

Notice of Intent Geotechnical Investigation

**I-90 Allston Multimodal Project
Soldiers Field Road
Boston, Massachusetts**

Submitted to:

**City of Boston
Conservation Commission
November 20, 2019**



TETRA TECH

November 20, 2019

Amelia Croteau, Executive Secretary
City of Boston
Conservation Commission
Boston City Hall, Room 709
Boston, MA 02201

**Re: Notice of Intent
Geotechnical Investigation
I-90 Allston Multimodal Project
Soldiers Field Road
Boston, Massachusetts**

Dear Ms. Croteau:

On behalf of the Massachusetts Department of Transportation, Highway Division (MassDOT Highway Division), Tetra Tech is pleased to submit this Notice of Intent (NOI) for geotechnical borings in the Charles River in support of the I-90 Allston Multimodal Project. Geotechnical borings will be performed in order to collect information on underlying sediments to assist in the design of the proposed temporary trestle associated with the proposed improvements to the I-90/Allston Interchange.

As a state agency, MassDOT is exempt from municipal bylaws and regulations; however, MassDOT will comply with applicable rules and regulations to the extent practicable. In addition, MassDOT is not required to notify project abutters.

This NOI is being submitted pursuant to the Massachusetts Wetlands Protection Act (MA WPA, MGL Ch. 131, s. 40) regulations (310 CMR 10.00 et seq.). Please find enclosed two (2) hard copies and one (1) digital copy of the NOI and supporting information for the project. If you have any questions or require any additional information, please contact me at (508) 786-2306.

Very truly yours,

Mark Fobert
Senior Project Manager

P:\4522\143-4522-14001\ASSIGN NO 04 - I-90 ALLSTON\DOCS\REPORTS\NOI (IN-WATER BORINGS)\NOI REPORT (IN-WATER BORINGS) REV 1.DOCX

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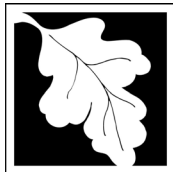
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WPA Form 3
Notice of Intent



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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BOSTON

City/Town

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>Soldiers Field Rd. (Charles River Reservation)</u>	<u>Boston</u>	<u>02134</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>42.353446</u>	<u>-71.114651</u>
	d. Latitude	e. Longitude
	<u>2200103000</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Susan</u>	<u>McArthur</u>	
a. First Name	b. Last Name	
<u>Massachusetts Department of Transportation-Highway Division</u>		
c. Organization		
<u>10 Park Plaza, Room 4260</u>		
d. Street Address		
<u>Boston</u>	<u>MA</u>	<u>02116</u>
e. City/Town	f. State	g. Zip Code
<u>(857) 368-8807</u>	<u>(857) 368-0609</u>	<u>susan.mcarthur@state.ma.us</u>
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

<u>Priscilla</u>	<u>Geigis</u>	
a. First Name	b. Last Name	
<u>Massachusetts Department of Conservation and Recreation</u>		
c. Organization		
<u>251 Causeway Street, 9th Floor</u>		
d. Street Address		
<u>Boston</u>	<u>MA</u>	<u>02114</u>
e. City/Town	f. State	g. Zip Code
<u>617-626-1250</u>		<u>Priscilla.Geigis@mass.gov</u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Mark</u>	<u>Fobert</u>	
a. First Name	b. Last Name	
<u>Tetra Tech</u>		
c. Company		
<u>100 Nickerson Road</u>		
d. Street Address		
<u>Marlborough</u>	<u>MA</u>	<u>01752</u>
e. City/Town	f. State	g. Zip Code
<u>(508) 786-2306</u>	<u>(508) 786-2201</u>	<u>mark.fobert@tetrattech.com</u>
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

<u>\$</u>	<u>\$362.50</u>	<u>\$75.00</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:
 Borings for geotechnical investigation.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Suffolk	
a. County	b. Certificate # (if registered land)
7858, 7710	573, 80
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input checked="" type="checkbox"/> Bank	<u>4 (Temporary)</u> 1. linear feet	_____ 2. linear feet
b. <input type="checkbox"/> Bordering Vegetated Wetland	_____ 1. square feet	_____ 2. square feet
c. <input checked="" type="checkbox"/> Land Under Waterbodies and Waterways	<u>5 (Temporary)</u> 1. square feet _____ 3. cubic yards dredged	_____ 2. square feet

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
d. <input type="checkbox"/> Bordering Land Subject to Flooding	_____ 1. square feet _____ 3. cubic feet of flood storage lost	_____ 2. square feet _____ 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	_____ 1. square feet _____ 2. cubic feet of flood storage lost	_____ 3. cubic feet replaced
f. <input type="checkbox"/> Riverfront Area	_____ 1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.

Exploratory borings are considered a minor activity in the buffer zone (as defined in 310 CMR 10.02(2)(b)1) and are not otherwise subject to regulation under the Massachusetts Wetlands Protection Act (MGL Ch. 131, s. 40).



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	
4. <input type="checkbox"/> Restoration/Enhancement	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.2.b or B.3.h above, please enter the additional amount here.	
	_____	_____
	a. square feet of BVW	b. square feet of Salt Marsh
5. <input type="checkbox"/> Project Involves Stream Crossings		
	_____	_____
	a. number of new stream crossings	b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

- 2017 (MassGIS)
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

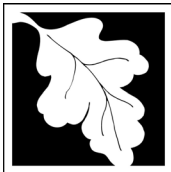
- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **
 - (a) Project description (including description of impacts outside of wetland resource area & buffer zone)
 - (b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

(c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to “Commonwealth of Massachusetts - NHESP” and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

(d) Vegetation cover type map of site

(e) Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. Separate MESA review completed. Include copy of NHESP “no Take” determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
 Southeast Marine Fisheries Station
 Attn: Environmental Reviewer
 836 South Rodney French Blvd.
 New Bedford, MA 02744
 Email: DMF.EnvReview-South@state.ma.us

Division of Marine Fisheries -
 North Shore Office
 Attn: Environmental Reviewer
 30 Emerson Avenue
 Gloucester, MA 01930
 Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP’s Boston Office. For coastal towns in the Southeast Region, please contact MassDEP’s Southeast Regional Office.



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Online Users:
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C. Other Applicable Standards and Requirements (cont'd)

- 4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
 a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
 b. ACEC
- 5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
 a. Yes No
- 6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
 a. Yes No
- 7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
 a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if: **(See Appendix C)**
 - 1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 - 2. A portion of the site constitutes redevelopment
 - 3. Proprietary BMPs are included in the Stormwater Management System.
 b. No. Check why the project is exempt:
 - 1. Single-family house
 - 2. Emergency road repair
 - 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

- 1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
- 2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



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D. Additional Information (cont'd)

- 3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.
- 4. List the titles and dates for all plans and other materials submitted with this NOI.
 - I-90 Allston Multimodal Project-Notice of Intent-Boring Plan
 - a. Plan Title
 - Tetra Tech
 - b. Prepared By
 - c. Signed and Stamped by
 - 1" = 100'
 - d. Final Revision Date
 - e. Scale
 - f. Additional Plan or Document Title
 - November 6, 2019
 - g. Date
- 5. If there is more than one property owner, please attach a list of these property owners not listed on this form.
- 6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
- 7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
- 8. Attach NOI Wetland Fee Transmittal Form
- 9. Attach Stormwater Report, if needed. **(See Section 9.0, NOI Narrative and Appendix C)**

E. Fees

- 1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

<u>197040525</u>	<u>11/5/2019</u>
2. Municipal Check Number	3. Check date
<u>197040526</u>	<u>11/5/2019</u>
4. State Check Number	5. Check date
_____	<u>Tetra Tech</u>
6. Payor name on check: First Name	7. Payor name on check: Last Name



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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

<i>Susan McArthur</i>	11/10/2019
1. Signature of Applicant	2. Date
<i>[Signature]</i>	11/15/19
3. Signature of Property Owner (if different)	4. Date
<i>[Signature]</i>	11/12/19
5. Signature of Representative (if any)	6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a copy of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

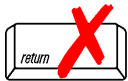
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

<u>Soldiers Field Rd. (Charles River Reservation)</u>	<u>Boston</u>
a. Street Address	b. City/Town
<u>197040526</u>	<u>\$362.50</u>
c. Check number	d. Fee amount

2. Applicant Mailing Address:

<u>Susan</u>	<u>McArthur</u>	
a. First Name	b. Last Name	
<u>Massachusetts Department of Transportation-Highway Division</u>		
c. Organization		
<u>10 Park Plaza, Room 4260</u>		
d. Mailing Address		
<u>Boston</u>	<u>MA</u>	<u>02116</u>
e. City/Town	f. State	g. Zip Code
<u>(857) 368-8807</u>	<u>(857) 368-0609</u>	<u>susan.mcarthur@state.ma.us</u>
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

<u>Priscilla</u>	<u>Geigis</u>	
a. First Name	b. Last Name	
<u>Massachusetts Department of Conservation and Recreation</u>		
c. Organization		
<u>251 Causeway Street, 9th Floor</u>		
d. Mailing Address		
<u>Boston</u>	<u>MA</u>	<u>02114</u>
e. City/Town	f. State	g. Zip Code
<u>617-626-1250</u>	<u>Priscilla.Geigis@mass.gov</u>	
h. Phone Number	i. Fax Number	j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2j (in Riverfront)	1	\$500.00 x 1.5	\$750.00
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Step 5/Total Project Fee:			<u>\$750.00</u>
Step 6/Fee Payments:			
Total Project Fee:			<u>\$750.00</u>
			a. Total Fee from Step 5
State share of filing Fee:			<u>\$362.50</u>
			b. 1/2 Total Fee less \$12.50
City/Town share of filing Fee:			<u>\$75.00*</u>
			c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

* City of Boston Filing Fee

Pursuant to City of Boston Title 14, Section 450, the following fees are payable to the City of Boston for Notice of Intent processing:

- \$25.00 for projects with the fair cost of \$1,000.00 or less.
- \$50.00 for projects with the fair cost of more than \$1,000.00 but not more than \$50,000.00.
- \$75.00 for projects with a fair cost of more than \$50,000.00 but not more than \$100,000.00.

THE FACE OF THIS DOCUMENT CONTAINS A VOID PANTOGRAPH AND MICRPRINTING

197040525

WELLS FARGO BANK, N.A.

Positive Pay Protected

DATE 11/05/2019

56-382/412

TETRA TECH, INC
3475 E. Foothill Blvd.
Pasadena CA 91107-6024
TETRA TECH 626.470.2300



Pay Seventy-five Only Dollars

****\$75.00

TO THE ORDER OF
CITY OF BOSTON
PUBLIC IMPROVEMENT COMMISSION
ONE CITY HALL PLAZA
ROOM 714
BOSTON, MA 02201

Steven Paulini
VOID AFTER 90 DAYS
[Signature]

⑈ 197040525⑈ ⑆ 04 1 2038 24 ⑆ 9600048505⑈

THE FACE OF THIS DOCUMENT CONTAINS A VOID PANTOGRAPH AND MICRPRINTING

197040526

WELLS FARGO BANK, N.A.

Positive Pay Protected

DATE 11/05/2019

56-382/412

TETRA TECH, INC
3475 E. Foothill Blvd.
Pasadena CA 91107-6024
TETRA TECH 626.470.2300



Pay Three Hundred Sixty-two And 50/100 Dollars

****\$362.50

TO THE ORDER OF
COMMONWEALTH OF MASSACHUSETTS
DEPT OF ENVIRONMENTAL PROTECTION
BOX 4062
BOSTON, MA 02211

Steven Paulini
VOID AFTER 90 DAYS
[Signature]

⑈ 197040526⑈ ⑆ 04 1 2038 24 ⑆ 9600048505⑈

1.0 INTRODUCTION

The intent of the proposed work is to progress the studies and design of the proposed improvements to the Interstate 90 (I-90)/Allston Interchange by the Massachusetts Department of Transportation (MassDOT). The work includes geotechnical borings and sediment sampling in the Charles River to collect information on underlying sediments to assist in the design of the proposed temporary trestle associated with the MassDOT I-90 Allston Multimodal Project. Please note this Notice of Intent (NOI) is solely for the installation of geotechnical borings/sediment sampling. No roadway expansion or increase in impervious area is proposed as part of the work. This work is exclusively for investigatory purposes. A site location map is included as Figure 1.

2.0 PROJECT AREA

The overall Project Area is located within the Allston neighborhood of the City of Boston and includes the area encompassed by the former Beacon Park Yard (BPY) rail yard. The overall Project Area is bounded by Ashford Street to the south, the Commonwealth Avenue bridge and the Charles River to the east, Cambridge Street to the north, and Cambridge Street and the Franklin Street pedestrian bridge over I-90 to the west.

The Project Area for the geotechnical borings begins approximately 350 feet west of the Boston University (BU) Bridge and extends westerly along the Bank of the Charles River for approximately 2,400 feet (Figure 1). Six borings are proposed on the Bank and fifteen borings/sediment probes are proposed in the Charles River, itself. The borings/sediment probes in the Charles River will be located along the approximate 2,400-foot length of the Bank within the geotechnical project area and will be located between 2 feet and 100 feet from shore as shown on the project plans in Appendix A.

3.0 PROJECT HISTORY

The Massachusetts Environmental Policy Act (MEPA) Environmental Notification Form (ENF) for the Project was filed on October 31, 2014, and a Notice of Availability for the ENF was published in the Environmental Monitor on November 5, 2014 (Executive Office of Energy and Environmental Affairs (EOEEA) File Number 15278). On December 24, 2014, the Secretary of the EOEEA issued a Certificate on the ENF requiring MassDOT to prepare an Environmental Impact Report (EIR).

The MEPA Draft EIR (DEIR) further refined and modified concepts for the layout and design of the interchange, as well as the “Throat Area” of the Project, the relatively narrow existing multi-modal section where the I-90 viaduct is situated between the Charles River and BU (see Figure 2).

The Secretary’s Certificate on the DEIR encouraged MassDOT to incorporate desirable elements of all alternatives into the design. MassDOT identified a new Throat Area option that incorporates the desirable elements of all alternatives as encouraged by the Secretary.

Because the Throat is too narrow to construct all transportation infrastructure at-grade, MassDOT’s new Throat Area option proposes to elevate Soldiers Field Road (SFR) over I-90. Because of the existing roadway and rail infrastructure within the Project Area, insufficient space remains available within the Throat to temporarily shift travel lanes or railroad tracks out of the way to enable construction to proceed

and still maintain operation of travel lanes and rail service. Consequently, a temporary trestle for Soldiers Field Road is proposed in the Charles River, thereby freeing-up space to shift I-90 travel lanes out of the way of construction. The proposed geotechnical borings/sediment probes in the Charles River will be conducted to collect information on underlying sediments to assist in the design of this proposed temporary trestle.

4.0 WETLAND RESOURCE AREAS

4.1 SITE DESCRIPTION

The Charles River Basin Master Plan (DCR, 2002) was developed as a guide for management, planning and design decisions affecting the Charles River Basin. The Charles River Basin Master Plan divides the basin into three zones: the Lower Basin extends from the Charles River Dam to the BU Bridge; the Middle Basin occupies the area from the BU Bridge to Herter Park; and the Upper Basin extends from Herter Park to the Watertown Dam. The proposed geotechnical borings/sediment probes will be conducted in the Middle Basin and will begin just west of the BU Bridge.

Vegetation along the riverbank in the Project Area can be described as forest/shrub strips, characterized by thick stands of volunteer shrubs and trees. The Charles River Basin Master Plan indicates that, in most instances, invasive species such as false indigo bush (*Amorpha fruticosa*) dominate the forest/shrub strips and obstruct views to the river. In addition to other deciduous species, pioneer tree species, such as river birch (*Betula nigra*), indicative of disturbance, often dominate these stands.

Many of the forest/shrub strips in the Middle Basin (the area of the proposed geotechnical borings/sediment probes) are less than 25 feet wide. According to the Master Plan, research has shown that as these forest/shrub strips narrow to less than 25 feet in width, there is a loss of habitat value due to the quantity and quality of available wildlife shelter. The presence of pedestrians and dogs on nearby paths reduces further the wildlife habitat value of these forest/shrub strips.

4.2 REVIEW OF AVAILABLE DATA

The published soil survey for the Site (Norfolk and Suffolk Counties, Massachusetts 1989) maps a small area just west of the Boston University (BU) Bridge as Udorthents, wet substratum (map symbol Ue) and the area to the west in the remaining portion of the temporary bridge project area as Urban land, wet substratum, 0 to 3 percent slopes (map symbol Uw). Ue map units consist of filled areas that were previously tidal marshes, river flood plains, bays, harbors, and swamps. The fill consists of rubble, refuse, and mixed soil material, typically sand, gravel, and channel dredgings. Areas of these soils are most extensive along Boston, Dorchester, and Quincy Bays and adjacent to the Charles and Neponset Rivers.

Uw map units consist of Urban land developed in areas of Udorthents, wet substratum (Ue). Buildings, industrial areas, pavement, and railroad beds cover more than 75 percent of the land surface. Included with this map unit are small areas of Udorthents, wet substratum, and Udorthents, loamy, where the surface has been exposed.

The Area of Critical Environmental Concern (ACEC) Maps indicate that the site is not located within an ACEC. Massachusetts Natural Heritage and Endangered Species Program (NHESP) maps indicate that the site is not located in Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species.

4.3 ON-SITE INVESTIGATION

In order to verify the accuracy of the data discussed above, field investigations were performed. Using the technical criteria and methodology outlined in MA DEP's Delineating Bordering Vegetated Wetlands (1995), the Site was investigated for the presence of hydrophytic vegetation, hydric soils and wetland hydrology. A transect was established and vegetation, soil and hydrologic indicators, if any, were observed and documented on MA DEP data forms (Appendix B).

The vegetation on the Site is dominated by Japanese knotweed (*Reynoutria japonica*) and false indigo bush (*Amorpha fruticosa*) and to a lesser extent by purple loosestrife (*Lythrum salicaria*) and spiderwort (*Tradescantia virginiana*). Japanese knotweed has a wetland indicator status of FACU, which indicates that it occurs more often (>67% to 99%) in non-wetlands. False indigo bush has a wetland indicator status of FACW, which indicates that it usually occurs (>67% to 99%) in wetlands. Purple loosestrife (OBL) almost always occurs (>99%) in wetlands and spiderwort (UPL) almost always occurs (>99%) in uplands. The vegetation on the Site meets the wetland vegetation criteria.

The Natural Resources Conservation Service (NRCS) classifies the soils on the Site as Udorthents, wet substratum and Urban land, wet substratum. These are filled areas and areas of urban land covered by buildings, industrial areas, pavement, and railroad beds. Site soils that were reviewed did not indicate the presence of hydric soil. The toe of the bank is armored with riprap stone. The soils on the Site do not meet the hydric soil criteria.

The water elevations in the Charles River are controlled by the Charles River Dam operator. The landward boundary of Land under Water (LUW) is the Mean Annual Low Flow (MALF) level of the Charles River which is elevation 0 feet, North American Vertical Datum of 1988 (NAVD88). Because the water elevation is controlled by the dam operator, the water elevation of the Charles River is maintained between elevation 0 feet and 2 feet (NAVD88), elevation 0 being the MALF level and elevation 2 being the Mean Annual Flood Level (MAFL). No evidence of wetland hydrology was observed on the Site. The Site does not meet the wetland hydrology criteria.

Because the Site does not meet the hydric soil criteria and does not meet the wetland hydrology criteria, there are no Bordering Vegetated Wetlands on the Site.

4.4 WATER ELEVATION

The elevations of Mean Annual Flood Level (MAFL) and Mean Annual Low Flow (MALF) were determined based on past environmental permits filed for work within the Charles River, a review of the historic water levels at the Charles River Dam river gauge and the First Street Station river gauge in Cambridge and input from the Woods Hole Group who studied the Charles River Dam in conjunction with a flood study.

State and federal wetlands and waterways jurisdictions are based on elevations of the water surface of the Charles River. For the purposes of this NOI, unless otherwise noted, all elevations are expressed in North American Vertical Datum of 1988 feet (NAVD88). There are three state wetland resource areas associated with the water elevation including Land Under Water (LUW) (area below elevation 0); Bank underlying an anadromous/catadromous fish run (Bank) (area between elevation 0 and 2), and Bordering Land Subject to Flooding (BLSF) (area between elevation 2 and 4). The federal wetland and waterway resources of the Charles River, regulated by the USACE, are defined as Non-tidal federal Navigable

Waters of the United States (WUS) (area below elevation 2). State Chapter 91 Waterways jurisdiction is defined as Ordinary High Water (OHW), the landward limit of flowed tidelands, which is also the area below elevation 2. In Massachusetts, resource areas associated with the Charles River are protected under the MA WPA and include LUW, Bank, BLSF and Riverfront Area. These areas are described in further detail below. As described above, there is no Bordering Vegetated Wetland along the Charles River in the Project vicinity. See Figures 3 and 4 for existing state wetland resource areas.

4.4.1 Land Under Water Bodies and Waterways

The MA WPA defines LUW as the land beneath any creek, river, stream, pond or lake, which may be composed of organic muck or peat, fine sediments, rocks or bedrock. The land beneath the Charles River is considered LUW. The landward boundary of LUW is the MALF level of the Charles River which is elevation 0 feet, North American Vertical Datum of 1988 (NAVD88).

4.4.2 Inland Bank

As defined in the MA WPA, a Bank is the portion of the land surface which normally abuts and confines a water body. A Bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel or stone. The Charles River contains banks on both sides that confine and abut the waterway. The lower boundary of Inland Bank is the MALF level, elevation 0 feet (NAVD88); the upper boundary of the Inland Bank is the MAFL, which is elevation 2 feet (NAVD88). The upper boundary of the Inland Bank is the lower limit of the adjacent floodplain. The area within 100 feet of the bank, measured from the upper boundary of the bank into the adjacent upland to the south and west, is considered the 100-foot buffer zone under the MA WPA and consists of the PDW Path, landscaped parkland and portions of SFR. The 100-foot buffer zone to Bank extends beyond the eastbound lanes of SFR for approximately 10 feet. The toe of the slope is armored with stone.

4.4.3 Bordering Land Subject to Flooding/100 Year Flood Zone

The Federal Emergency Management Agency (FEMA) is responsible for establishing the flood zone elevation or height of water during certain flood events. FEMA publishes Flood Insurance Rate Maps (FIRMs) showing flood hazard areas. The Flood Map showing the Project Site is Map 25025C0076G, dated September 25, 2009, panel 76 of 151 (Figure 5). The 100-year flood is an event that has a 1% probability of occurring in any given year. For this section of the Charles River, FEMA has determined that the river will rise to elevation 4.0 feet (NAVD88) during the 100-year event. Under the MA WPA, the boundary of BLSF is the estimated maximum lateral extent of flood water which will result from the 100-year event. The lower boundary of BLSF is the MAFL (top of the Inland Bank), elevation 2.0 feet (NAVD88); and the upper boundary is the limit of the 100-year flood, elevation 4.0 feet (NAVD88). See Figures 3, 4 and 5. There will be no impact to BLSF from the proposed project.

4.4.4 Riverfront Area

Under the MA WPA, Riverfront Area (RFA) is the area of land between a river's mean annual high water line and a parallel line located 200 feet away, measured horizontally. In the Project Area (Boston), the Riverfront Area is 25 feet in width adjacent to the Charles River because it is within a municipality with a population of 90,000 people or more, as defined in the MA WPA. The 25-foot Riverfront Area is measured from the MAFL, elevation 2 feet (NAVD88) and extends approximately 5 feet onto SFR to the west. It also extends to the exit ramp at River Street for a distance of approximately 500 feet. Vegetated portions of RFA in the Project Area include the forest/shrub strips described above, characterized by thick stands of

volunteer shrubs and trees. There are no borings proposed in the RFA and there will be no impact to RFA from the proposed project.

5.0 PROPOSED WORK

Two contractors, GeoLogic, Inc. and CR Environmental, Inc., will conduct geotechnical borings and sediment probes for the project. GeoLogic, Inc. proposes 8 geotechnical borings within Land Under Water in the Charles River and CR Environmental will conduct 7 sediment probes within LUW and 6 sediment probes on the Bank of the Charles River as shown in Table 1 and on the project plans (Appendix A). Some additional borings (B-11, B-17, B-21, B-23, and B-24) are shown on the plans for informational purposes. These borings are located within the 100-foot buffer zone. Exploratory borings are considered a minor activity in the buffer zone (as defined in 310 CMR 10.02(2)(b)1) and are not otherwise subject to regulation under the Massachusetts Wetlands Protection Act (MGL Ch. 131, s. 40).

Table 1 Geotechnical Boring Identification and Wetlands Protection Act Jurisdiction

Wetlands Protection Act Jurisdiction	Geotechnical Boring/Sediment Probe ID
Land Under Water	B-01, B-03, B-04, B-05, B-09, B-10, B-12, B-13, B-14, B-15, B-16, B-19, B-20, B-25, B-26
Bank	B-02, B-06, B-07, B-08, B-18, B-22



GeoLogic, Inc. Spud-Secured Drilling Barge

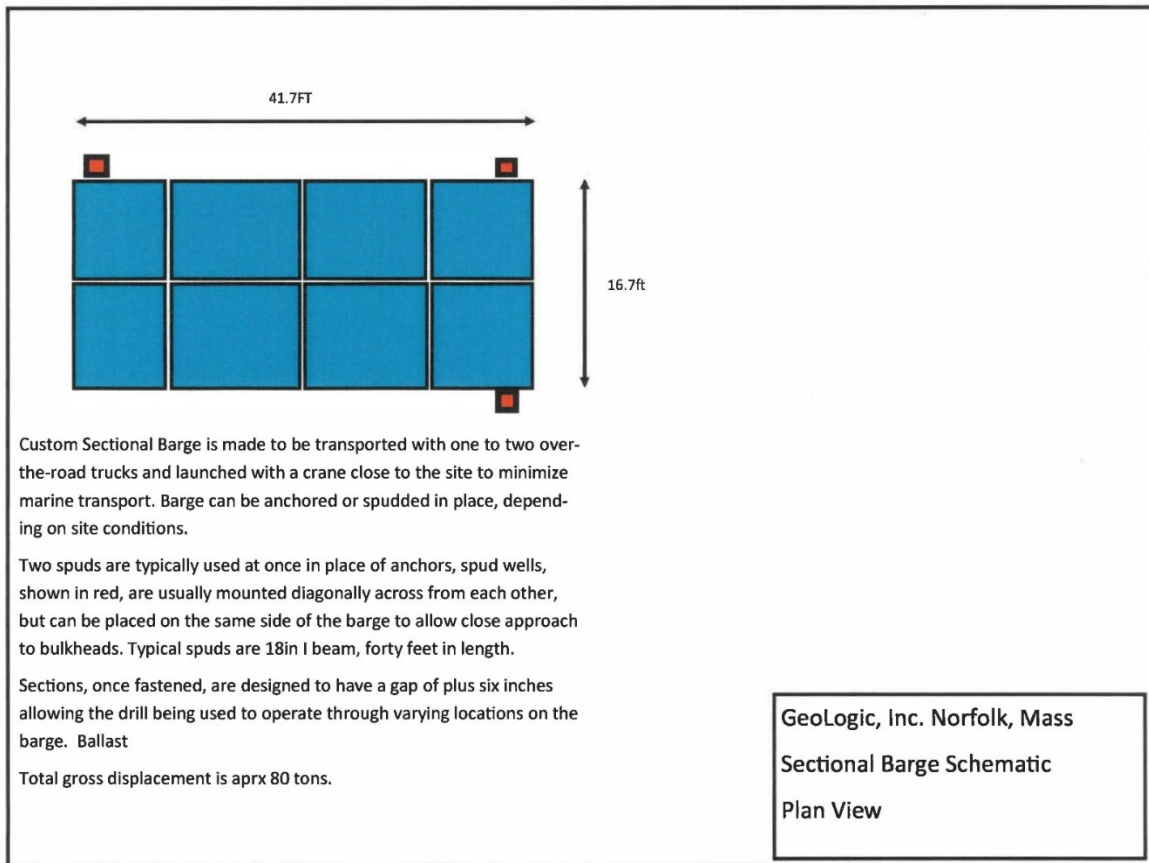
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Soldiers Field Road, Boston, Massachusetts**

Drilling for the subject work will take place using the barge pictured on the previous page, which will enter the River via an established boat launch. Its dimensions, shown in detail below, make it ideal for working in inland harbors and waterways. It can be anchored by using standard marine anchors attached by rope and chain, or by steel legs, called spuds, to reduce its footprint in areas of marine or other congestion.

Once fastened to the bottom, drilling is performed by extending steel casing through the water into the mudline below the barge. After drilling begins, the barge cannot be moved until the hole is completed. Given the hole depths in this program, some holes are expected to take multiple days to complete.

In the case of the drilling for the proposed trestle, all soil cuttings and drilling water will be contained in a vessel called a mud tub, to be returned to the borehole at the completion of the work. The borings are advanced by alternately drilling and driving steel casing. When the boring has been advanced to its full depth and sampling is completed, the steel casing is still in the hole. The casing is withdrawn partially (still within the soil), and the cuttings are returned to the boring through the casing. Once the cuttings have settled in place within the boring, then the casing is withdrawn completely.

The barge will have sanitary facilities and will be tended by a stout workboat which will be docked locally at night throughout the project. Emergency oil spill kits will be carried on the barge at all times. Standard sorbent booms are 6 inches by 10 feet.



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Because of considerable marine traffic on the Charles River, four (4) white marker buoys with nighttime white flashing lights, will be placed within about 200 yards of the barge on both the up and downstream sides, to alert boaters. The distance is chosen to give rowers, who must look over their shoulder to spot their location, room to change course.

For night lighting on the barge, the United States Coast Guard (USCG) calls for one white light visible for 360 degrees, usually on the masthead or a similar high point on the rig. GeoLogic usually uses this for night marking, but often augment it with solar rechargeable white lights on the highest point near each of the four corners of the barge. This will be in addition to the buoy lights mentioned above on the up and downstream sides of the barge.

GeoLogic has previous experience drilling on the Charles and has worked with the three primary safety groups. These are the US Coast Guard, the Massachusetts State Police, Marine Division and CRAB, the Charles River Alliance of Boaters. CRAB is a proactive river user's group that specializes in coordinating and alerting all rowing, sailing and powerboat users on the Charles, and has been very helpful announcing the presence of the drilling contractor during past projects.

Sediment sampling will be conducted by CR Environmental, Inc. Sediment sampling efforts will be conducted from CR's custom designed 26-foot landing craft style vessel, Lophius, that was specifically designed for shallow water sediment sampling operations. This vessel has a large enclosed stern pilothouse, can accommodate a 3- to 4-man crew and has a table for sample logging.

Lophius is equipped with a 1000-pound capacity hydraulic winch and bow mounted A-frame, portable generator, and a Ray Jefferson combination radar, depth sounder, and DGPS/Charter plotter. The vessel is powered by a 250 Hp 4 cycle outboard motor that is extremely quiet and maneuverable. The bow door can be lowered to the water surface, and the vessel can be spud down on location in 10 to 15 feet of water. The vessel also has 4-foot A-frame extensions for obtaining cores up to 20 feet in length.

Navigation for the sampling effort will be accomplished using a Hemisphere V 104 GPS Compass, capable of providing sub-meter horizontal position accuracy and vessel heading. The GPS will be interfaced to a shipboard computer running the latest version of HYPACK® hydrographic surveying software. During the sediment sampling operations, this system will calculate X, Y positions in the desired grid system, record navigation data and provide a steering display for the vessel captain; and use georeferenced imagery (e.g. orthophotos) as background files.

Vibracore Sampling. Vibracores will be obtained using CR's NAVCO pneumatic vibracore system that includes a 1,750 vpm Bin/Hopper Vibrator, 50 cfm portable air compressor and 10-20 ft long 3-inch diameter galvanized steel core barrels with core cutter/catcher assemblies and 2 7/8-inch OD CAB hard plastic liner. The samples are obtained solely by driving the sampler, and there is no circulation of drill fluid or generation of cuttings. The liners will be removed intact from the core barrels, labeled, and capped prior to transport to shore. The station core ID, coordinates, time and date of collection, water depth, core penetration and recoveries will be recorded in HYPACK and provided in Excel format.

Sediment Thickness Mapping. CR believes that acoustic sub-bottom profiling methods of determining sediment thickness would be inappropriate for the Charles River investigation due to extensive shallow areas and the anticipated presence of natural gases entrained in surficial sediments. Therefore, they propose manual probing of sediments to a depth which will not exceed 30 feet below the water surface. A survey staff measurement of water depth to the sediment surface will also be collected at each sediment probe location. Probes and staff measurements will be conducted in a grid network sufficient to allow

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interpolation between stations and development of sediment thickness contours. The probe rod is advanced solely by driving the solid rod. From 80-100 sediment probes can be accomplished in one day period. Probe locations will be recorded digitally using a submeter GPS positioning and HYPACK recording software. Estimated sediment texture and detected layering will be documented at each location.



Vibracoring off 26 ft RV Lophius in New Bedford Harbor

6.0 IMPACTS TO JURISDICTIONAL RESOURCES

6.1 LAND UNDER WATER

Fifteen (15) geotechnical borings/sediment probes are proposed within Land Under Water in the Charles River. This amounts to approximately five (5) square feet of temporary impact to LUW.

6.2 BANK

Six (6) sediment probes are proposed within the Bank of the Charles River. This amounts to approximately four (4) linear feet of temporary impact to Bank.

7.0 COMPLIANCE WITH STATUTORY INTERESTS

The proposed geotechnical boring program is not expected to result in adverse impacts to the interests of the MWPA.

Prevention of Flooding, Storm Damage and Pollution

There will be no temporary or permanent impacts which would impact the ability of LUW or the Bank of the Charles River to provide for prevention of flooding, prevention of storm damage or the attenuation of pollution.

Protection of Public and Private Water Supplies and Groundwater

There are no public or private water supplies that will be affected.

Protection of Wildlife Habitat/ Rare and Endangered Species

The temporary impacts will not affect the ability of LUW or the Bank of the Charles River to provide habitat for wildlife. These wetland resource areas are not designated as Estimated Habitat of Rare Wetlands Wildlife.

Protection of Fisheries and Shellfish Beds

There will be no impacts to fisheries in the Charles River resulting from the proposed geotechnical boring program. There are no shellfish beds associated with the Charles River in the project area.

8.0 COMPLIANCE WITH REGULATORY PERFORMANCE STANDARDS

8.1 LAND UNDER WATER BODIES AND WATERWAYS

Land Under Water Bodies and Waterways will be temporarily altered by the proposed geotechnical boring program in the Charles River. This resource area is presumed to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to the prevention of pollution and to the protection of fisheries and wildlife habitat.

The presumptions of significance for LUW are included at 310 CMR 10.56(3):

(3) Presumption. Where a project involves removing, filling, dredging or altering of Land Under Water Bodies and Waterways, the issuing authority shall presume that such area is significant to the interests specified in 310 CMR 10.56(1). This presumption is rebuttable and may be overcome upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the issuing authority shall make a written determination to this effect, setting forth its grounds (Form 6).

This paragraph refers to the statutory interests of the MWPA, as listed in section 7 above (public or private water supply, ground water supply, flood control, storm damage prevention, prevention of

pollution, the protection of fisheries and wildlife habitat). As detailed in section 7, the proposed geotechnical boring program is not expected to negatively impact the statutory interests.

Relevant performance standards for LUW are included at 310 CMR 10.56(4)(a) and (c).

(a) Where the presumption set forth in 310 CMR 10.56(3) is not overcome, any proposed work within Land under Water Bodies and Waterways shall not impair the following:

1. The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;

The proposed borings will temporarily impact approximately five (5) square feet of LUW. The project will not impact the water carrying capacity within the defined channel.

2. Ground and surface water quality;

The proposed borings will temporarily impact approximately five (5) square feet of LUW. The project will not impact the ground and surface water quality of the Charles River.

3. The capacity of said land to provide breeding habitat, escape cover and food for fisheries; and

The proposed borings will temporarily impact approximately five (5) square feet of LUW. The project will not impact the capacity of said land to provide breeding habitat, escape cover and food for fisheries.

4. The capacity of said land to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of intent is filed on or after November 1, 1987, that (cumulatively) alter(s) 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, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures established under 310 CMR 10.60.

The proposed borings will temporarily impact approximately five (5) square feet of LUW. The project will not impair the capacity of said land to provide important wildlife habitat functions

(c) Notwithstanding the provisions of 310 CMR 10.56(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.

As noted, these wetland resource areas are not designated as Estimated Habitat of Rare Wetlands Wildlife.

8.2 BANK

Bank will be temporarily altered by the proposed geotechnical boring program in the Charles River. This resource area is presumed to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to the prevention of pollution and to the protection of fisheries and wildlife habitat.

The presumptions of significance for Bank are included at 310 CMR 10.54(3):

(3) Presumption. Where a proposed activity involves the removing, filling, dredging or altering of a Bank, the issuing authority shall presume that such area is significant to the interests specified in 310 CMR 10.54(1). This presumption is rebuttable and may be overcome upon a clear showing that the Bank does not play a role in the protection of said interests. In the event that the presumption is deemed to have

been overcome, the issuing authority shall make a written determination to this effect, setting forth its grounds (Form 6).

As detailed in section 7, the proposed geotechnical boring program is not expected to negatively impact the statutory interests.

Relevant performance standards for Bank are included at 310 CMR 10.54(4)(a) and (c).

(a) Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:

1. the physical stability of the Bank;

The proposed borings will temporarily impact approximately four (4) linear feet of Bank. The project will not impact the physical stability of the Bank.

2. the water carrying capacity of the existing channel within the Bank;

The proposed borings will temporarily impact approximately four (4) linear feet of Bank. The project will not impact the water carrying capacity of the existing channel within the Bank.

3. ground water and surface water quality;

The proposed borings will temporarily impact approximately four (4) linear feet of Bank. The project will not impact groundwater and surface water quality.

4. the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;

The proposed borings will temporarily impact approximately four (4) linear feet of Bank. The project will not impact the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries.

5. the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. In the case of a bank of a river or an intermittent stream, the impact shall be measured on each side of the stream or river. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

The proposed borings will temporarily impact approximately four (4) linear feet of Bank. The project will not impact the capacity of the Bank to provide important wildlife habitat functions.

(c) Notwithstanding the provisions of 310 CMR 10.54(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59.

As noted, these wetland resource areas are not designated as Estimated Habitat of Rare Wetlands Wildlife.

9.0 DEP STORMWATER STANDARDS

The following is an overview of the project compliance with the ten stormwater standards. The installation of geotechnical borings will not create additional impervious surface area or stormwater volume. There will be no new discharges associated with this project.

Standard 1. No New Untreated Discharges

No new untreated discharges are proposed.

Standard 2. Peak Rate Attenuation

No new impervious area is proposed.

Standard 3. Recharge

No new impervious area is proposed.

Standard 4. Water Quality

Water Quality will not change because of this project as all impacts are temporary.

Standard 5. Land Uses with Higher Potential Pollutant Loads

N/A – The project is not in an area with higher potential pollutant loads.

Standard 6. Critical Areas

N/A – According to the Natural Heritage & Endangered Species Program and the Division of Fisheries & Wildlife the project site is outside of the Priority and Estimated Habitats.

The proposed geotechnical boring program will not destroy or “otherwise impair” any portion of a BVW area within an ACEC or any designated Outstanding Resource Water (ORW).

Standard 7. Redevelopments and Other Projects Subject to the Standards Only to the Maximum Extent Practicable

N/A- This is not a redevelopment project.

Standard 8. Construction Period Pollution Prevention and Erosion and Sedimentation Control

Project includes less than 1 acre of disturbance therefore not covered under the Construction General Permit. Erosion and sedimentation measures will be used as necessary.

Standard 9. Operations & Maintenance Plan

An Operations and Maintenance (O&M) Plan has not been developed for this project at this point.

Standard 10. Prohibition of Illicit Discharges

There are no illicit discharges to this drainage system.

The Stormwater Management Checklist is attached as Appendix C.

10.0 SUMMARY

The proposed project, as discussed in this Notice of Intent, meets the performance standards of the MWPA and Regulations at 310 CMR 10.00, along with the statutory interests for the following reasons:

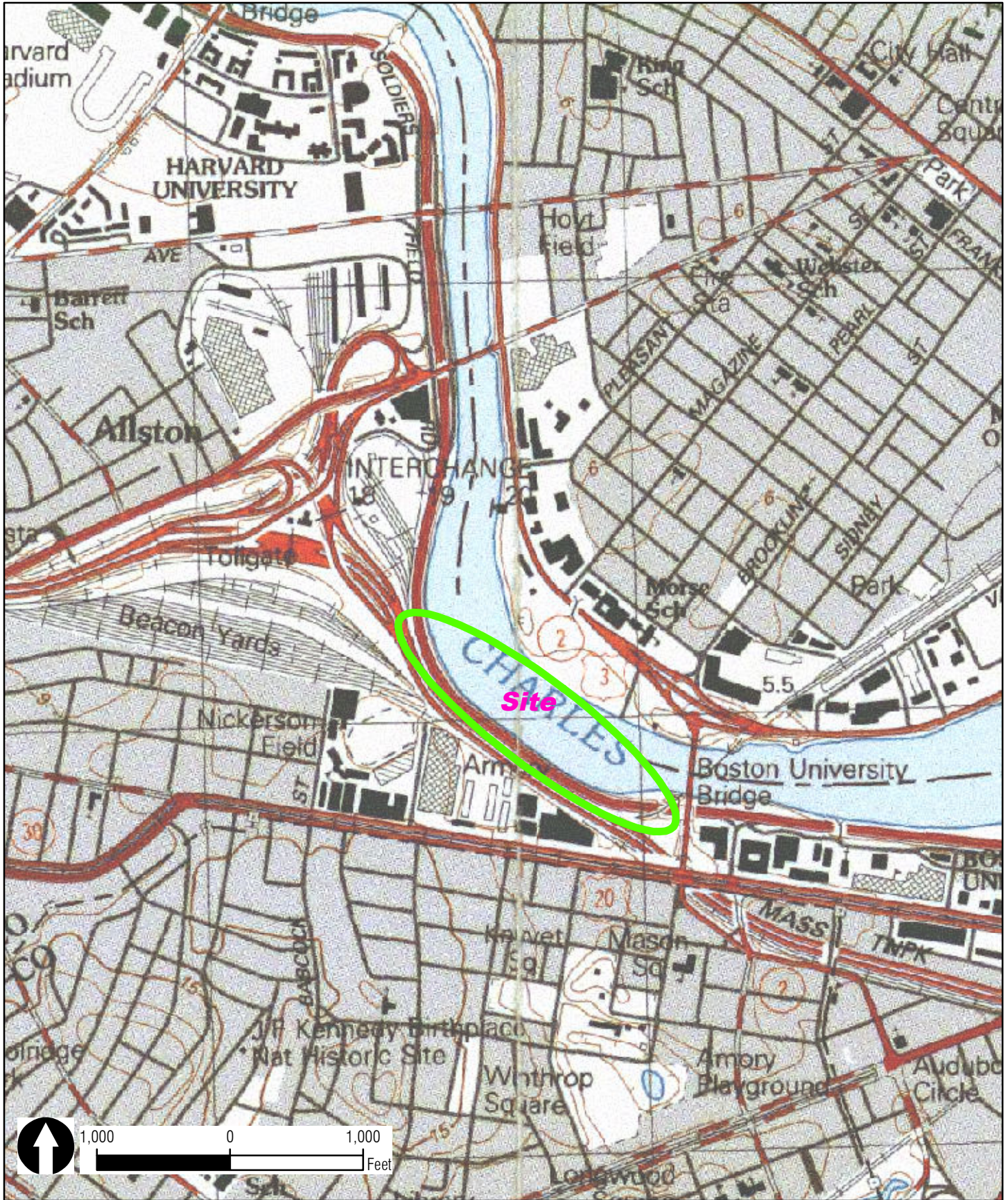
**Notice of Intent
Geotechnical Investigation
I-90 Allston Multimodal Project
Soldiers Field Road, Boston, Massachusetts**

The proposed geotechnical drilling program will result in less than 5,000 sf. of temporary alteration of LUW; and less than 50 linear feet of temporary alteration of Bank.

No permanent alteration of Bank or LUW resource areas is anticipated.

Therefore, the proposed geotechnical drilling project meets the required performance standards of 310 CMR 10.00. We respectfully request that after review, an Order of Conditions authorizing the project as presented be issued by the Boston Conservation Commission.

Figures



100 Nickerson Road
Marlborough, MA 01752
508.786.2200
www.tetrattech.com

Base Map:
USGS Topographic Map
MassGIS

I-90 Allston Multimodal Project
Allston Massachusetts

USGS Site
Location Map

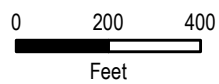
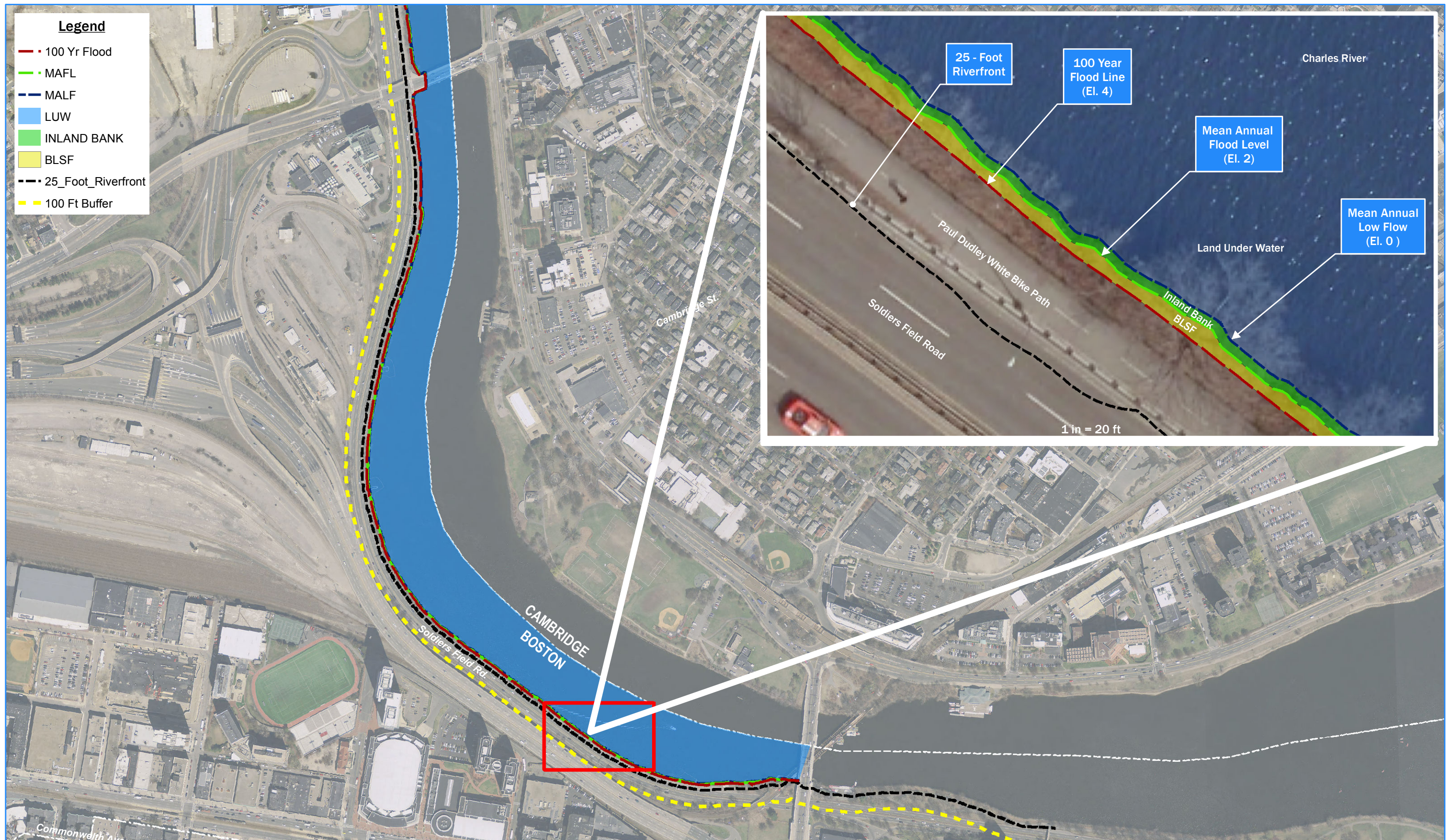
Figure 1



I-90 Allston Multimodal Project
Allston, Massachusetts



Throat Area
Figure 2



Notes:
 1. Basemap Source 2013 USGS Aerial
 2. All Elevations NAVD88 Feet

I-90 Allston Multimodal Project

State Wetland Resources

FIGURE

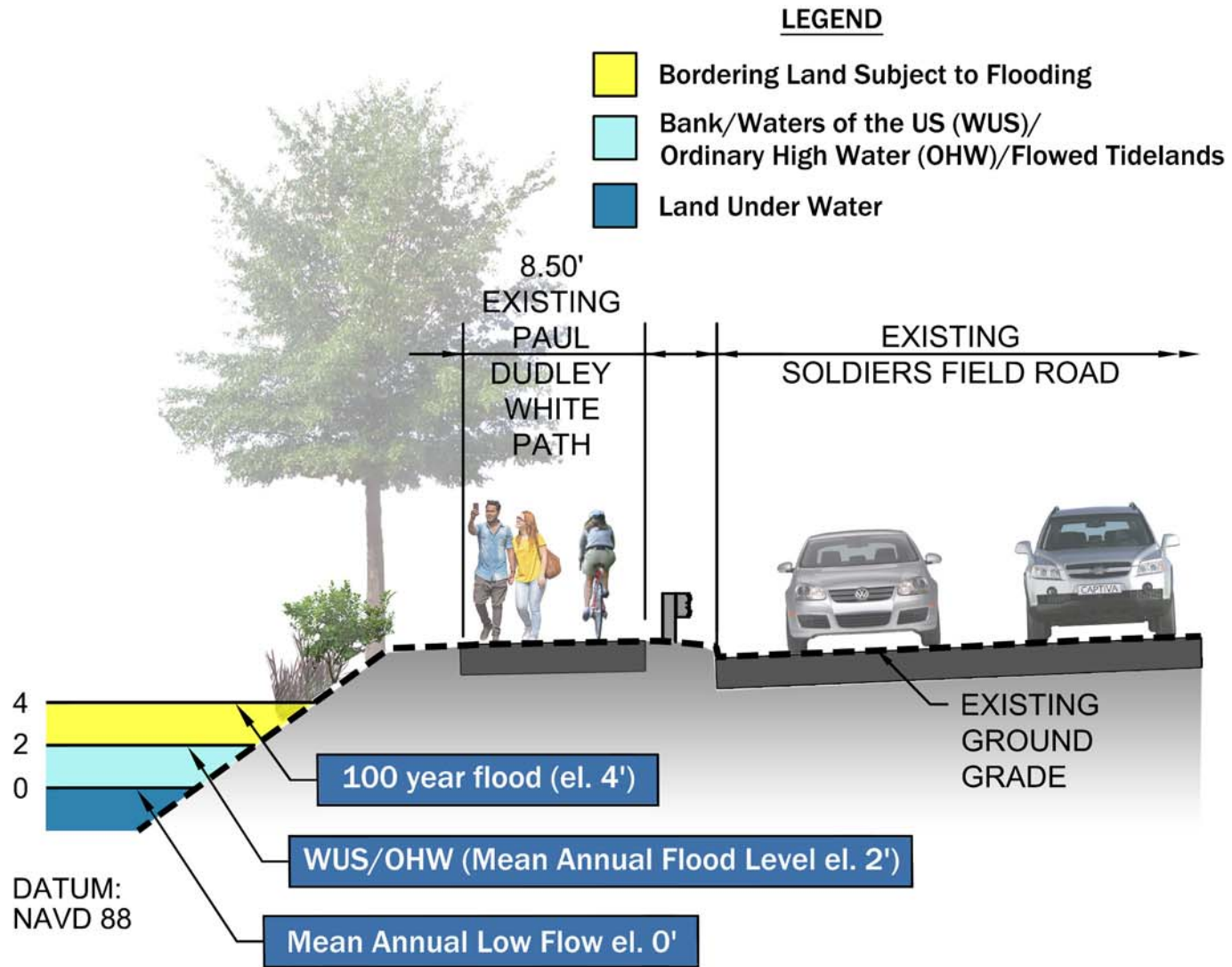
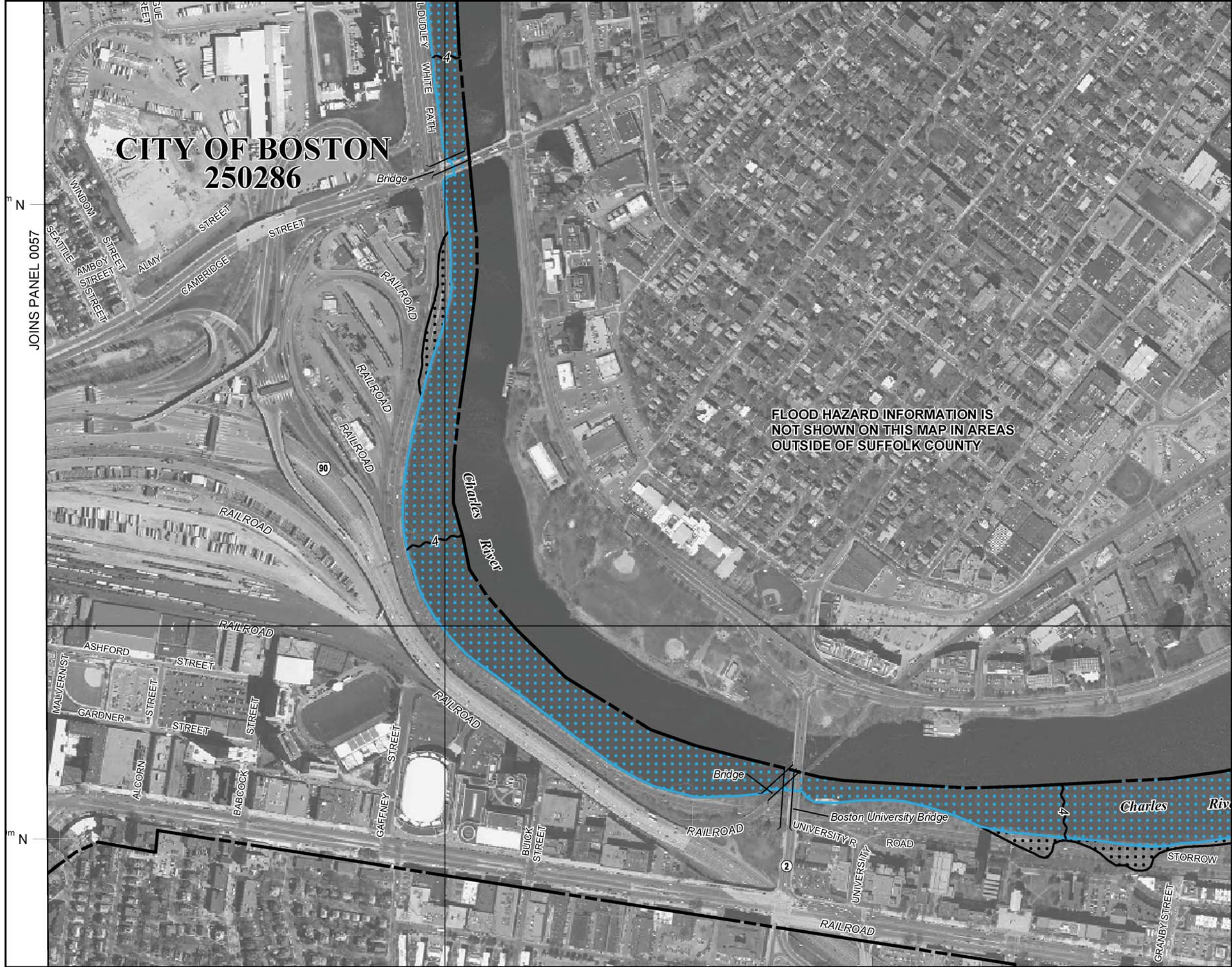
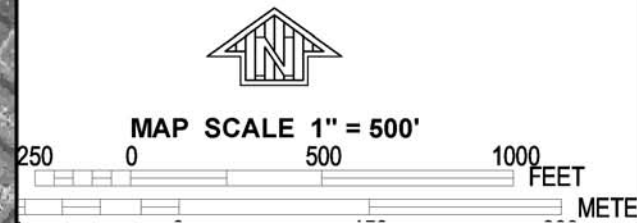


Figure 4
Wetland Resources



**CITY OF BOSTON
250286**

FLOOD HAZARD INFORMATION IS NOT SHOWN ON THIS MAP IN AREAS OUTSIDE OF SUFFOLK COUNTY



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0076G

FIRM
FLOOD INSURANCE RATE MAP
SUFFOLK COUNTY,
MASSACHUSETTS
(ALL JURISDICTIONS)

PANEL 76 OF 151
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOSTON, CITY OF	250286	0076	G

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
25025C0076G

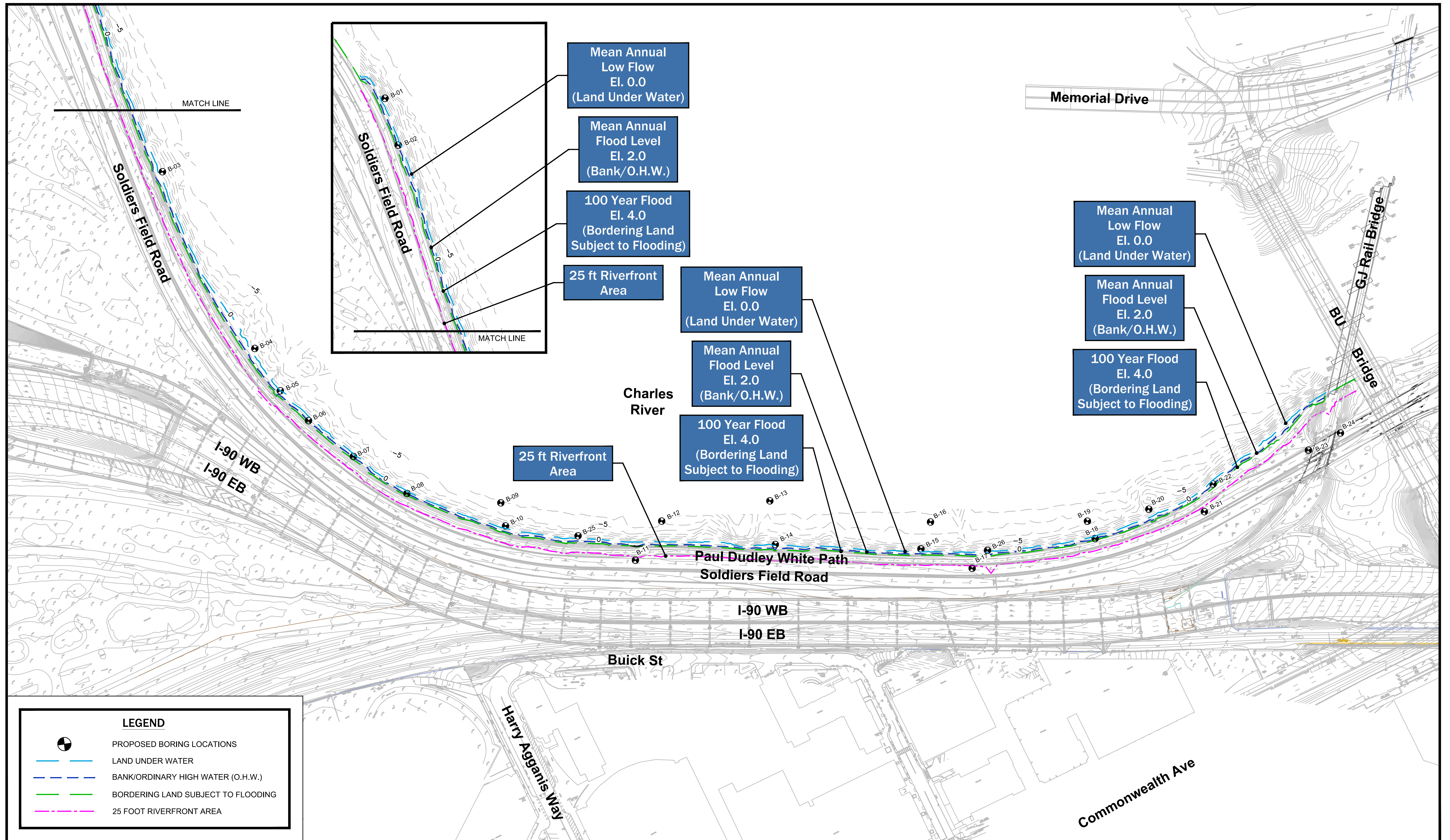
EFFECTIVE DATE
SEPTEMBER 25, 2009

Federal Emergency Management Agency

FIGURE 5
FEMA FLOOD MAP

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Appendix A
Project Plans



Mean Annual Low Flow
El. 0.0
(Land Under Water)

Mean Annual Flood Level
El. 2.0
(Bank/O.H.W.)

100 Year Flood
El. 4.0
(Bordering Land Subject to Flooding)

25 ft Riverfront Area

Mean Annual Low Flow
El. 0.0
(Land Under Water)

Mean Annual Flood Level
El. 2.0
(Bank/O.H.W.)

100 Year Flood
El. 4.0
(Bordering Land Subject to Flooding)

25 ft Riverfront Area

Mean Annual Low Flow
El. 0.0
(Land Under Water)

Mean Annual Flood Level
El. 2.0
(Bank/O.H.W.)

100 Year Flood
El. 4.0
(Bordering Land Subject to Flooding)

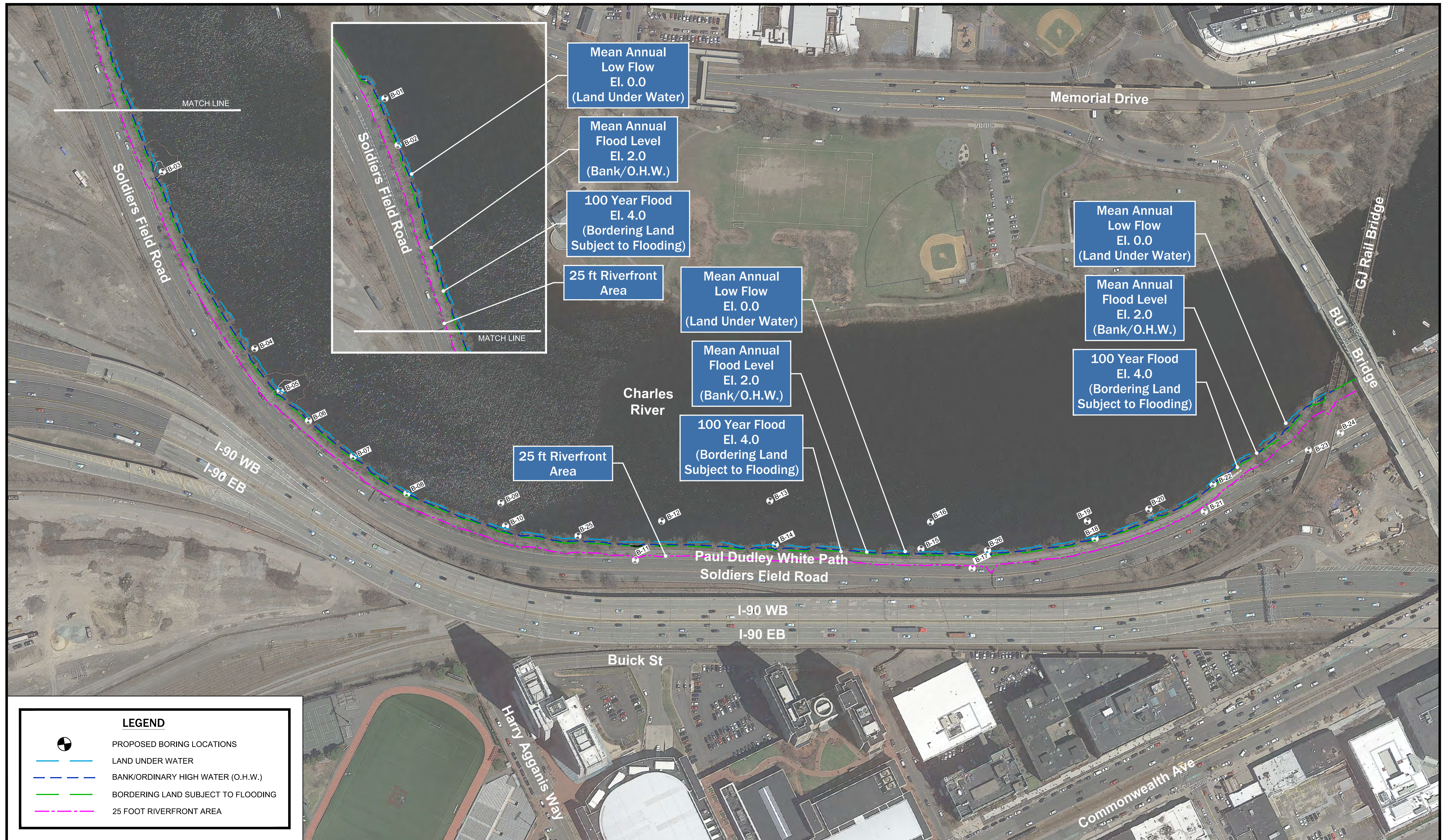
LEGEND

- PROPOSED BORING LOCATIONS
- LAND UNDER WATER
- BANK/ORDINARY HIGH WATER (O.H.W.)
- BORDERING LAND SUBJECT TO FLOODING
- 25 FOOT RIVERFRONT AREA



I-90 Allston Multimodal Project
Allston, Massachusetts
Notice of Intent
November 6, 2019

Boring Plan 1



Mean Annual Low Flow
El. 0.0
(Land Under Water)

Mean Annual Flood Level
El. 2.0
(Bank/O.H.W.)

100 Year Flood
El. 4.0
(Bordering Land Subject to Flooding)

25 ft Riverfront Area

Mean Annual Low Flow
El. 0.0
(Land Under Water)

Mean Annual Flood Level
El. 2.0
(Bank/O.H.W.)

100 Year Flood
El. 4.0
(Bordering Land Subject to Flooding)






25 ft Riverfront Area

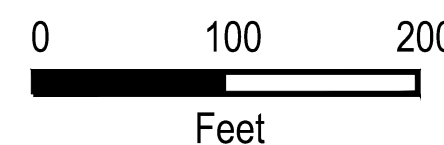
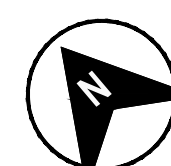
Mean Annual Low Flow
El. 0.0
(Land Under Water)

Mean Annual Flood Level
El. 2.0
(Bank/O.H.W.)

100 Year Flood
El. 4.0
(Bordering Land Subject to Flooding)

LEGEND

-  PROPOSED BORING LOCATIONS
-  LAND UNDER WATER
-  BANK/ORDINARY HIGH WATER (O.H.W.)
-  BORDERING LAND SUBJECT TO FLOODING
-  25 FOOT RIVERFRONT AREA



Appendix B
Wetland Data Form

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: MassDOT Prepared by: Tetra Tech Project location: Boston DEP File #: _____

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- Method other than dominance test used (attach additional information)

Section I. Vegetation Observation Plot Number: **1** Date of Delineation: **8/30/19**

A. Sample Layer and Plant Species	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Shrub Japanese Knotweed	25	55	YES	FACU
False Indigo Bush	20	44	YES	FACW*
Herb Purple Loosestrife	15	60	YES	OBL*
Spiderwort	10	40	YES	UPL

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW+, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:
Number of dominant wetland indicator plants: 2 **Number of dominant non-wetland indicator plants: 2**
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES

Section II. Indicators of Hydrology
Hydric Soil Interpretation

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated: _____
- Depth to free water in observation hole: _____
- Depth to soil saturation in observation hole: _____
- Water marks: _____
- Drift Lines: _____
- Sediment deposits: _____
- Drainage patterns in BVW: _____
- Oxidized rhizospheres: _____
- Water-stained leaves: _____
- Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- Other: _____

None

1. Soil Survey

Is there a published soil survey for this site?
 title/date: Soil Survey of Norfolk and Suffolk Counties, 1989
 map number: 6
 soil type mapped: Urban Land Wet Substratum/Udorthents, wet substratum
 hydric soil inclusions: Yes

Are field observations consistent with soil survey: Yes

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
0-10	0-10	10YR 2/2-2/3 refusal (stone)	none

Remarks:

3. Other:

Conclusion: Is soil hydric? NO

Vegetation and Hydrology Conclusion

	YES	NO
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present: hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample locations is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent.

Appendix C
Stormwater Management Checklist



Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

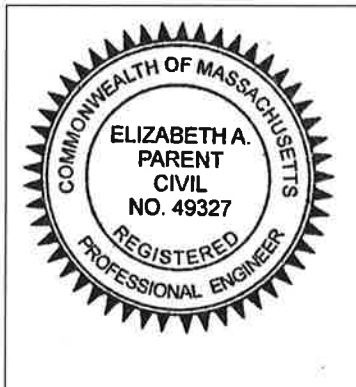
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



Elizabeth A. Parent 11-22-19
Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment? (*N/A – Application is for exploratory borings with no proposed development.*)

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of “country drainage” versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges (*N/A – Application is for exploratory borings with no proposed development.*)

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation *(N/A - Application is for exploratory borings with no proposed development/impervious area.)*

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge *(N/A - Application is for exploratory borings with no proposed development/impervious area.)*

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality (*N/A - Application is for exploratory borings with no proposed development/impervious area.*)

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs) *(The project site does not qualify as a LUHPPL.)*

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas *(N/A – The project site is not within or near the Priority and Estimated Habitats.)*

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable (*N/A - Application is for exploratory borings with no proposed development/impervious area.*)

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (*The exploratory borings will disturb less than 1 acre.*)

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan (*N/A – Application is for exploratory borings with no proposed development or permanent stormwater BMPs.*)

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges (*N/A – Application is for exploratory borings with no proposed development or permanent stormwater BMPs.*)

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.