		Allowance for sliding window at gatekeeper	**1**	ls	1,500.00	1,500		
171								
172	*089000*	*LOUVERS*						
173		Allowance for decorative louvers	**1**	ls	3,000.00	3,000		
174		SUBTOTAL					88,322	
175								
176	**B2030**	**EXTERIOR DOORS**						
177								
178	*061000*	*ROUGH CARPENTRY*						
179		Wood blocking at openings	**102**	lf	12.00	1,224		
180								
181	*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
182		Backer rod & double sealant	**102**	lf	11.00	1,122		
183								
184	*081110*	*HOLLOW METAL*						
185		Frame						
186		Single	**6**	ea	600.00	3,600		
187		Double	**1**	ea	800.00	800		
188		Door						
189		Flush, HM single	**5**	ea	1,000.00	5,000		
190		Flush, Wood single	**3**	ea	1,200.00	3,600		
190								
191	*083323*	*OVERHEAD DOOR*						

PM&C

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
Admin Building							
	No work assumed						
087100	*DOOR HARDWARE*						
	Exterior door hardware	**8**	ea	1,800.00	14,400		
	Auto openers; allow	**2**	lvs	5,000.00	10,000		
090007	*PAINTING*						
	Paint doors and frames	**8**	ea	200.00	1,600		
	SUBTOTAL					41,346	
	TOTAL - EXTERIOR CLOSURE						**$304,392**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
061000	*ROUGH CARPENTRY*						
	Roof blocking	**1,966**	sf	1.50	2,949		
070002	*ROOFING AND FLASHING*						
	Cedar shake roof w/ furring	**1,966**	sf	40.00	78,640		
	Ice and water	**1,966**	sf	2.50	4,915		
	6" insulated nailboard	**1,966**	sf	16.00	31,456		
	Miscellaneous Roofing						
	Miscellaneous flashings and sealants	**1,966**	sf	0.50	983		
	Gutters				NIC		
	Downspouts				NIC		
	Roof Edge Cladding/Fascia						
	Cedar edge trim and soffit and fascia	**182**	lf	50.00	9,100		
	SUBTOTAL					128,043	
B3020	**ROOF OPENINGS**						
	No work assumed						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$128,043**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
050001	*MISCELLANEOUS METALS*						
	Misc. metals & clips/hangers to partitions	**1,380**	sf	2.50	3,450		
061000	*ROUGH CARPENTRY*						
	2x faming, labor and materials	**1,380**	sf	9.00	12,420		
	1/2" plywood at each side of partition	**2,760**	sf	7.00	19,320		
	T&G Wood paneling	**2,760**	sf	30.00	82,800		
	Misc. blocking	**1,340**	gsf	3.00	4,020		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
	Miscellaneous sealants at partitions	**1,380**	sf	1.00	1,380		
072100	*THERMAL INSULATION*						
	Batt sound insulation	**1,380**	sf	2.00	2,760		
078400	*FIRESTOPPING*						
	Firestopping at partitions	**1,340**	gsf	1.00	1,340		
	SUBTOTAL					127,490	
C1020	**INTERIOR DOORS**						
061000	*ROUGH CARPENTRY*						

	CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
	Admin Building							
257		Wood blocking at openings	**85**	lf	4.00	340		
258								
259	*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
260		Backer rod & double sealant	**85**	lf	3.50	298		
261								
262	*080002*	*GLASS AND GLAZING*						
263		Sidelight	**4,429**	sf	50.00	221,450		
264								
265	*081113*	*HOLLOW METAL DOORS & FRAMES*						
266		*Frames*						
267		Single	**5**	ea	600.00	3,000		
268		Premium for slider	**1**	ea	300.00	300		
269		Sidelight allowance	**32**	sf	55.00	1,760		
270								
271	*081400*	*WOOD DOORS*						
272		Single door	**5**	ea	750.00	3,750		
273								
274	*083110*	*ACCESS DOORS AND FRAMES*						
275		Access doors	**1**	ls	500.00	500		
276								
277	*087100*	*DOOR HARDWARE*						
278		Hardware; includes install	**5**	set	1,400.00	7,000		
279		Auto openers; allow				w/ exterior		
280								
281	*090007*	*PAINTING*						
282		Paint door & frame	**5**	ea	200.00	1,000		
283		SUBTOTAL					239,398	
284								
285	**C1030**	**SPECIALTIES / MILLWORK**						
286								
287	*055000*	*MISCELLANEOUS METALS*						
288		Misc. metals as req'd throughout, allowance	**1,340**	gsf	2.00	2,680		
289		Shelving at storage allowance	**1**	ls	2,000.00	2,000		
290								
291	*061000*	*ROUGH CARPENTRY*						
292		Backer panels in electrical closets	**1**	ls	1,500.00	1,500		
293								
294	*064020*	*INTERIOR ARCHITECTURAL WOODWORK*						
295		Window sills; solid surface	**71**	lf	60.00	4,260		
296								
297	*080002*	*GLASS AND GLAZING*						
298		Mirrors	**2**	ea	500.00	1,000		
299								
300	*101100*	*VISUAL DISPLAY SURFACES*						
301		No work assumed						
302								
303	*101400*	*SIGNAGE*						
304		Code singe carried w/ exterior	**5**	ea	400.00	2,000		
305		Dedication plaque	**1**	ea	1,500.00	1,500		
306								
307	*102110*	*TOILET COMPARTMENTS*						
308		No work assumed						
309								
310	*102800*	*TOILET ACCESSORIES*						
311		Single bathrooms	**2**	rms	1,500.00	3,000		
312		Custodial closet accessories				NIC		
313		Shower accessories				NIC		
314		Changing tables; allow				NIC		
315								
316	*104400*	*FIRE PROTECTION SPECIALTIES*						
317		Fire extinguisher cabinets	**2**	ea	450.00	900		
318		AED cabinets - allowance	**1**	ea	450.00	450		
319								
320	*105000*	*LOCKERS*						
321		Allowance for stff lockers	**12**	opn	350.00	4,200		
322		SUBTOTAL					23,490	
323								
324		***TOTAL - INTERIOR CONSTRUCTION***						**$390,378**

Morses Pond Beach 21-Jan-26
Wellesley, MA

Study Cost Estimate GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST

Admin Building

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

055000 *MISCELLANEOUS METALS*

No work assumed

SUBTOTAL -

C2020 STAIR FINISHES

090005 *RESILIENT FLOORS*

No work assumed

SUBTOTAL -

TOTAL - STAIRCASES **$0**

C30 INTERIOR FINISHES

C3010 WALL FINISHES

090002 *TILE*

Wall tile wainscot at wet wall only (8') **112** sf 36.00 4,032

090007 *PAINTING*

Finish interior **3,928** sf 2.00 7,856

SUBTOTAL 11,888

C3020 FLOOR FINISHES

096700 *EPOXY FLOORING*

EPX, resinous epoxy w/ integral base **1,340** sf 28.00 37,520

Floor protection **1,340** sf 1.50 2,010

SUBTOTAL 39,530

C3030 CEILING FINISHES

064100 *ARCHITECTURAL WOODWORK*

#REF! T&G Wood paneling **952** sf 30.00 28,560

090007 *PAINTING*

Finish to exposed framing and wood roof deck **1,966** sf 3.00 5,898

SUBTOTAL 34,458

TOTAL - INTERIOR FINISHES **$85,876**

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

No work assumed -

SUBTOTAL -

TOTAL - CONVEYING SYSTEMS **$0**

D20 PLUMBING

D2000 PLUMBING, GENERALLY

Equipment

Domestic water service (5' from foundation wall) **1** ls 5,000.00 5,000

Sub water meter assembly **1** ea 2,000.00 2,000

Reduced pressure backflow preventer, 2" **1** ea 2,500.00 2,500

Point of use water heater **3** ea 1,200.00 3,600

Sewage ejector pump **1** ea 6,500.00 6,500

PM&C

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
Admin Building							
	Plumbing Fixtures & Specialties						
	Water closet	**2**	ea	2,000.00	4,000		
	Lavatory	**2**	ea	2,100.00	4,200		
	Sink (First Aid)	**1**	ea	1,850.00	1,850		
	Drinking fountain- assumed	**1**	ea	3,400.00	3,400		
	Janitor sink- assumed	**1**	ea	1,550.00	1,550		
	Domestic Water Piping						
	Copper pipe type L w/fittings & hangers	**300**	lf	53.00	15,900		
	Valves & accessories	**1**	ls	1,900.00	1,900		
	Sanitary W&V Piping						
	Sanitary waste & vent piping	**200**	lf	57.00	11,400		
	Storm Drainage						
	Storm drain piping				NR		
	Roof drain				NR		
	Pipe Insulation				-		
	Domestic water pipe insulation	**300**	lf	11.50	3,450		
	Miscellaneous						
	Coordination & PM	**1**	ls	5,000.00	5,000		
	Coring, sleeves & fire stopping	**1**	ls	1,200.00	1,200		
	Hydraulic lifts/rigging	**1**	ls	1,500.00	1,500		
	Commissioning support	**1**	ls	500.00	500		
	Testing and sterilization	**1**	ls	500.00	500		
	Fees & permits	**1**	ls	1,200.00	1,200		
	SUBTOTAL					77,150	
	TOTAL - PLUMBING						**$77,150**
D30	***HVAC***						
D3000	**HVAC, GENERALLY**						
	Equipment						
	VRF condensing unit, 3 ton	**1**	ea	10,000.00	10,000		
	VRF fan coil unit	**5**	ea	2,300.00	11,500		
	VRF branch selector	**1**	ea	5,500.00	5,500		
	Split system heat pump, 1.6 ton	**1**	ea	8,000.00	8,000		
	ERU, 400 CFM	**1**	ea	6,500.00	6,500		
	Electric duct coil, 3.8 kw	**1**	ea	1,800.00	1,800		
	Sheet Metal & Accessories						
	Galvanized steel ductwork	**1,000**	lbs	20.00	20,000		
	Louvers	**2**	ea	800.00	1,600		
	Motorized damper	**2**	ea	1,250.00	2,500		
	Registers, grilles & diffusers	**15**	ea	250.00	3,750		
	Duct accessories	**1**	ls	3,000.00	3,000		
	HVAC Piping						
	Refrigerant piping	**400**	lf	46.00	18,400		
	Condensate drain piping	**125**	lf	50.00	6,250		
	Insulation						
	Duct insulation	**800**	sf	6.00	4,800		
	Pipe insulation	**525**	lf	8.00	4,200		
	Automatic Temperature Controls						
	HVAC controls	**1**	ls	10,000.00	10,000		
	Balancing						
	System testing & balancing	**1**	ls	2,000.00	2,000		
	Miscellaneous						
	Coring, cutting, sleeves & fire stopping	**1**	ls	1,200.00	1,200		
	Coordination & PM	**1**	ls	7,500.00	7,500		
	SUBTOTAL					128,500	
	TOTAL - HVAC						**$128,500**
D40	***FIRE PROTECTION***						
D4000	**FIRE PROTECTION, GENERALLY**						
	No work in this section				0		
	SUBTOTAL					-	

Morses Pond Beach
Wellesley, MA

21-Jan-26

Study Cost Estimate

GFA 952

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST

Admin Building

	TOTAL - FIRE PROTECTION						**$0**
	D50 ELECTRICAL						
	D5010 SERVICE & DISTRIBUTION						
	Electrical	**1,340**	sf	70.00	93,800		
	SUBTOTAL					93,800	
	TOTAL - ELECTRICAL						**$93,800**
	E10 EQUIPMENT						
110000	*EQUIPMENT*						
	Residential equipment; fridge, microwave misc.	**1**	ls	6,000.00	6,000		
	SUBTOTAL					6,000	
	TOTAL - EQUIPMENT						**$6,000**
	E20 FURNISHINGS						
	E2010 FIXED FURNISHINGS						
122100	*WINDOW TREATMENT*						
	Manual shades	**500**	sf	15.00	7,500		
123000	*CASEWORK*						
	Wall mounted work plam counters	**33**	lf	300.00	9,900		
	Shelving	**17**	lf	150.00	2,550		
	Allowance for misc. casework not yet shown	**1**	ls	5,000.00	5,000		
	SUBTOTAL					24,950	
	E2020 MOVABLE FURNISHINGS						
	All movable furnishings to be provided and installed by owner				NIC		
	SUBTOTAL					-	
	TOTAL - FURNISHINGS						**$24,950**
	F10 SPECIAL CONSTRUCTION						
	F1000 SPECIAL CONSTRUCTION						
	No work assumed						
	SUBTOTAL					-	
	TOTAL - SPECIAL CONSTRUCTION						**$0**
	F20 SELECTIVE BUILDING DEMOLITION						
	F2010 BUILDING ELEMENTS DEMOLITION						
	See summary						
	SUBTOTAL					-	
	F2020 HAZARDOUS COMPONENTS ABATEMENT						
	See summary						
	SUBTOTAL					-	
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$0**

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST

Site Backup

1			***31 EARTHWORK***						
2									
3		**311000**	**Site Preparation, Clearing & Demolition**						
4	311000		6' high site construction fence allowance	**2,990**	lf	13.00	38,870		
5	311000		Site construction entrance and gates and removal/restoration	**1**	loc	8,000.00	8,000		
6	311000		Mobilization & Demobilization	**1**	ea	15,000.00	15,000		
7	311000		*SITE SALVAGE ITEMS*						
8	311000		Remove and stockpile existing picnic tables - assumed	**12**	ea	100.00	1,200		
9	311000		Remove and stockpile existing volleyball net - assumed	**1**	ea	500.00	500		
10	311000		Remove and stockpile existing benches - assumed	**4**	ea	325.00	1,300		
11	311000		Remove and stockpile existing grills - assumed	**5**	ea	325.00	1,625		
12	311000		Remove and stockpile existing bike rack - assumed	**1**	ea	325.00	325		
13	311000		Remove and relocate sand volleyball court	**1,795**	sf	5.00	8,975		
14	311000		*SITE DEMOLITION AND RELOCATIONS*						
15	311000		Demolish existing concrete walk	**3,824**	sf	2.50	9,560		
16	311000		Demolish existing paving	**5,282**	sf	1.25	6,603		
17	311000		Demolish existing gravel	**4,292**	sf	0.25	1,073		
18	311000		Demolish existing playground mulch	**1,113**	sf	1.25	1,391		
19	311000		Demolish existing playground equipment	**1**	ls	1,800.00	1,800		
20	311000		Demolish existing building	**2,572**	sf	16.00	41,152		
21	311000		Demolish existing fencing	**90**	lf	5.00	450		
22	311000		Demolish existing walls	**44**	lf	95.00	4,180		
23	311000		Miscellaneous site demolition; furnishings, concrete pads, signs etc	**1**	ls	5,000.00	5,000		
24	311000		*UTILITY DEMOLITION - assumed*						
25	311000		Cut/cap utilities lines	**2**	ea	5,000.00	10,000		
26	311000		Utility structure removal	**3**	ea	850.00	2,550		
27	311000		Utility line removal	**483**	lf	25.00	Assumed NR		
28	311000		*ROADWAY WORK*						
29	311000		Sawcut	**8**	lf	8.25	66		
30	311000		*VEGETATION & TOPSOIL MANAGEMENT*						
31	311000		Clear and grub	**1**	ls	5,000.00	5,000		
32	311000		Remove existing trees	**10**	ea	850.00	8,500		
33	311000		Remove invasive species	**15,000**	sf	1.25	18,750		
34	311000		Vegetation protection fencing - allowance	**100**	lf	16.00	1,600		
35	311000		Strip + dispose topsoil	**974**	cy	37.00	36,038		
36	311000		SUBTOTAL:					229,508	
37									
38		**312000**	**Earthwork - Site**						
39	312000		Site cut to design subgrade	*3,291*	*cy*				
40	312000		Cut	**3,291**	cy	8.00	26,328		
41	312000		Store cut onsite	**138**	cy	3.50	483		
42	312000		Site fill to design subgrade	*138*	*cy*				
43	312000		Fill - from cut	**138**	cy	10.00	1,380		
44	312000		*SOIL DISPOSAL - conversion factor 1.7 to tons*						
45	312000		Load excess soils for disposal	**3,153**	cy	2.50	7,883		
46	312000		Less than RCS-1 - clean non-regulated	**5,360**	tn	23.00	123,280		
47	312000		*ESTABLISHING GRADE*						
48	312000		Sub grade establishment	**34,922**	sf	0.25	8,731		
49	312000		Fine grading throughout the site	**34,922**	sf	0.35	12,223		
50			SUBTOTAL:					180,308	
51									
52		**312500**	**Erosion Control**						
53	312500		Erosion Control around perimeter	**3,350**	lf	12.00	40,200		
54	312500		Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
55	312500		SUBTOTAL:					50,200	
56									
57		***TOTAL, DIVISION 31 EARTHWORK***							**$460,016**
58									
59		***32 EXTERIOR IMPROVEMENTS***							
60									
61		**321000**	**Flexible Paving**						

	CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
		Site Backup						
62		Asphalt Paving; parking lots - profiles assumed	*1,453*	*sf*				
63	312000	gravel base; 12" thick	**54**	cy	65.00	3,510		
64	321000	asphalt top; 2" thick	**19**	tns	225.00	4,275		
65	321000	asphalt binder; 2" thick	**19**	tns	130.00	2,470		
66		Asphalt Paving; pedestrian and utility corridor	*6,488*	*sf*				
67	312000	gravel base; 8" thick	**161**	cy	65.00	10,465		
68	321000	asphalt top; 1" thick	**41**	tns	225.00	9,225		
69	321000	asphalt binder; 2" thick	**83**	tns	130.00	10,790		
70		Overlay Milled roadways	*2,813*	*sf*				
71	321000	1.5" Top Course	**26**	tn	225.00	5,850		
72	321000	Mill (Cold Plane) Existing roadways	**313**	sy	6.00	1,878		
73		*ROAD MARKINGS AND SIGNS*						
74	321000	Parking spot ADA	**6**	ea	250.00	1,500		
75	321000	Sign allowance	**1**	ls	5,000.00	5,000		
76	321000	Pavement markings allowance	**1**	ls	5,000.00	5,000		
77	321000	SUBTOTAL:					59,963	
78								
79		**321300 Rigid Paving**						
80		Concrete sidewalks	*2,356*	*sf*				
81	312000	gravel base; 8" thick	**58**	cy	100.00	5,800		
82	321000	Broom finish concrete paving; 4" thick	**2,356**	sf	12.00	28,272		
83		SUBTOTAL:					34,072	
84								
85		**321400 Unit Paving**						
86		Concrete unit pavers on concrete slabs - plaza	*2,605*	*sf*				
87	312000	gravel base; 8" thick	**65**	cy	100.00	6,500		
88	321000	Concrete slab paving; 4" thick	**2,605**	sf	12.00	31,260		
89	321000	Concrete pavers	**2,605**	sf	28.00	72,940		
90	321000	Geotextiles	**2,605**	sf	0.55	Assumed NR		
91	321000	Edging	**248**	lf	18.00	4,464		
92	321000	SUBTOTAL:					115,164	
93	321000							
94		**312000 Aggregate Surfacing**						
95		ADA Beach mat pathway	*750*	*sf*				
96	312000	gravel base; 6" thick	**14**	cy	100.00	Assumed NR		
97	321000	ADA Beach mat	**750**	sf	12.00	9,000		
98		Boardwalk pathway	*621*	*sf*				
99	312000	gravel base; 6" thick; surface below elevated boardwalk	**12**	cy	100.00	1,200		
100	321000	Boardwalk materials	**621**	sf	175.00	108,675		
101		SUBTOTAL:					118,875	
102								
103		**321600 Curbs, Gutters, Sidewalks, & Driveways**						
104	321000	Vertical granite curb	**97**	lf	100.00	9,700		
105	321000	ADA Curb cuts	**3**	ea	850.00	2,550		
106		SUBTOTAL:					12,250	
107								
108		**323000 Site Furnishings**						
109	323000	Benches - reinstall salvaged assumed	**3**	ea	850.00	2,550		
110	323000	Picnic tables - reinstall salvaged assumed	**1**	ls	1,000.00	1,000		
111	323000	Park signage allowance	**1**	ls	25,000.00	25,000		
112	323000	Renovate existing bridge; paving, walls, rails	**413**	sf	100.00	41,300		
113	323000	Misc. new site furnishings allowance	**1**	ls	50,000.00	50,000		
114	323000	*PLAY AREAS*						
115	323000	Playground - wood fiber mulch	3,856	*sf*				
116	323000	gravel base; 8" thick	**96**	cy	100.00	9,600		
117	323000	EWF	**3,856**	sf	7.00	26,992		
118	323000	Edging	**74**	lf	45.00	3,330		
119	323000	Allowance for play equipment	**1**	ls	96,400.00	96,400		
120	323000	*FENCING*						

	CODE		DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
			Site Backup						
121	323000		6' Ht - Chain link fence	**84**	lf	100.00	8,400		
122	323000		6' Ht - Chain link double gate	**1**	ea	3,000.00	3,000		
123			Renovate existing bridge; paving, walls, rails				Assumed NR		
124			*SITE WALLS*						
125			Cast-in-place retaining wall - 3' ht.	*203*	*lf*				
126	323000		Concrete wall - smooth finish	**203**	lf	590.00	119,770		
127	323000		Credit for modular block wall	**(1)**	ls	50,000.00	(50,000)		
128	312000		Excavation	**85**	cy	100.00	8,500		
129	312000		Backfill - (assume using onsite soils)	**51**	cy	35.00	1,785		
130	334000		Wall drain	**203**	lf	22.00	4,466		
131			SUBTOTAL:					352,093	
132									
133		**329000**	**Planting**						
134		*329900*	*LAWN AND SEED - includes invasive species area*	*42,987*	*sf*				
135	329900		Topsoil 6" thick - required - swell 25%	**995**	cy	75.00	74,625		
136	329900		Scarify subgrade	**42,987**	sf	0.15	6,448		
137	329900		Power rake and hydroseed disturbed areas	**42,987**	sf	0.25	10,747		
138		*329900*	*TREES*						
139	329900		Deciduous trees - 2.5-3" cal. - assumed	**6**	ea	1,300.00	7,800		
140		*329900*	*MAINTENANCE*						
141	329900		1-yr plant maintenance	**1**	ls	1,170.00	incl. above		
142	329900		Watering to grow-in	**1**	ls	5,000.00	5,000		
143			SUBTOTAL:					104,620	
144									
145			***TOTAL, DIVISION 32 EXTERIOR IMPROVEMENTS***						**$797,037**
146									
147		***33***	***UTILITIES***						
148									
149		**331000**	**Water Utilities**						
150			*WATER UTILITIES*						
151	331000		4" CLDI	**482**	lf	67.50	32,535		
152			*CONNECTIONS*						
153	331000		Connect to existing water line; 6/8/10 (inside site)	**1**	ea	10,000.00	10,000		
154			*EXCAVATION & BACKFILL*	*482*	*lf*				
155	331000		DI gravity piping excavation	**428**	cy	46.75	20,009		
156	331000		Trench bedding	**96**	cy	38.50	3,696		
157	331000		Pressure test & chlorinate	**482**	lf	5.00	2,410		
158	331000		Allowance for temporary water service	**1**	ea	25,000.00	NR		
159	331000		Allowance for temporary support of existing utilities	**1**	ea	15,000.00	NR		
160	331000		SUBTOTAL:					68,650	
161									
162		**333000**	**Sanitary Sewerage**						
163	333000		6" PVC	**160**	lf	21.16	3,386		
164	333000		Waste water ejector pump allowance				W/ Building Cost		
165			*CONNECTIONS*						
166	333000		Connect to existing (inside site)	**2**	ea	10,000.00	20,000		
167	333000		*EXCAVATION & BACKFILL - Gravity*	*160*	*lf*				
168	333000		PVC gravity piping excavation	**142**	cy	46.75	6,639		
169	333000		Trench bedding	**47**	cy	38.50	1,810		
170	333000		Pressure testing	**160**	lf	4.00	640		
171	333000		Video Inspection	**1**	ls	2,500.00	2,500		
172	333000		SUBTOTAL:					34,975	
173									
174		**334000**	**Stormwater Utilities**						
175			No work in this section						
176	334000		SUBTOTAL:						
177									
178		**337000**	**Electrical Utilities**						
179	337000		Power riser allow	**1**	ea	3,500.00	3,500		
180	337000		Primary service 2-4" allow	**450**	lf	100.00	45,000		
181	337000		Pad mounted transformer allow			by utility			
182	337000		Pad mounted transformer grounding allow	**1**	ea	3,500.00	3,500		
183	337000		Secondary service 200A (to both, bath house and admin)	**120**	lf	90.00	10,800		

Morses Pond Beach
New Buildings and Sitework
Wellesley, MA

1/21/2026

Study Cost Estimate

	CODE	DESCRIPTION	QTY	UNIT	UNIT COST	COST	SUBTOTAL COST	TOTAL COST
		Site Backup						
184	337000	Telecommunications riser allow	**1**	ea	3,500.00	3,500		
185	337000	Telecommunications service 2-2" allow, assumes to admin building only	**500**	lf	75.00	37,500		
186	337000	Site lighting allowance			Assumes building mounted			
187	337000	Canopy lighting allowance	**1**	ls	15,000.00	15,000		
188	337000	Shed electrical, allow including power service	**600**	sf	50.00	30,000		
189	337000	EV charging stations				Assumes NIC		
190	337000	SUBTOTAL:					148,800	
191								
192		***TOTAL, DIVISION 33 UTILITIES***						**$252,425**

Total Direct Trade Costs $ 1,509,478

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST

ALTERNATES

Add Alt #1 - Paved drop-off turn around

SCOPE CARRIED IN BASE ESTIMATE						
none						
SUBTOTAL						-
ADDITIONAL SCOPE NOT IN BASE ESTIMATE						
Demolish existing paving	**6,994**	sf	1.25	8,743		
Remove curbing	**238**	lf	12.00	2,856		
Sawcut	**25**	lf	8.25	206		
Strip + dispose topsoil	**76**	cy	37.00	2,812		
Silt Fence; installation and removal - assumed	**500**	lf	12.00	w_base		
Cut+prep area	**242**	cy	25.00	6,050		
Sub/fine grade establishment	**6,539**	sf	0.60	3,923		
Asphalt Paving; drop-off turn around	*6,539*	*sf*				
gravel base; 12" thick	**242**	cy	65.00	15,730		
asphalt top; 2" thick	**84**	tns	225.00	18,900		
asphalt binder; 2" thick	**84**	tns	225.00	18,900		
Topsoil	**65**	cy	75.00	4,875		
Power rake and hydroseed disturbed areas	**2,806**	sf	0.35	982		
SUBTOTAL					83,977	
TOTAL - ALTERNATE 1						***$83,977***

Add Alt #2 - Mill & Overlay existing access road

SCOPE CARRIED IN BASE ESTIMATE						
none						
SUBTOTAL						-
ADDITIONAL SCOPE NOT IN BASE ESTIMATE						
Demolish existing gravel	**4,292**	sf	1.25	5,365		
Strip + dispose topsoil	**43**	cy	37.00	1,591		
Silt Fence; installation and removal - assumed	**2,025**	lf	12.00	24,300		
Cut+prep area	**121**	cy	25.00	3,025		
Sub/fine grade establishment	**3,268**	sf	0.60	1,961		
Asphalt Paving; new section of access road	*3,268*	*sf*				
gravel base; 12" thick	**121**	cy	65.00	7,865		
asphalt top; 2" thick	**42**	tns	225.00	9,450		
asphalt binder; 2" thick	**42**	tns	225.00	9,450		
Overlay Milled Roadways; existing access road	*12,046*	*sf*				
1.5" Top Course	**113**	tn	225.00	25,425		
Mill (Cold Plane) Existing Roadways	**1,338**	sy	6.00	8,028		
SUBTOTAL					96,460	
TOTAL - ALTERNATE 2						***$96,460***

APPENDIX Q

Total Project Budget- Detailed Breakdown

1/21/2026

Final Supplemental Feasibilty Study Project Budget

MoPo Beach & Bathhouse Project

	Budget Appropriation		
	DESIGN	**CONSTRUCTION**	**TOTAL**
CONSTRUCTION	**$ -**	**$ 6,187,526**	**$ 6,187,526**
Contractor Construction Cost	$ -	$ 6,037,526	$ 6,037,526
Site Access Road Repairs/Improvements (DPW)	$ -	$ 100,000	$ 100,000
Existing Bathhouse Abatement	$ -	$ 50,000	$ 50,000
PROFESSIONAL SERVICES & TESTING	**$ 697,900**	**$ 268,550**	**$ 966,450**
Designer Fees (Landscape, Architecture, Engineering)	$ 632,900	$ 193,550	$ 826,450
FF&E Design (in Designer Fee)			
Commissioning Services (in Designer Fee)			
Cost Estimating (in Designer Fee)			
Presentations (in Designer Fee)			
Testing & Inspections	$ 60,000	$ 60,000	$ 120,000
Hazardous Materials (Hygienist)	$ 5,000	$ 15,000	$ 20,000
OWNER'S CLERK & PROJECT MANAGER	**$ -**	**$ 270,000**	**$ 270,000**
Clerk of the Works (12 months)	$ -	$ 270,000	$ 270,000
Owner's Project Manager (FMD)	$ -	$ -	$ -
GENERAL & TEMPORARY EXPENSES	**$ 41,000**	**$ 266,000**	**$ 307,000**
Printing	$ 1,000	$ -	$ 1,000
Advertising/Bid Docs Online	$ 5,000	$ -	$ 5,000
Reimbursables	$ 15,000	$ 2,000	$ 17,000
PBC Expense	$ 1,000	$ 1,000	$ 2,000
Submittal Exchange	$ 8,000	$ 8,000	$ 16,000
FMD Support & Custodial OT	$ 1,000	$ 5,000	$ 6,000
Fire Services	$ 5,000	$ 10,000	$ 15,000
Legal	$ 5,000	$ 5,000	$ 10,000
FFE & Technology	$ -	$ 70,000	$ 70,000
Builder's Risk Insurance	$ -	$ 75,000	$ 75,000
Utilities- Construction use	$ -	$ 10,000	$ 10,000
Utilities- MLP Back Charge Electric & Fiber	$ -	$ 50,000	$ 50,000
Moving/Storage Trailer Rental	$ -	$ 30,000	$ 30,000
CONTINGENCIES	**$ 115,935**	**$ 968,411**	**$ 1,084,346**
Hard Cost Contingency (15%)	$ -	$ 928,129	$ 928,129
Soft Cost Contingency (15%)	$ 115,935	$ 40,283	$ 156,218
TOTAL BUDGET	**$ 854,835**	**$ 7,960,487**	**$ 8,815,322**
Previous Master Plan Project Budget	$ 924,835	$ 8,211,351	$ 9,136,186
Delta	$ (70,000)	$ (250,864)	$ (320,864)

DESIGN PHASE COST SUMMARY

	Master Plan Study	Supplemental Feasibility Study
ARCHITECTS & ENGINEERS	$682,900	$632,900
TESTING & COMMISSIONING	$85,000	$65,000
GENERAL SUPPLIES & SERVICES	$41,000	$41,000
CONTINGENCIES	$115,935	$115,935
TOTAL	$924,835	$854,835
DELTA		-$70,000

CONSTRUCTION PHASE COST SUMMARY

	Master Plan Study	Supplemental Feasibility Study
CONSTRUCTION	$6,319,032	$6,187,526
PROFESSIONAL SERVICES & TESTING	$287,600	$268,550
OWNER'S CLERK & PROJECT MANAGER	$313,600	$270,000
GENERAL & TEMPORARY EXPENSES	$303,000	$266,000
CONTINGENCIES	$988,119	$968,411
TOTAL	$8,211,351	$7,960,487
DELTA		-$250,864