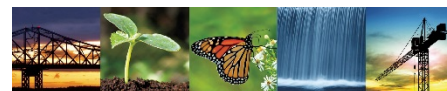




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F: 781.278.5702  
www.gza.com



May 24, 2019  
File No. 01.0171521.52

Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup  
205B Lowell Street  
Wilmington, Massachusetts 01887

Re:

Immediate Response Action (IRA) Completion Report  
East Shoreline Concentrated Flow of Tidal Flux Water  
(Former) Everett Staging Yard  
Everett, Massachusetts  
MassDEP Release Tracking Number (RTN) 3-34943

Dear Sir or Madam:

On behalf of Wynn MA, LLC ("Wynn MA"), GZA GeoEnvironmental, Inc. ("GZA") has prepared this Immediate Response Action ("IRA") Completion Report for the concentrated flow of tidal flux water into the Mystic River. The IRA work is associated with a portion of the One Broadway Encore Boston Harbor Resort project ("Site"). A Locus Plan and Site Plan are included as Figures 1 and 2, respectively. Assessment and remediation of the Site as part of redevelopment has been ongoing since October 2015 under Release Tracking Number (RTN) 3-13341. For the purposes of this filing, the IRA "Study Area" under RTN 3-34943 is defined as the eastern shoreline portion of the Site where a concentrated flow of water that contained elevated concentrations of copper was observed entering the Mystic River.

This IRA Completion Report has been prepared in accordance with 310 CMR 40.0427 of the Massachusetts Contingency Plan ("MCP"), and is subject to the Limitations presented in Appendix A. This IRA Completion report will be submitted electronically through the eDEP online filing system. A copy of the IRA Transmittal Form BWSC105 is included in Appendix B.

The disposal site under RTN 3-13341 has been designated as a Public Involvement Plan ("PIP") Site in accordance with Section 40.1404 of the MCP. A Notice of Availability of this IRA Completion Report has been emailed and/or mailed to local officials and residents on the PIP mailing list. A copy of this IRA Completion Report has also been made available at the designated information repositories, on the Encore Boston Harbor website, and on eDEP.

## EXECUTIVE SUMMARY

In May 2018, Mr. Andrew Clark of the Massachusetts Department of Environmental Protection ("MassDEP") visited the Site to observe the condition of dredge cap material that had eroded from along the shoreline at the Site. During this site visit, Mr. Clark observed a concentrated flow of water emanating from the edge of the living shoreline at the base of the coir rock roll in the area where the dredge cap soils had eroded away from the water side of the coir rock roll. Mr. Clark expressed his concern that the flow of water could be transporting contamination from the Site into the Mystic River as surface water flow. He requested that GZA obtain a sample of the water and submit the sample for laboratory analysis for Site contaminants of concern.



GZA collected the requested water sample from the concentrated flow area. The sample was submitted to Alpha Analytical of Westborough, Massachusetts, for laboratory testing.

Laboratory testing data was provided to MassDEP on May 24, 2018. Based on the presence of detectable levels of Site contaminants in the concentrated flow, MassDEP indicated that it considered this to be a Condition of Substantial Release Migration to the Mystic River from the Site. Verbal release notification of the Condition of Substantial Release Migration to MassDEP was made to MassDEP by GZA (on behalf of Wynn MA) on Friday, May 25, 2018. GZA submitted an IRA Plan describing proposed IRA activities to MassDEP on July 24, 2018.

This IRA Status Completion Report describes IRA activities and monitoring performed to date to address the Condition of Substantial Release Migration.

## **IMMEDIATE RESPONSE ACTION COMPLETION REPORT**

The information provided below addresses the requirements of the MCP for IRA Completion Reports, as outlined in 310 CMR 40.0427(4)(a) through (g). The IRA Transmittal Form (BWSC105) was submitted electronically via eDEP in accordance with the current MassDEP policy. A copy of this form is included in Appendix B of this report.

### ***(a) A description of the release or threat of release, site conditions, and surrounding receptors.***

The following sections provide a description of the Site and surrounding area conditions, and a description of the release.

#### **SITE AND SURROUNDING AREA CONDITIONS**

The IRA Study Area is a small portion of the Site at One Broadway in Everett (Figure 1). The location of the observed concentrated flow of water is shown on Figure 2. The approximate latitude and longitude for the location of the concentrated flow of water are 42.3933 degrees north and 71.0714 degrees west, respectively. The Universal Transverse Mercator ("UTM") coordinates are 4,695,523 meters north and 329,508 meters east. Construction of the Encore Boston Harbor Resort is underway at the Site; the surrounding ground surface at the Site is generally bituminous pavement, hardscape (brick and/or concrete), artificial turf, or landscaped (grass, bushes, trees, etc.). The ground surface at the Site is currently highest proximate to the resort casino building, and slopes downward from that area to the east and south towards the Mystic River. Current ground surface elevations at the Site, based on the NAVD 88 datum, range from 15 feet (proximate to the building) to elevation 10 feet proximate to the top of the Coastal Bank. Grades slope downward to about elevation 4.35 feet from the top of Coastal Bank to the bottom of the living shoreline. The observed concentrated flow of water was observed emanating at approximately elevation 2.35 to 3 feet.

The One Broadway Site is adjoined to the northeast by a vehicle maintenance and repair facility operated by the Massachusetts Bay Transportation Authority ("MBTA"); to the southeast by properties along Alford Street, including facilities operated by the Boston Water and Sewer Commission ("BWSC") and the Massachusetts Water Resources Authority ("MWRA"); to the southwest by the Mystic River; and to the northwest by railroad tracks for the MBTA Commuter Rail, beyond which are several large commercial/retail buildings associated with the Gateway Center.

The Site is located within the Boston Basin, a regional depression of bedrock consisting primarily of Cambridge Argillite, a partially metamorphosed siltstone. Site conditions generally consist of fill over a variable sequence of naturally deposited organics, sand and gravel, and silty clay over weathered rock and bedrock. Filling over naturally deposited materials occurred in the area of the Site from the late 1800s through the early 1960s. More recent naturally deposited sediments along the shoreline include sand, silt, and organics.



Depth to groundwater at the Site ranges from approximately 4 to 10 feet below ground surface and is tidally influenced. Groundwater at the Site flows generally toward the southeast on the southern portion of the Site and generally toward the south on the northern portion of the Site.

According to a Massachusetts Geographic Information System ("MassGIS") map, a copy of which is included in Appendix C, the Site is not located in or within 500 feet of a Zone II public water supply, a potentially productive aquifer, a Zone A surface water body, an Interim Wellhead Protection Area, a protected wetlands habitat, or an Area of Critical Environmental Concern. Protected open space associated with Gateway Park is located approximately 400 feet to the northwest of the Site.

Soil and groundwater at the Site have been contaminated by historic activities, including the former use of the Site as a chemical manufacturing facility. On August 18, 2015, Wynn MA and GZA submitted a RAM Plan under RTN 3-13341 documenting MCP Response Actions to be completed prior to the redevelopment of the Site. These activities were completed in May 2016, with a RAM Completion Report submitted to MassDEP on August 4, 2016. Redevelopment of the Site for construction of the resort and associated utility installation, roadway construction, and grading operation are being performed under a second RAM plan submitted to MassDEP on May 2, 2016, and modified by RAM Plan Modifications on November 16, 2016, February 2, 2017, and November 1, 2017. The active RAM Plan at the Site addresses the management and disposal of excess soils from the Site, the treatment and discharge of impacted groundwater as necessary to perform excavation and construction activities below the groundwater table, and the installation of engineering controls to mitigate future exposures to contaminated soils.

#### RELEASE HISTORY

On May 11, 2018, Mr. Andrew Clark of MassDEP observed a concentrated flow of water emanating from the edge of the living shoreline at the base of the coir rock roll in the area where dredge cap soils had eroded away from the water side of the coir rock roll. Mr. Clark expressed his concern that the flow of water could be transporting contamination from the Site into the Mystic River as surface water flow. On May 15, 2018 Mr. Clark requested that GZA obtain a sample of the observed concentrated flow of water and submit the sample for laboratory analysis for Site contaminants of concern. GZA collected the requested water sample on May 16, 2018 and submitted it to Alpha Analytical Laboratory in Westborough, Massachusetts, for laboratory testing.

Laboratory testing data was provided to MassDEP on May 24, 2018. Based on the presence of detectable levels of Site contaminants in the concentrated flow, MassDEP indicated that it considered this to be a Condition of Substantial Release Migration to the Mystic River from the Site. Verbal release notification of the Condition of Substantial Release Migration was made to MassDEP by GZA (on behalf of Wynn MA) on Friday, May 25, 2018. GZA submitted an IRA Plan describing proposed IRA activities to MassDEP on July 24, 2018; followed by and IRA Status Report submitted on November 28, 2018 summarizing IRA activities.

***(b) A description of the work completed, including work undertaken in response to any conditions of approval imposed by the Department, and any work undertaken at the site that was not included in the scope of the Immediate Response Action Plan, where submitted; and (c) All investigatory and monitoring data obtained during the implementation of the Immediate Response Action.***

Between July 24, 2018, and March 29, 2019, GZA personnel and others conducted the following activities to further evaluate and monitor the concentrated flow of tidal flux water:



*Concentrated Flow Observation and Monitoring and Dredge Cap Repair.*

From July 24 through August 8, 2018, GZA observed on a nearly daily basis, as the tidal schedule and work hours allowed, that the concentrated flow of water would become visible during the outgoing tide when water levels dropped to approximately elevation 3.5 feet (NAVD88 datum).

Between August 2 and August 9, 2018, AMEC/Foster Wheeler and SPS New England, Inc. (the dredge designer/LSP and contractor, respectively) commenced repair of the dredge cap where the cap had eroded, which had resulted in the observed concentrated flow condition. This work was performed in accordance with an Amended Order of Conditions from the Everett Conservation Commission, minor project modification to the Chapter 91 license, amendment to the Water Quality Certification, and modification to the United States Army Corps of Engineers permit and was not a specific response action for this IRA. The original dredge cap material was primarily sand and silt material with reduced permeability and was eroded due to a combination of a tidal flux/groundwater runnel and storm surges during the winter and spring of 2018. The dredge cap repair material consisted of coarser material (less than 3-inch diameter rounded stone) which has a higher permeability and is more resistant to erosion. Refer to Appendix D for attached photographs documenting the dredge cap repair work.

Upon completion of the dredge cap repair work, GZA continued to monitor the area on a periodic basis (at low tide) to see if the concentrated flow of water was still present. As of March 29, 2019, GZA personnel have not observed a concentrated flow of water materialize in this area.

***(d) A succinct statement on the findings and conclusions of the Immediate Response Action.***

The repairs to the dredge cap, although not a specific response action for this IRA, re-established the shoreline elevations that existed prior to erosion of the dredge cap and the observation of the concentrated flow of water. The corrected ground/cap materials and elevations appear to have eliminated the concentrated flow of water and the resulting Condition of Substantial Release Migration.

***(e) Details and documentation on the management of any Remediation Waste, Remedial Wastewater and/or Remedial Additives managed at the site as part of the Immediate Response Action.***

No Remediation Wastes were generated during the implementation of IRA activities.

***(f) A description of any ongoing activities related to the Immediate Response Action that will be conducted at the site, including monitoring activities, security measures and the maintenance of fences, caps and other passive systems.***

The IRA activities associated with RTN 3-34943 are complete and no ongoing activities are associated with this IRA. Wynn MA is continuing response actions directed at achieving a Permanent Solution for RTN 3-13341. The BWSC107 Transmittal Form that has been provided with this submittal to link the IRA RTN 3-34943 with the main site RTN (3-13341) will serve as documentation that any future response actions will be reported under the main site RTN.

***(g) A description of any ongoing activities related to the Immediate Response Action that will be conducted at the site as part of Comprehensive Response Actions.***

As noted above, future response actions in the Study Area will be completed under RTN 3-13341.



## **PUBLIC INVOLVEMENT**

As noted above, local officials and residents on the PIP mailing list have been notified regarding the completion of IRA activities in accordance with 310 CMR 40.01403(11)(e); copies of the letters are included in Appendix E.

Please contact the undersigned at (781) 278-3700 if you have questions concerning this IRA Completion Report.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'Daniel Scanlon'.

Daniel Scanlon  
Assistant Project Manager

A handwritten signature in blue ink, appearing to read 'Matthew Smith'.

Matthew Smith  
Consultant/Reviewer

A handwritten signature in blue ink, appearing to read 'Lawrence Feldman'.

Lawrence Feldman, LSP  
Senior Principal

Attachments: Figure 1 - Locus Plan  
Figure 2 - Site Plan  
Appendix A - Limitations  
Appendix B - MassDEP Transmittal Form BWSC105  
Appendix C – MassGIS  
Appendix D – Photographs

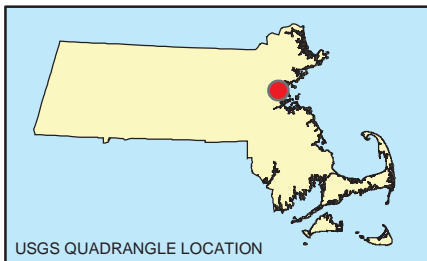


## Figures





Copyright © 2013 National Geographic Society, i-cubed



SOURCE : THIS MAP CONTAINS THE ESRI ARCGIS ONLINE USA TOPOGRAPHIC MAP SERVICE, PUBLISHED DECEMBER 12, 2009 BY ESRI ARCGIS SERVICES AND UPDATED AS NEEDED. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

Data Supplied by :



PROJ. MGR.: MMS  
DESIGNED BY: MMS  
REVIEWED BY: LF  
OPERATOR: EMD

DATE: 3-21-2019

**LOCUS PLAN**  
**ONE BROADWAY**  
**EVERETT, MASSACHUSETTS**

JOB NO.  
01.0171521.52  
FIGURE NO.  
**1**



**FIGURE 2- CONCENTRATED FLOW OF TIDAL FLUX SURFACE WATER AND APPROXIMATE DREDGE CAP REPAIR AREA**

The figure consists of two plan views of a coastal area, likely a harbor or inlet, showing proposed and existing features.

**Left Plan View:**

- Topography:** Contours show elevations ranging from approximately -10 to +15 feet.
- Proposed Features:** Includes a "PROPOSED LIVING SHORELINE WITH COIR WRAPPED ROCK ROLL (TYP.) (APPROX. 23,180 SF)", "OUTSIDE ISS LIMITS PLACE 1 FOOT THICK LAYER OF 25-100 LB COBBLES WITH COASTAL BANK PLANTING SOIL PLACED IN BETWEEN VOIDS", "MATCH ISS LIMIT. FIELD VERIFY.", "PROPOSED SUBGRADE CONTOURS (TYP.)", "ALONG GRAVITY WALL PLACE 1-FOOT THICK LAYER OF 25-100 LB COBBLES WITH COASTAL BANK PLANTING SOIL PLACED IN BETWEEN VOIDS", "PROPOSED RETAINING WALL", "SUBGRADING CONTOURS SHOW GRADING FOR LIVING SHORELINE. ADDITIONAL EXCAVATION REQUIRED FOR INSTALLATION OF CONCRETE RETAINING WALL AND CONTINUOUS CONCRETE LIGHT POLE BASE. SEE SHEET W-4201 FOR CONCRETE RETAINING WALL AND CONCRETE LIGHT POLE BASE.", "PROPOSED COIR WRAPPED ROCK ROLL SILL SET AT EL. +4.35 AT ±50 ON CENTER (TYP.)", "FACE OF WALL N: 2,968,574.48 E: 771,821.81", "FACE OF WALL N: 2,968,688.28 E: 771,914.28", "FACE OF WALL N: 2,968,690.2 E: 771,919.34".
- Section Markers:** A-A, B-B, C-C, D-D, E-E.
- Notes:** "LOCATION OF OBSERVED EXISTING SALT MARSH TO BE PROTECTED DURING CONSTRUCTION", "APPROXIMATE LIMITS OF IN-SITU SOLIDIFICATION STABILIZATION (ISS) REMEDIATION WORK (SEE GENERAL NOTE 3 THIS SHEET)".
- Annotations:** A red box highlights the "Approximate location of observed concentrated flow of tidal flux surface water prior to August 9, 2018". A blue box at the bottom indicates the "Approximate limits of dredge cap repair activities".

**Right Plan View:**

- Topography:** Continuation of contours from the left view.
- Proposed Features:** Includes "PROPOSED COIR ROLLS (TYP.)", "LIVING SHORELINE PROPOSED 13,000± S.F. COASTAL BANK CREATION (WIDTH VARIES)", "PROPOSED HARBOR WALK", "PROPOSED CONTINUOUS CONCRETE LIGHT POLE BASE (TYP.)", "PROPOSED RETAINING WALL (±150')", "PROPOSED LIVING SHORELINE WITH COIR WRAPPED ROCK ROLL (TYP.)", "PROPOSED BULKHEAD".
- Section Markers:** A-A, B-B, C-C, D-D, E-E.
- Notes:** "LOCATION OF OBSERVED EXISTING SALT MARSH TO BE PROTECTED DURING CONSTRUCTION", "PROPOSED COIR WRAPPED ROCK ROLL SILL SET AT EL. +3.8 WITHIN SALT MARSH AREA SPACED AT ±50 ON CENTER (TYP.)", "PROPOSED COIR WRAPPED ROCK ROLL SILL SET AT EL. +4.35 AT ±50 ON CENTER (TYP.)".

## Approximate limits of dredge cap repair activities

PLAN

PLAN

EXISTING CONTOUR  
PROPOSED CONTOUR  
EXISTING SALT MARSH  
PROPOSED FLOW DIRECTION

LIST OF PLANTINGS IN SALT MARSH CREATION AREA				
SPECIES	COMMON NAME	TYPE	SIZE	NUMBER OF PLANTING
SPARTINA ALTERNIFLORA	SALT MARSH CORD GRASS	PLUG	6"	10,000
SPARTINA PATENS	SALT MEADOW CORD GRASS		6"	1000
DISTICHLIS SPICATA	SALT GRASS		6"	1000
VARIOUS NATIVE SPECIES	COASTAL BANK SEED MIX		-	5 LBS / 1000 S.F.

REVISIONS ISSUED IN BULLETIN 020

General Notes:

P 702.770.5000  
E 702.770.5003

[illegible]

**Key Plan:**



W.1201.S

PLOT STAMP: 1/6/2017 7:56:17 PM

1. REFER TO SHEET C.0002 FOR GENERAL NOTES.
2. REFER TO SHEET L-GL-10.16 FOR COASTAL BANK PLANTING PLAN AND PLANTING SCHEDULE.
3. MATERIAL REMOVED FROM WITHIN THE IN-SITU SOLIDIFICATION/ STABILIZATION (ISS) MIXED SOILS SHALL BE STOCKPILED FOR CHARACTERIZATION OF MATERIAL BEFORE REMOVAL FROM THE SITE.

1. COASTAL BANK SOIL BORROW AND SALT MARSH SOIL BORROW SHALL BE A MINIMUM OF 2 FEET THICK OVER LOW pH IN-SITU SOLIDIFICATION/ STABILIZATION (ISS) AREA.
2. COIR ROCK ROLL:
  1. MATERIAL WITHIN COIR ROCK ROLL SHALL CONSIST OF 25-100 LB COBBLES WITH ALL VOID SPACE FILLED WITH SALT MARSH SOIL BORROW.
3. SALT MARSH CREATION AREA:
  - 3.1. OWNER'S COASTAL WETLAND SCIENTIST WILL PERFORM SALINITY TESTING AT THE SITE. COASTAL

WETLAND SCIENTIST WILL PROVIDE SALINITY TEST RESULTS TO CONTRACTOR TO INFORM THE NURSERIES OF THE SALINITY LEVELS TO PREPARE THE PLANT MATERIALS.

- 3.2. INSTALLATION OF STAKED SEDIMENTATION FENCE WILL BE REQUIRED AT SALT MARSH CREATION AREA PRIOR TO THE INSTALLATION OF THE COIR COBBLE ROLL. THE COIR COBBLE ROLL WILL BE INSTALLED PRIOR TO PLACEMENT OF SALT MARSH FILL.
- 3.3. AS FEASIBLE, SALT MARSH PLANTING IN MAY OR JUNE IS PREFERRED. SALT MARSH CREATION WORK SHOULD OCCUR AT LOW TIDE IN ORDER TO PERFORM WORK IN THE DRY AND REDUCE SEDIMENTATION.

Note: Markups by GZA, MMS, 11-24-2018  
for IRA Status Report No. 1





## **Appendix A - Limitations**



## USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

## STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.
4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

## SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

## COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.





## SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.
9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.
10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

## INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

## ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

## ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

## CONCEPTUAL SITE MODEL

14. Our opinions were developed, in part, based upon a comparison of site data to conditions anticipated within our Conceptual Site Model (CSM). The CSM is based on available information, and professional judgment. There are rarely sufficient data to develop a unique CSM. Therefore observations over time, and/or space, may vary from those depicted in the CSM provided in this report. In addition, the CSM should be evaluated and refined (as appropriate) whenever significant new information and/or data is obtained.

## RISK CHARACTERIZATION

15. Our risk evaluation was performed in accordance with generally accepted practices of appropriate Federal and/or state regulatory agencies, and of other consultants undertaking similar studies at the same time, for similar purposes, and under similar circumstances. The findings of the risk evaluation are dependent on the numerous assumptions and uncertainties inherent in the risk characterization process. Sources of the uncertainty may include Site conditions; Site use; the nature, extent, concentration and distribution of contaminants; and the available toxicity and/or health/risk based regulatory information. Consequently, the findings of the risk characterization are not an absolute



characterization of actual risks; but rather serve to highlight potential incremental risks associated with activities indicated in the Report. Actual risks may be other than indicated in the Report.





## **Appendix B – MassDEP Transmittal Form BWSC105**



**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC 105**

**Immediate Response Action (IRA) Transmittal Form**

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3 - 34943

**A. SITE LOCATION:**

1. Release Name/Location Aid: ENCORE BOSTON HARBOR
2. Street Address: 1 HORIZON WAY
3. City/Town: EVERETT 4. Zip Code: 021490000
- ☐ 5. Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.
- ☐ a. CERCLA ☐ b. HSWA Corrective Action ☐ c. Solid Waste Management
- ☐ d. RCRA State Program (21C Facilities)

**B. THIS FORM IS BEING USED TO: (check all that apply)**

1. List Submittal Date of Initial IRA Written Plan (if previously submitted): \_\_\_\_\_
- ☐ 2. Submit an **Initial IRA Plan**.
- ☐ 3. Submit a **Modified IRA Plan** of a previously submitted written IRA Plan.
- ☐ 4. Submit an **Imminent Hazard Evaluation**. (check one)
- ☐ a. An Imminent Hazard exists in connection with this Release or Threat of Release.
- ☐ b. An Imminent Hazard does not exist in connection with this Release or Threat of Release.
- ☐ c. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
- ☐ d. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.
- ☐ 5. Submit a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard**.
- ☐ 6. Submit an **IRA Status Report**
- ☐ 7. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
- a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
- b. Frequency of Submittal: (check all that apply)
- ☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
- ☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
- ☐ iii. A Remedial Monitoring Report(s) submitted every six months, concurrent with an IRA Status Report.
- ☐ iv. A Remedial Monitoring Report(s) submitted annually, concurrent with an IRA Status Report.
- c. Number of Remedial Systems and/or Monitoring Programs: \_\_\_\_\_

A separate BWSC105A, IRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.





Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC 105

Immediate Response Action (IRA) Transmittal Form

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3 - 34943

☒ 8. Submit an **IRA Completion Statement**.

☒ a. Check here if future response actions addressing this Release or Threat of Release notification condition will be conducted as part of the Response Actions planned or ongoing at a Site that has already been Tier Classified under a different Release Tracking Number (RTN)

b. Provide Release Tracking Number of Tier Classified Site (Primary RTN): 3 13341

These additional response actions must occur according to the deadlines applicable to the Primary RTN. Use the Primary RTN when making all future submittals for the site unless specifically relating to this Immediate Response Action.

☐ 9. Submit a **Revised IRA Completion Statement**.

☐ 10. Submit a **Plan for the Application of Remedial Additives** near a sensitive receptor, pursuant to 310 CMR 40.0046(3).

(All sections of this transmittal form must be filled out unless otherwise noted above)

**C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:**

1. Media Impacted and Receptors Affected: (check all that apply)
- |   |   |   |
|---|---|---|
| <input type="checkbox"/> a. Paved Surface       | <input type="checkbox"/> b. Basement          | <input type="checkbox"/> c. School                    |
| <input type="checkbox"/> d. Public Water Supply | <input type="checkbox"/> e. Surface Water     | <input type="checkbox"/> f. Zone 2                    |
| <input type="checkbox"/> g. Private Well        | <input type="checkbox"/> h. Residence         | <input type="checkbox"/> i. Soil                      |
| <input type="checkbox"/> j. Groundwater         | <input type="checkbox"/> k. Sediments         | <input type="checkbox"/> l. Wetland                   |
| <input type="checkbox"/> m. Storm Drain         | <input type="checkbox"/> n. Indoor Air        | <input type="checkbox"/> o. Air                       |
| <input type="checkbox"/> p. Soil Gas            | <input type="checkbox"/> q. Sub-Slab Soil Gas | <input type="checkbox"/> r. Critical Exposure Pathway |
| <input type="checkbox"/> s. NAPL                | <input type="checkbox"/> t. Unknown           |   |
- ☒ r. Others Specify: SURFACEWATER/LIVING SHORELINE
2. Sources of the Release or TOR: (check all that apply)
- |  |  |                                     |
|--|--|-------------------------------------|
| <input type="checkbox"/> a. Transformer  | <input type="checkbox"/> b. Fuel Tank                                  | <input type="checkbox"/> c. Pipe    |
| <input type="checkbox"/> d. OHM Delivery | <input type="checkbox"/> e. AST  | <input type="checkbox"/> f. Drums   |
| <input type="checkbox"/> g. Tanker Truck | <input type="checkbox"/> h. Hose                                       | <input type="checkbox"/> i. Line    |
| <input type="checkbox"/> j. UST          | Describe: _____  | <input type="checkbox"/> k. Vehicle |
| <input type="checkbox"/> l. Boat/Vessel  |  |                                     |
| <input type="checkbox"/> m. Unknown      | <input checked="" type="checkbox"/> n. Other: HISTORICAL MANUFACTURING |                                     |
3. Type of Release or TOR: (check all that apply)
- |  |  |   |                                      |
|--|--|---|--------------------------------------|
| <input type="checkbox"/> a. Dumping      | <input type="checkbox"/> b. Fire                                       | <input type="checkbox"/> c. AST Removal | <input type="checkbox"/> d. Overfill |
| <input type="checkbox"/> e. Rupture      | <input type="checkbox"/> f. Vehicle Accident                           | <input type="checkbox"/> g. Leak        | <input type="checkbox"/> h. Spill    |
| <input type="checkbox"/> i. Test failure | <input type="checkbox"/> j. TOR Only                                   |   |                                      |
| <input type="checkbox"/> k. UST Removal  | Describe: _____  |   |                                      |
| <input type="checkbox"/> l. Unknown      | <input checked="" type="checkbox"/> m. Other: HISTORICAL MANUFACTURING |   |                                      |
4. Identify Oils and Hazardous Materials Released: (check all that apply)
- |  |   |
|--|---|
| <input type="checkbox"/> a. Oils         | <input type="checkbox"/> b. Chlorinated Solvents                                |
| <input type="checkbox"/> c. Heavy Metals | <input checked="" type="checkbox"/> d. Others Specify: HISTORICAL MANUFACTURING |

**D. DESCRIPTION OF RESPONSE ACTIONS:** (check all that apply, for volumes list cumulative amounts)

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> 1. Assessment and/or Monitoring Only      | <input type="checkbox"/> 2. Temporary Covers or Caps                        |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials  | <input type="checkbox"/> 4. Temporary Water Supplies                        |
| <input type="checkbox"/> 5. Structure Venting System/HVAC Modification System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery                          | <input type="checkbox"/> 8. Fencing and Sign Posting                        |
| <input type="checkbox"/> 9. Groundwater Treatment Systems                     | <input type="checkbox"/> 10. Soil Vapor Extraction                          |
| <input type="checkbox"/> 11. Remedial Additives                               | <input type="checkbox"/> 12. Air Sparging                                   |
| <input type="checkbox"/> 13. Active Exposure Pathway Mitigation System        | <input type="checkbox"/> 14. Passive Exposure Pathway Mitigation System     |



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**D. DESCRIPTION OF RESPONSE ACTIONS: (cont.)**

☐ 15. Excavation of Contaminated Soils.

☐ a. Re-use, Recycling or Treatment

☐ i. On Site

Estimated volume in cubic yards \_\_\_\_\_

☐ ii. Off Site

Estimated volume in cubic yards \_\_\_\_\_

iiia. Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

iiib. Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

iiic. Describe: \_\_\_\_\_

☐ b. Store

☐ i. On Site

Estimated volume in cubic yards \_\_\_\_\_

☐ ii. Off Site

Estimated volume in cubic yards \_\_\_\_\_

iiia. Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

iiib. Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

☐ c. Landfill

☐ i. Cover

Estimated volume in cubic yards \_\_\_\_\_

Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

☐ ii. Disposal

Estimated volume in cubic yards \_\_\_\_\_

Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

☐ 16. Removal of Drums, Tanks, or Containers:

a. Describe Quantity and Amount: \_\_\_\_\_

b. Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

c. Receiving Facility: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

☐ 17. Removal of Other Contaminated Media:

a. Specify Type and Volume: \_\_\_\_\_

☒ 18. Other Response Actions:

Describe: REPLACEMENT OF ERODED DREDGE CAP MATERIAL

☐ 19. Use of Innovative Technologies:

Describe: \_\_\_\_\_



Massachusetts Department of Environmental Protection  
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**E. LSP SIGNATURE AND STAMP:**

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal 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,

> if Section B of this form indicates that an **Immediate Response Action Plan** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Imminent Hazard Evaluation** is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation comply(ies) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> if Section B of this form indicates that an **Immediate Response Action Status Report** and/or a **Remedial Monitoring Report** is(are) being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Immediate Response Action Completion Statement** or a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified 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 #: 8107

2. First Name: LAWRENCE 3. Last Name: FELDMAN

4. Telephone: 781-278-3700 5. Ext:  6. Email:

7. Signature: LAWRENCE FELDMAN

8. Date: 5/28/2019 (mm/dd/yyyy)

9. LSP Stamp:







**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC 105**

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**F. PERSON UNDERTAKING IRA:**

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: WYNN MA LLC
3. Contact First Name: ROBERT 4. Last Name: DESALVIO
5. Street: 101 STATION LANDING STE 2200 6. Title: PRESIDENT
7. City/Town: MEDFORD 8. State: MA 9. Zip Code: 021555134
10. Telephone: 857-770-7000 11. Ext:  12. Email: robert.desalvio@encorebostonharbor.com; robert.desa

**G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:**

- ☒ Check here to change relationship
- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
- ☒ e. Other RP or PRP Specify Relationship: 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:

**H. REQUIRED ATTACHMENT AND SUBMITTALS:**

- ☐ 1. Check here if any Remediation Waste, generated as a result of this IRA, will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement. If this box is checked, you must submit one of the following plans, along with the appropriate transmittal form.
- ☐ a. A Release Abatement Measure (RAM) Plan (BWSC106) ☐ b. Phase IV Remedy Implementation Plan (BWSC108)
- ☐ 2. 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 approval(s) issued by MassDEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the implementation of an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
- ☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the submittal of a Completion Statement for an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
- ☐ 5. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to BWSC.eDEP@state.ma.us.
- ☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC 105**

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**I. CERTIFICATION OF PERSON UNDERTAKING IRA:**

1. I, ROBERT DESALVIO, attest under the pains and penalties of 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 the/those individual(s) immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge, information and belief, true, accurate and complete; (iii) that, to the best of my knowledge, information and belief, I/the person(s) or entity(ies) on whose behalf this submittal is made satisfy(ies) the criteria in 310 CMR 40.0183(2); (iv) that I/the person(s) or entity(ies) on whose behalf this submittal is made have provided notice in accordance with 310 CMR 40.0183(5); and (v) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is/are 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: ROBERT DESALVIO 3. Title: PRESIDENT

4. For: WYNN MA LLC 5. Date: 5/28/2019 (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: \_\_\_\_\_

8. City/Town: \_\_\_\_\_ 9. State: \_\_\_\_\_ 10. Zip Code: \_\_\_\_\_

11. Telephone: \_\_\_\_\_ 12. Ext: \_\_\_\_\_ 13. Email: \_\_\_\_\_

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 (DEP USE ONLY:)

**Received by DEP on**  
**5/28/2019 2:58:51 PM**



## **Appendix C – MassGIS**



# MassDEP - Bureau of Waste Site Cleanup

## Site Information:

FORMER EVERETT STAGING YARD  
1 HORIZON WAY EVERETT, MA  
3-000013341

### NAD83 UTM Meters:

4695723mN, 329609mE (Zone: 19)  
January 20, 2015

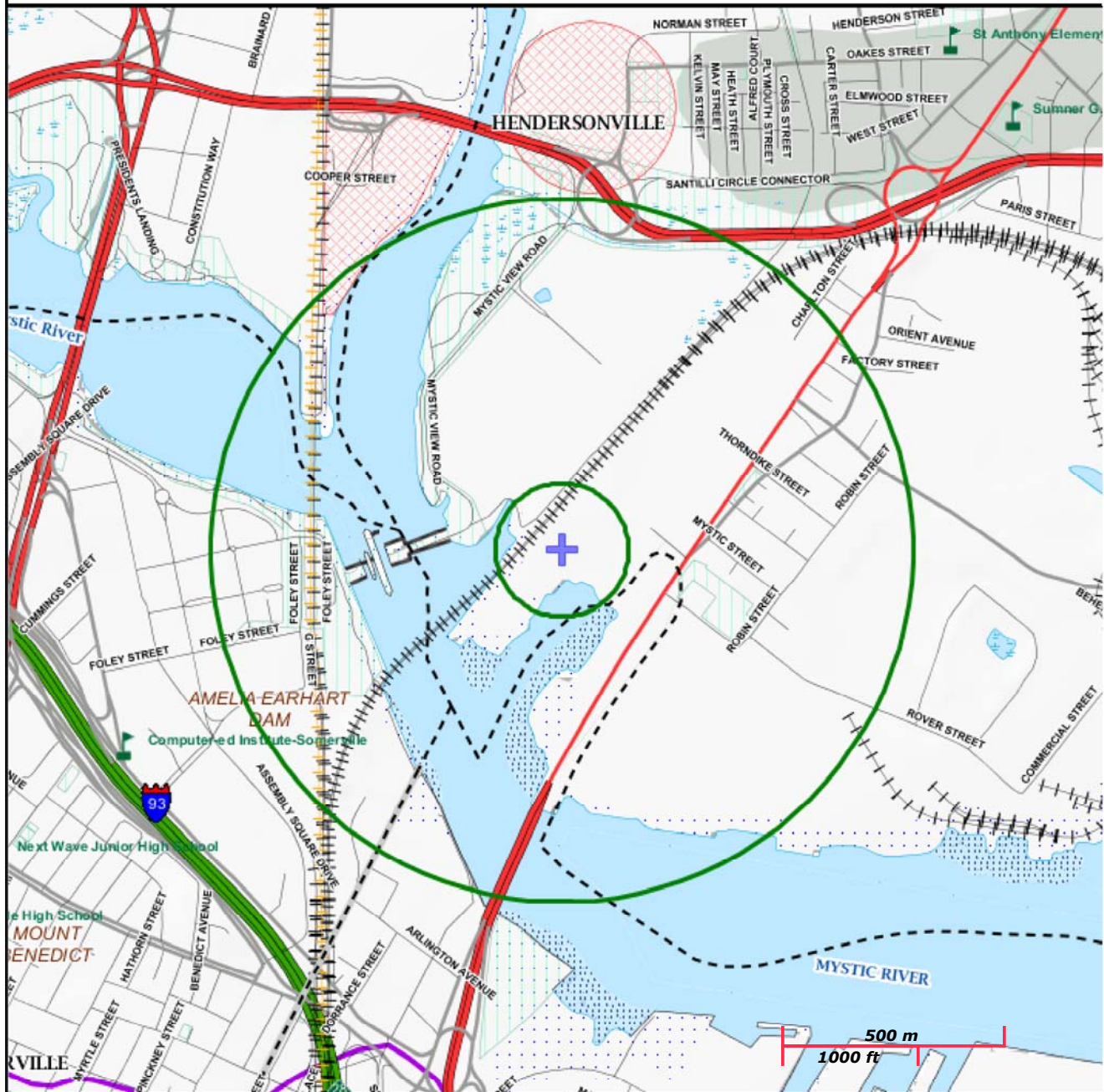
## Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:  
<http://www.mass.gov/mgis/>



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection



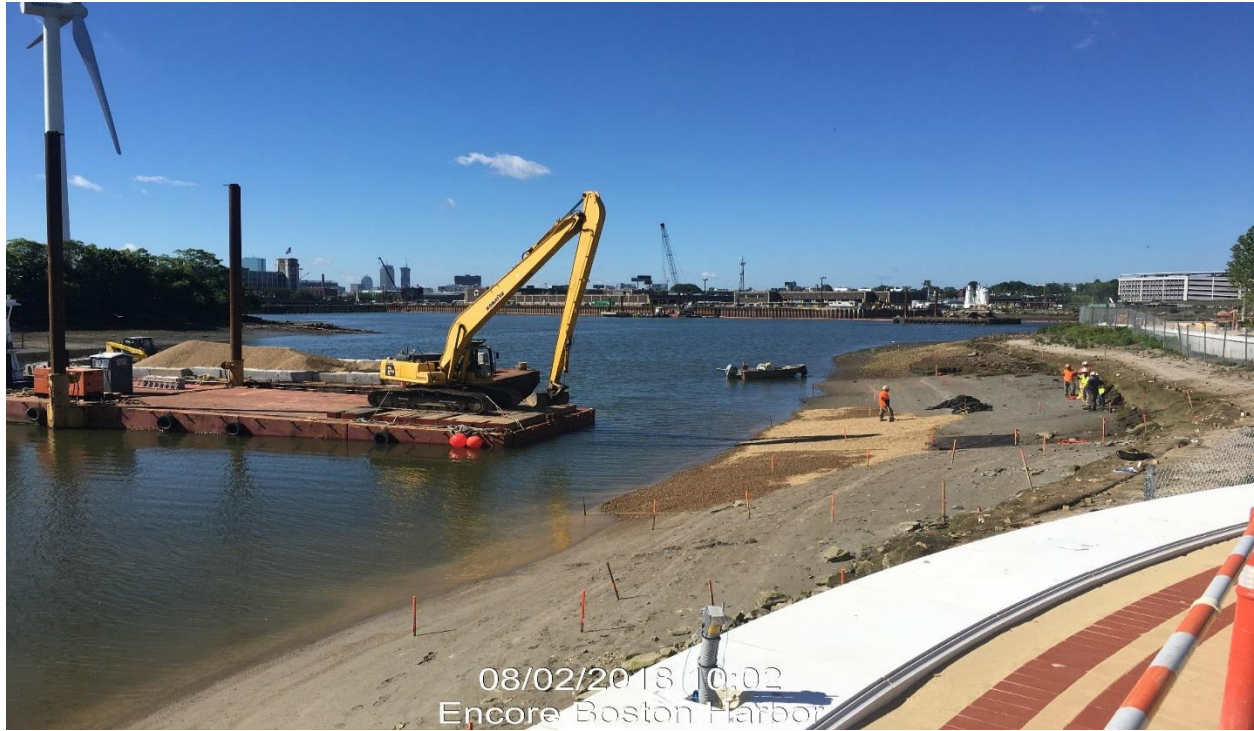
Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail	PWS Protection Areas: Zone II, IWPA, Zone A	
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct	Hydrography: Open Water, PWS Reservoir, Tidal Flat	
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam	Wetlands: Freshwater, Saltwater, Cranberry Bog	
Aquifers: Medium Yield, High Yield, EPA Sole Source	FEMA 100yr Floodplain; Protected Open Space; ACEC	
Non Potential Drinking Water Source Area: Medium, High (Yield)	Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential	
	Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.	



## **Appendix D – Photographs**



PHOTOGRAPHS OF DREDGE CAP REPAIR WORK



Photograph #1: Start of dredge cap repair work, eastern shoreline of Site.



Photograph #2: Nearing completion of dredge cap repair work, eastern shoreline of Site.