



R:\4110 SGH MBTA Bus Depot\Permit Modifications\Amended OOC

**PRINCIPALS**

- Theodore A Barten, PE
- Margaret B Briggs
- Dale T Raczynski, PE
- Cindy Schlessinger
- Lester B Smith, Jr
- Robert D O'Neal, CCM, INCE
- Michael D Howard, PWS
- Douglas J Kelleher
- AJ Jablonowski, PE
- Stephen H Slocomb, PE
- David E Hewett, LEED AP
- Dwight R Dunk, LPD
- David C Klinch, PWS, PMP
- Maria B Hartnett

**ASSOCIATES**

- Richard M Lampeter, INCE
- Geoff Starsiak, LEED AP BD+C
- Marc Bergeron, PWS, CWS
- Alyssa Jacobs, PWS
- Holly Carlson Johnston
- Brian Lever

3 Mill & Main Place, Suite 250  
Maynard, MA 01754  
www.epsilonassociates.com

978 897 7100  
FAX 978 897 0099

December 3, 2019

By Electronic Mail and U.S. Mail

Ms. Amelia Croteau  
Boston Conservation Commission  
City of Boston Environment Department  
Boston City Hall, Room 709  
Boston, MA 02201

**Subject: DEP File No. 006-1501 MBTA Bus Facility, Mystic River, Boston  
Request for Amended Order of Conditions**

Dear Ms. Croteau:

The Massachusetts Bay Transportation Authority ("MBTA"), proposes to modify the outfall design of Outfall E at the MBTA Bus facility in Charlestown. This modification is being pursued at the request of the Boston Water and Sewer Commission ("BWSC") to accommodate future drainage improvements in the project vicinity proposed by the BWSC. BWSC's request was accommodated, and the outfall was constructed to facilitate future BWSC drainage improvements. Upon review of future anticipated storm discharge rates during low tide conditions, it was determined that increased stormwater discharges could scour the river bottom, riverward of the outfall, and that has the potential to cause scour at the nearby Alford Street Bridge's southernmost abutment and pier. Therefore, an energy dissipator is proposed at Outfall E to reduce the discharge velocity and provide scour protection, as depicted on Revised Sheet 10 of 14 and Sheets SK-14A and 14-B. On behalf of the MBTA, Epsilon Associates, Inc. ("Epsilon") respectfully requests that this design change be allowed to proceed as an Amended Order of Conditions ("OOC") issued to the project (DEP File No. 006-1501).

To support this request, attached to this letter are the following:

- OOC – DEPO File No. 006-1501
- Sheet 10 of 14 – Resource Area (March 13, 2017)
- Revised Sheet 10 of 14 – Resource Area (November 15, 2019)
- Sheets SK-14A and SK-14B - MBTA SHORELINE RESTORATION (November 25, 2019)

**OOC DEP File No. 006-1501**

The OOC was issued to the MBTA to construct and maintain long-term shoreline protection along the entire MBTA bus facility including a raised embankment and

revetment, a sheet-pile cutoff wall, storm water improvements, and convey an easement and physical space to the Department of Conservation and Recreation, who shall under a separate license, create an approximate 14 foot wide shared-use pathway along the entire project shoreline of the project site in and over the filled and flowed tidelands of the Mystic River.

That work authorized alteration of approximately: 51,600 square feet (“s.f.”) of Land Under the Ocean (“LUO”); 14,260 s.f. of Coastal Beach (Tidal Flat); 1,220 linear feet (“l.f.”) of Coastal Bank; 180 cubic yards (c.y.) in Fish Run; and 9,800 s.f. in Land Subject to Coastal Storm Flowage (“LSCSF”), see Sheet 10 of 14 (March 2017). As shown on that plan tide flat (regulated as Coastal Beach) alteration at Outfall E was approximately 6,900 s.f.

### **Proposed Activity**

As described, and at the request of the BWSC, the MBTA modified the outfall design to accommodate future area-wide drainage improvements being planned by the BWSC. Those improvements will advance on their own design schedule and secure required permits as needed. After those drainage improvements are implemented stormwater discharges will be greater than current flows. Evaluation of those future higher flow rates revealed the potential for river bottom scour at the nearby Alford Street Bridge abutment, especially during low tide conditions when there is a minimal tailwater condition. Therefore, the design engineer proposes to construct a storm water energy dissipator to provide scour protection. As depicted on Sheet 10 of 14 (November 2019), the revised Outfall E would cause the alteration of 9,100 s.f. of tide flat (Coastal Beach), a 2,200 s.f. increase as compared to the permitted condition. Based on the total authorized intertidal (Coastal Beach) and subtidal (LUO) alteration of 66,220 s.f. (collectively “tidelands”), this 2,200 s.f. correlates to a 3.3% increase in tidelands alteration from that authorized in the OOC.

This revision is proposed to be constructed now, during the shoreline stabilization and drainage improvements project construction rather than waiting for the BWSC improvements to be built in the future. This approach benefits the tidal resources because this reach of shoreline is disturbed once, rather than being disturbed multiple times – now for the outfall and in the future to construct the energy dissipator by the BWSC along with future drainage improvements.

### **OOC GENERAL CONDITION 14**

General Condition No. 14 reads as follows:

*“Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.”*

The proposed energy dissipator is a change to the approved plans however, it is needed to: 1) provide scour protection at the nearby bridge abutment and pier, 2) avoids altering

the tidelands multiple times, and 3) is a minor increase in area of that originally authorized in the OOC; therefore we respectfully request that this work be allowed to proceed as an Amended order of Conditions in lieu of needing a new Notice of Intent.

### Conclusion

The proposed modification described above will not substantially change the project or impacts authorized in the OOC, and the change is the result of coordination with the BWSC and is needed to accommodate future area-wide drainage improvements being planned by the BWSC.

It is our opinion that the energy dissipator as described herein and shown on Sheets SK-14A and SK-14B prepared by SGH, Inc. represents a minor plan change that can be authorized as an Amended OOC. The purpose of this letter is to notify the Boston Conservation Commission in writing of this plan change in accordance with General Conditions No. 14, and to request an Amended OOC for this change.

Thank you for your consideration of the above material. We understand the next meeting of the Boston Conservation Commission is scheduled for **December 18, 2019**. Please contact me at (978) 897-7100 or via email at [ddunk@epsilonassociates.com](mailto:ddunk@epsilonassociates.com) with questions regarding this project, or to schedule a meeting or call to discuss this request.

Sincerely,  
EPSILON ASSOCIATES, INC.



Dwight R. Dunk, LPD, PWS, BCES  
Principal

cc: H. Palmgren, MBTA  
P. Schuman, SGH, Inc.

encl. OOC DEP File No. 006-1501  
OOO Page 4 of 12 (with revised impacts quantities)  
Sheet 10 of 14 – Resource Area (March 13, 2017)  
Revised Sheet 10 of 14 – Resource Area (November 15, 2019)  
Sheets SK-14A and SK-14B - MBTA SHORELINE RESTORATION (November 25, 2019)



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**WPA Form 5 - Order of Conditions**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
 MassDEP File #:006-1501  
 eDEP Transaction #:918907  
 City/Town:BOSTON

**A. General Information**

1. Conservation Commission BOSTON  
 2. Issuance a.  OOC b.  Amended OOC

**3. Applicant Details**

a. First Name HOLLY b. Last Name PALMGREN  
 c. Organization MBTA  
 d. Mailing Address 10 PARK PLAZA  
 e. City/Town BOSTON f. State MA g. Zip Code 02116

**4. Property Owner**

a. First Name b. Last Name  
 c. Organization  
 d. Mailing Address  
 e. City/Town f. State g. Zip Code

**5. Project Location**

a. Street Address 80 ALFORD STREET  
 b. City/Town BOSTON c. Zip Code 02116  
 d. Assessors Map/Plat# 0201836000 e. Parcel/Lot# NA  
 f. Latitude 42.38914N g. Longitude 71.07398W

**6. Property recorded at the Registry of Deed for:**

a. County b. Certificate c. Book d. Page

**7. Dates**

a. Date NOI Filed : 3/2/2017 b. Date Public Hearing Closed: 3/15/2017 c. Date Of Issuance: 4/19/2017

**8. Final Approved Plans and Other Documents**

a. Plan Title: b. Plan Prepared by: c. Plan Signed/Stamped by: d. Revised Final Date: e. Scale:

**B. Findings**

**I. Findings pursuant to the Massachusetts Wetlands Protection Act**

Following the review of the the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act.

Check all that apply:

a. <input type="checkbox"/> Public Water Supply	b. <input checked="" type="checkbox"/> Land Containing Shellfish	c. <input checked="" type="checkbox"/> Prevention of Pollution
d. <input type="checkbox"/> Private Water Supply	e. <input checked="" type="checkbox"/> Fisheries	f. <input checked="" type="checkbox"/> Protection of Wildlife Habitat
g. <input type="checkbox"/> Ground Water Supply	h. <input checked="" type="checkbox"/> Storm Damage Prevention	i. <input checked="" type="checkbox"/> Flood Control

**2. Commission hereby finds the project, as proposed, is:**

**Approved subject to:**

a.  The following conditions which are necessary in accordance with the performance standards set forth in the



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

**WPA Form 5 - Order of Conditions**

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

Provided by MassDEP:  
 MassDEP File #:006-1501  
 eDEP Transaction #:918907  
 City/Town:BOSTON

wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

Denied because:

- b.  The proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect interests of the Act, and a final Order of Conditions is issued. A description of the performance standards which the proposed work cannot meet is attached to this Order.
- c.  The information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).

- 3.  Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310CMR10.02(1)(a).

\_\_\_\_\_ a. linear feet

**Inland Resource Area Impacts:(For Approvals Only):**

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	_____ a. linear feet	_____ b. linear feet	_____ c. linear feet	_____ d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
6. <input type="checkbox"/> Land under Waterbodies and Waterways	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
	_____ e. c/y dredged	_____ f. c/y dredged		
7. <input type="checkbox"/> Bordering Land Subject to Flooding	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
	Cubic Feet Flood Storage _____ e. cubic feet	_____ f. cubic feet	_____ g. cubic feet	_____ h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	_____ a. square feet	_____ b. square feet		
	Cubic Feet Flood Storage _____ c. cubic feet	_____ d. cubic feet	_____ e. cubic feet	_____ f. cubic feet
9. <input type="checkbox"/> Riverfront Area	_____ a. total sq. feet	_____ b. total sq. feet		
	Sq ft within 100 ft _____	_____	_____	_____



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection - Wetlands**  
**WPA Form 5 - Order of Conditions**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
 MassDEP File #:006-1501  
 eDEP Transaction #:918907  
 City/Town:BOSTON

Sq ft between 100-200 ft

c. square feet	d. square feet	e. square feet	f. square feet
_____	_____	_____	_____
g. square feet	h. square feet	i. square feet	j. square feet
_____	_____	_____	_____

**Coastal Resource Area Impacts:**

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input checked="" type="checkbox"/> Land Under the Ocean	51600			
	a. square feet	b. square feet		
	0			
	c. c/y dredged	d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	14620		0	
	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
14. <input type="checkbox"/> Coastal Dunes	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
15. <input checked="" type="checkbox"/> Coastal Banks	1220			
	a. linear feet	b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	a. square feet	b. square feet		
17. <input type="checkbox"/> Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. <input type="checkbox"/> Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. <input checked="" type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	180			
	c. c/y dredged	d. c/y dredged		
21. <input checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	9800			
	a. square feet	b. square feet		

22.  Restoration/Enhancement (For Approvals Only)

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c & d or B.17.c & d above, please entered the additional amount here.



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**WPA Form 5 - Order of Conditions**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
 MassDEP File #:006-1501  
 eDEP Transaction #:918907  
 City/Town:BOSTON

a. square feet of BVW

b. square feet of Salt Marsh

23. \_\_\_\_\_

**Γ. Streams Crossing(s)**

If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings

b. number of replacement stream crossings

**C. General Conditions Under Massachusetts Wetlands Protection Act**

**The following conditions are only applicable to Approved projects**

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
  - a. the work is a maintenance dredging project as provided for in the Act; or
  - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not exceed the issuance date of the original Final Order of Conditions.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work..
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

" Massachusetts Department of Environmental Protection"  
 [or "MassDEP"]  
 File Number : "006-1501"



**Massachusetts Department of Environmental  
Protection**

Bureau of Resource Protection - Wetlands

**WPA Form 5 - Order of Conditions**

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

Provided by MassDEP:  
MassDEP File #:006-1501  
eDEP Transaction #:918907  
City/Town:BOSTON

11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before Mass DEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

**NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS**

19. The work associated with this Order(the "Project") is (1)  is not (2)  subject to the Massachusetts Stormwater Standards. If the work is subject to Stormwater Standards, then the project is subject to the following conditions;
  - a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollutant Discharge Elimination System Construction General Permit as required by Stormwater Standard 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
  - b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that: *i.* all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures; *ii.* as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized; *iii.* any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10; *iv.* all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been





**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

**WPA Form 5 - Order of Conditions**

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

Provided by MassDEP:  
MassDEP File #:006-1501  
eDEP Transaction #:918907  
City/Town: BOSTON

- inspected to ensure that they are not damaged and that they are in proper working condition; v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.
- c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 19(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.
  - d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollutant Discharge Elimination System Multi-Sector General Permit.
  - e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 19(f) through 19(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 19(f) through 19(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.
  - f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.
  - g) The responsible party shall:
    - 1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
    - 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
    - 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
  - h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
  - i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
  - j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
  - k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.



**Massachusetts Department of Environmental  
Protection**  
Bureau of Resource Protection - Wetlands  
**WPA Form 5 - Order of Conditions**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
MassDEP File #:006-1501  
eDEP Transaction #:918907  
City/Town:BOSTON

- 
- 1) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

**Special Conditions:**  
SEE ATTACHMENT



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection - Wetlands**  
**WPA Form 5 - Order of Conditions**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
MassDEP File #:006-1501  
eDEP Transaction #:918907  
City/Town:BOSTON

**D. Findings Under Municipal Wetlands Bylaw or Ordinance**

1. Is a municipal wetlands bylaw or ordinance applicable?  Yes  No

**2. The Conservation Commission hereby (check one that applies):**

a.  DENIES the proposed work which cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

1. Municipal Ordinance or Bylaw \_\_\_\_\_

2. Citation \_\_\_\_\_

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order or Conditions is issued. Which are necessary to comply with a municipal ordinance or bylaw:

b.  APPROVES the proposed work, subject to the following additional conditions.

1. Municipal Ordinance or Bylaw \_\_\_\_\_

2. Citation \_\_\_\_\_

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows:



Massachusetts Department of Environmental Protection  
 Bureau of Resource Protection - Wetlands  
**WPA Form 5 – Order of Conditions**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
006-1501  
 MassDEP File #

eDEP Transaction #  
Boston  
 City/Town

**E. Signatures**

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

4/19/2017

1. Date of Issuance

Please indicate the number of members who will sign this form.  
 This Order must be signed by a majority of the Conservation Commission.

5

2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Aldo J. Jr.  
Luise Bell  
M. J. D.

John Lee  
J. C.

by hand delivery on

by certified mail, return receipt requested on 4/20/17

Date

Date

**F. Appeals**

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection - Wetlands**  
**WPA Form 5 - Order of Conditions**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
 MassDEP File #:006-1501  
 eDEP Transaction #:918907  
 City/Town:BOSTON

(M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

**G. Recording Information**

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

BOSTON  
 Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:  
BOSTON  
 Conservation Commission

Please be advised that the Order of Conditions for the Project at:

80 ALFORD STREET 006-1501  
 Project Location MassDEP File Number

Has been recorded at the Registry of Deeds of:

County	Book	Page
--------	------	------

for:  
Property Owner

and has been noted in the chain of title of the affected property in:

Book	Page
------	------

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number



**Massachusetts Department of Environmental  
Protection**  
Bureau of Resource Protection - Wetlands  
**WPA Form 5 - Order of Conditions**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
MassDEP File #:006-1501  
eDEP Transaction #:918907  
City/Town:BOSTON

---

Signature of Applicant

Rev. 4/1/2010

March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)

DEP File No. 006-1501

20. The term "Applicant" as used in this Order of Conditions refers to the owner, any successor in interest or successor in control of the property referenced in the Notice of Intent, supporting documents and this Order of Conditions. The Commission must be notified in writing within 30 days of all transfers of title of any portion of property that take place prior to the issuance of the Certificate of Compliance.
21. The property that is the subject of this Order and upon which the project is located will be referred hereinafter as "the subject property" or the "project site".
22. A member of the Conservation Commission or its agent may enter and inspect the property and the activities that are the subjects of this Order of Conditions (OOC) at all reasonable times, with or without probable cause or prior notice, and until a Certificate of Compliance (COC) is issued, for the limited purpose of evaluating compliance with this OOC.
23. The Applicant is hereby instructed to review such conditions with all contractors and workers involved in on site operations prior to the commencement of construction on this project. Any contractors and workers arriving after construction commences must also be apprised of these conditions.
24. The Applicant must attach a copy of this Final Order of Conditions (hereinafter "the Order") to the contract documents associated with this project.
25. The Commission reserves the right to impose additional conditions or require the submittal of additional information as necessary to protect the interests of the Act.
26. If at any time during the implementation of the project a fish kill or significant water quality problem occurs in the vicinity of the project, all site related activities impacting the water must cease until the source of the problem is identified and adequate mitigating measures employed to the satisfaction of the Boston Conservation Commission (hereinafter "the Commission").
27. Where relevant, all facilities and equipment will be continually operated and maintained so as to comply with the conditions and the Massachusetts Wetlands Protection Act (hereinafter "the Act"). The Applicant, owner, successor or assigns will be responsible for maintaining all on-site drainage structures and outfalls, assuring the lasting integrity of the surface cover on the site and site activities so as to prevent erosion, siltation, sedimentation, chemical contamination or other detrimental impact to the on-site and/or off-site wetland resource areas. This condition is a **maintenance** condition, and will not expire upon the issuance of a Certificate of Compliance.
28. A copy of the Order, including all referenced documents and plans, and all other subsequent approvals and directives issued by the Commission, must be available for inspection at the work area.
29. All project generated discharges, including stormwater, authorized by a NPDES permit, will be subject to the terms of the NPDES permit which is incorporated herein by reference pursuant to 310 CMR 10.03 (4). The Applicant must submit the NPDES permit to the Commission.
30. The Applicant will submit the Water Quality Certificate issued by the Massachusetts Department of Environmental Protection, pursuant to Section 401 and 404 of the federal Clean Water Act, to the Commission. The terms of the Water Quality Certificate will be made part of this Order of Conditions. In no case will they exempt the proponent from any other condition of this Order. If a conflict arises between requirements of this Order and the requirements of the Water Quality Certificate the Applicant will request an amendment of this Order of Conditions to review the condition causing the conflict.
31. There may be no discharge or spillage of fuel, oil, or any other pollutant from this project into adjacent wetland resource areas or 100-foot Buffer Zone (hereinafter "buffer zone") associated with those resource areas. Any equipment used in any wetland resource area or buffer zone that uses fuel, oil or hydraulic fluid must be inspected daily for leakage. Any equipment that requires repair must be repaired outside of any wetland resource area or buffer zone. Any equipment that uses fuel, oil and/or hydraulic fluid must be staffed at all times while operational within wetland resource areas or buffer zone. Equipment must not be re-fueled within any wetland resource areas, except that equipment

March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)  
**DEP File No. 006-1501**

located within the cofferdam that cannot be readily moved outside of the cofferdam. The contractor will use caution when refueling and spill kits will be available.

32. The Applicant and/or their contractor will develop a spill management plan for any hazardous materials that may be employed during work in the buffer zone or over the water. Specifically, the Applicant should prepare to effectively deal with spillage of fuel or hydraulic fluids from equipment. A quick-absorbent material, such as "Speedy Dry" or equivalent, must be stored in a dry readily available area at the work site, and on any project related vessels, for use in the event petroleum-based fluids are spilled or leaked. The contractor must have an oil sorbent boom at the project site and deploy the boom immediately upon observing any petroleum sheen on the watersheet. The spent material should be containerized and disposed of properly.
33. The Applicant must inform the Commission of any violation of this Order and any other project related spill or accident that may impact wetland resource areas as soon as possible and at least by the end of the business day, and must take appropriate action to mitigate impacts from such spill or accident. The Applicant or site supervisor must notify the City of any emergency by calling Commission staff at 617-635-3850 from 9:00 AM - 5:00 PM, Monday - Friday and, at all other times, by calling the Mayor's Office's 24-hour Hotline at 617-635-4500. On the date of the issuance of this Order, the appropriate contact is Amelia Croteau, Conservation Assistant: [cc@boston.gov](mailto:cc@boston.gov)
34. The Applicant must submit for Commission staff review and approval an Oil Spill Prevention, Control and Countermeasure Plan, which must specify the containment measures and notification protocol to be implemented should a fuel spill occur. The fuel tanks must also have a leak detection system. The plan should include the continued maintenance of emergency fuel booms at the facility. The approved plan will be incorporated into this Order by reference herein, and will not expire upon issuance of a Certificate of Compliance.
35. Anti-degradation provisions of the Massachusetts Surface Water Quality Standards protect all waters including wetlands. The contractor must take all steps necessary to assure that the proposed activities will be conducted in a manner which will avoid violations of said standards.
36. Any mitigation measures required by federal, state, or other local agencies that may impact wetlands resource areas must be submitted to Commission staff for review to determine what level of permitting or authorization will be necessary.
37. The proposed activity is a limited project as described in 310 CMR 10.24 "General Provisions" and/or 310 CMR 10.53 "General Provisions" and must adhere to the conditions applicable thereto.
38. All project related correspondence and submittals to the Boston Conservation Commission regarding this Final Order must indicate the DEP File number: 006-1501.

#### Prior to Construction

39. Prior to construction start up, the Applicant must submit final plans stamped by a registered professional engineer to Commission staff. Commission staff will determine if there have been significant revisions made to the plans referenced in this Order that may require further Commission review.
40. In advance of construction start-up on any section of this project, the Applicant must notify the Commission and, at the request of the Commission, may arrange an on-site conference of representatives of the Commission, the contractor, the project engineer and the Applicant to ensure that all the conditions of this Order are understood. The Commission must be notified at least 48 hours in advance of the date upon which construction activities on the site are to proceed. All appropriate construction impact mitigation measures must be in place prior to initiation of work on the project site.
41. The Applicant and/or their contractor must provide to the Commission written notification of the name, title, address and telephone numbers of the person or persons designated by the project proponent to



March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)  
DEP File No. 006-1501

be responsible for compliance with the Order on site. An emergency telephone number must be provided in the event that action is required during non-working hours.

42. The project supervisor overseeing daily operations at the site must read this Order and sign a copy of each page, indicating that each condition has been read and understood. These signed pages must be submitted to Commission staff.
43. Before work at this site commences, the Applicant or their contractor must submit a final erosion and sediment control plan for review and approval by Commission staff. Final plans showing the points of discharge, wheel wash stations, sedimentation tanks and basins, oil separating equipment and other engineering structures should be provided to the Commission with a certified engineer's stamp and signature. To satisfy this condition the Applicant may submit a Storm Water Pollution Prevention Plan (SWPPP) required under the NPDES Construction General Permit for Storm Water Discharges for Construction Activities. The approved plan will be a condition of this Order by reference herein.
44. Prior to the commencement of construction and site clearing, an erosion and sediment control barrier must be installed along the limit of activity between all work areas and wetland resource areas. Hay bales or straw bales should be double staked (where possible) with bales butted against each other. If straw wattles or filter sox are used, they should be anchored in place. If specified, geotextile siltation fence should be installed no further than twelve (12) inches from the down-gradient side of the barrier. These barriers must be inspected daily and after significant rain events (greater than 0.5 inches of precipitation) and maintained as necessary, including the removal of accumulated sediments. The contractor will ensure that additional erosion and sediment control materials are available for immediate installation to replace those that are damaged or degraded. Erosion control measures should be removed upon completion of work and after disturbed areas are stabilized. The geotextile fence will constitute a limit-of-work line, beyond which no work or clearing of vegetation may occur.
45. The contractor must submit a construction materials and equipment staging plan 30 days prior to construction for Commission staff review and approval. Project related staging areas will be subject to all conditions herein. Staging areas located outside the project footprint, as indicated on the approved project plan of record, and within wetland resource areas and the buffer zone may be subject to further Commission review.
46. The Applicant must submit to Commission staff notice of approval by the Boston Water and Sewer Commission (BWSC) of the plans for this project. Any modifications required by BWSC to the plans approved by this Order must be detailed in writing with this submittal so that Commission staff can determine if further conditions are required.
47. Before construction commences, the Applicant must submit to the Commission for its review and approval a landscaping plan that provides native coastal bank vegetation and a maintenance plan for the coastal landscaped areas outlining the mechanisms used for prevention of invasive plants such as phragmites. These submittals will be incorporated into this Order by reference herein.
48. Before construction commences, the Applicant must submit to Commission staff evidence of notification of this proposed project to the Boston Parks and Recreation Commission, to determine if the city ordinance requiring review and approval by the Park Commission of projects within 100 feet of any park within the City of Boston applies to this proposed project.
49. The Applicant must design the stormwater drainage system to include infiltration of rooftop runoff and parking lot drainage or submit certification from a registered professional engineer that infiltration is not technically feasible. The revised plans or certification must be approved by the Boston Water and Sewer Commission and then submitted to Conservation Commission staff before construction commences.
50. Before construction commences, the Applicant must submit to Commission staff evidence of notification of this proposed project to the Department of Conservation and Recreation, as property owner of the adjacent Ryan Playground, and to the Boston Parks and Recreation Commission

March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)  
DEP File No. 006-1501

(hereinafter the Park Commission), to determine if the city ordinance requiring review and approval by the Park Commission of projects within 100 feet of any park within the City of Boston applies to this proposed project.

51. The Applicant must submit a construction and post-construction snow management plan for Commission staff review and approval. Snow from landside areas may not be plowed or otherwise deposited into the waters of the Mystic River or adjacent coastal beaches or banks. Snow must be stockpiled on paved surfaces that direct melted snow water to catch basins. Deicing material and sand must be stored and contained in areas that will not allow for their migration into wetland resource areas. Prior to April 1<sup>st</sup>, all sand and salt from winter application must be removed from the site. The approved snow management plan will be a perpetual maintenance condition that will not expire upon issuance of a Certificate of Compliance.

#### During Construction

52. The Applicant, owner, successor or assigns must regularly remove and dispose of debris on all wetland resources areas on the project site. This is a perpetual **maintenance** condition that will not expire upon issuance of a Certificate of Compliance.
53. The Applicant must maintain the project site free of trash and debris during any down time or hiatus in the project during the term of this Order.
54. The Applicant and/or their contractor must clean the work area at the end of each workday to prevent wind deposition of fugitive dust and accumulation of debris in the buffer zone or wetland resource areas. All stored excavate or fill must be contained with appropriate best management practices when not in use. Special attention should be given by the contractor to securing covers on stored excavate, fill, dumpsters and roll-off containers over the weekend or during down time.
55. Except when necessary for final fitting or precision cutting and during demolition, no timber or construction materials may be cut within the buffer zone. All sawdust and debris must be collected and disposed of properly. Wood treated with creosote or cuprinol may not be placed in the waters of the Mystic River.
56. The applicant should consider the use of Alkaline Copper Quaternary (ACQ)-treated timber piles in place of Chromated Copper Arsenate (CCA)-treated timber piles. This material employs preservative components that are listed in EPA's classification as "General Use" pesticides. This is a less toxic material than CCA and it performs similarly.
57. Disposal of all construction materials, demolition debris and excess fill must be done in accordance with applicable federal, state, and local laws. Proof of proper disposal must be provided in the form of copies of bills of lading, disposal receipts or manifests to Commission staff upon request.
58. All practical best management practices must be implemented during in-water or waterside demolition and construction activities to minimize turbidity and other water quality impacts, including but not limited to a floating boom with an attached silt curtain to contain work areas. The silt curtain should be maintained in good operating condition, should rest on the mud line at all times, and should have adequate shore-line anchors, tie-downs or other mechanisms to ensure proper position and performance. Any visible plume of turbid water caused by project activity outside the area contained by the silt curtain will constitute inadequate performance and require immediate adjustment and/or repositioning of the curtain. Deployment of the curtain should occur in such a way that it will not interfere with water traffic. The boom may be removed when work directly requiring the use of a boom has been completed. The contractor must also have an oil sorbent boom at the project site and deploy the boom immediately upon observing any petroleum sheen on the watersheet.
59. All project-related materials must be contained from migration into wetland resource areas and all practical precautions must be used during any water-based demolition and construction work. The Applicant and/or their contractor will be responsible for the removal of any project-related debris, material, machinery or equipment lost, dumped, thrown into, or otherwise entering any wetland

March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)  
DEP File No. 006-1501

resource area, regardless of whether it is within or outside of the project limits. The proponent must seek Commission approval for any remedial action involving substantial impacts to wetland resource areas.

60. The contractor must have a boat available for the collection and removal of project related trash and debris within wetland resource areas and on the watersheet. The contractor will contain and collect all floating debris that results from the project and collect it along with solid waste including trash. The collected debris and trash will be placed into containers and periodically removed for proper disposal. The boat should also be used to check the boom.
61. All vessels working at this site must be maintained in seaworthy condition. Should any vessel or barge associated with the project sink the Commission must be informed immediately. The proposed work and placement of barges should be coordinated with vessels that navigate in the affected waterways. All vessels and floating equipment must be anchored or moored when not in use and have proper lighting per U.S. Coast Guard requirements. Barges must be anchored with spuds or tied off to a secure structure; under no circumstances should construction equipment on the barge be utilized for purposes of anchoring. Project related vessels may not rest upon tidal flats.
62. All deck gear and equipment stored on project-related vessels must be secured at the end of each workday and inspected for any leakage. All project-related vessels must have a spill kit containing sorbent materials on the vessel at all times. All material stored on project related vessels must be contained so as not to enter the resource area. Petroleum product and hydraulic fluids must be stored within leak-proof lockers secured to the deck of the vessel.
63. Piles must be extracted entirely by pulling. If there is a structural reason for cutting the piles, then the contractor must cut them at the mud line, and the Applicant must submit to Commission staff a letter from a registered, professional engineer certifying the reason therefore. The Applicant must also submit a plan stamped by a registered engineer indicating the location of piles that remain below the mud line.
64. On-site discharge of untreated, decanted water from construction dewatering to resource areas is prohibited. If on-site discharge becomes necessary, the Applicant must submit a plan indicating dewatering methodology, water quality monitoring measures, and staging location of dewatering equipment for Commission staff review and approval. Any approved dewatering must treat decanted water according to additional conditions deemed necessary by Commission staff.
65. The Applicant, owner, successor or assigns will ensure the cleanliness of all catch basins on the project site or affected by project related activity. Catch basins will be protected with hay bales and/ or silt sacks during the construction period. The proponent must inspect and, as necessary, clean all catch basins at least weekly during construction and more frequently after a significant rain event. Upon completion of the project, the inspection and cleaning of catch basins on the subject property must occur twice a year: once between March 1<sup>st</sup> and April 30<sup>th</sup> and once between November 1<sup>st</sup> and November 30<sup>th</sup> of each year, and more often if necessary. This **maintenance** condition is perpetual and will not expire upon issuance of a Certificate of Compliance.
66. The Applicant must provide the Commission with copies of the Operations and Maintenance Log for all stormwater BMP's on the subject site yearly. Copies must be provided for a minimum of three years after completion of construction and specify dates of inspections, repairs, replacement, maintenance and cleaning actions, and names of individuals or contractors conducting said maintenance.
67. Repair or replacement of stormwater infrastructure may not commence in advance of a forecasted rain event.
68. All sheet flow from areas where vehicles drive or park must be directed toward catch basins that meet Boston Water and Sewer Specifications.

March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)

**DEP File No. 006-1501**

69. Any new or reconstructed catch basins, or any new or replaced sections of sidewalk or pavement adjacent to surface drains on the project site, must have a permanent plaque within one foot of the structure that states "Don't Dump - Drains to Boston Harbor."
70. Trucks entering and leaving the site must have their loads completely covered in compliance with M.G.L. Chapter 85 § 36. Vehicles that accumulate soil or any unconsolidated material on their tires due to exposed ground conditions at the site must be thoroughly washed to avoid tracking of material onto the public way.
71. The contractor must have designated washout areas for concrete equipment that will be comprised of impermeable material and sized to contain project concrete wastes and wash water. Washout areas may not be located in the vicinity of storm drain inlets, stormwater conveyance, surface waters or wetlands.
72. Excavation equipment may access the inter-tidal area only during periods of low tide and utilize rubber-tired vehicles.
73. There may be no parking of contractor or laborer vehicles in any resource area or associated buffer zone without proper stormwater controls or best management practices installed.
74. Construction activity will be confined within the limits of work as represented on the final plan of record. There may be no staging of construction materials, storage of construction equipment, clearing or disturbance to land beyond the limit of work.
75. There may be no overnight stockpiling or storage of construction material including unconsolidated material, piles, debris, petroleum products or hydraulic fluids (or equipment containing these products or fluids) within the buffer zone, 25 feet of the coastal bank, or the 100-year flood plain. Erosion and sediment control containment measures must be installed and maintained between wetland resource areas and any stored construction materials or staged construction equipment. Under no circumstances may the project contractor store, stage or locate unconsolidated material or construction equipment not directly associated with the project and subject site within resource areas or the buffer zone. At the request of the Applicant, Commission staff may authorize construction lay-down areas within the buffer zone for storage of equipment *during the construction period only*.
76. The Applicant or their contractor must keep a daily log summarizing all construction and demolition activities of this project on every day that such activity occurs, noting turbidity conditions, occurrence of fish kills, debris removal from resource areas and evaluations of measures employed to reduce turbidity and other impacts to the water and wetland resources. The condition of all drainage, erosion controls and sedimentation structures must be noted in the daily log, as well as the performance of maintenance activities on such structures. The contractor must provide Commission staff with a draft construction inspection form prior to commencement of work on the project site. This log must be kept at the work area and made available upon demand by Commission staff.
77. All land-side areas disturbed during construction must be stabilized as soon as possible upon completion of construction. Loaming and seeding should occur within (5 - 30) days of final grading. Disturbed resource areas landward of the high water line and buffer zone mark should be secured by a biodegradable erosion control mats while vegetation establishes. Barren areas should be stabilized with a temporary cover of rye or other grass if work on the project is interrupted for more than 30 days. If the season is not appropriate for plant growth, then exposed surfaces may be stabilized by straw, snow fence, or other U.S. Natural Resources Conservation Service - recommended methods. The Applicant or their contractor will ensure a mature cover of vegetation is established on previously disturbed or exposed areas.
78. The contractor will conduct construction sequencing such that areas cleared of ground vegetation and earth materials are exposed for a minimum of time before they are covered, seeded, or otherwise stabilized to prevent erosion.
79. There may be no dumping of leaves, grass clippings, brush, fill or other debris into wetland resource areas. This condition is perpetual and will not expire upon issuance of a certificate of compliance.

March 15, 2017

## Attachment – Special Conditions

MBTA, Charlestown Bus Facility Shoreline Stabilization and Yard Improvements, 80 Alford Street  
Charlestown, Mystic River (LUO, Coastal Beaches, Coastal Banks, Fish Runs, LSCSF)

**DEP File No. 006-1501**

80. All equipment and unconsolidated materials must be removed from areas subject to the 1% annual chance flood (100-year flood, Zone A) in advance of significant rainfall that will exceed the volume of a 2-year storm event.
81. All equipment and unconsolidated materials must be removed from the buffer zone and Land Subject to Coastal Storm Flowage (Special Flood Hazard Areas subject to inundation by the 1% annual chance flood) in advance of any forecasted coastal flooding event.

**Additional Conditions**

82. Following the completion of state and local review processes, the Applicants must submit final design plans, including landscaping and signage details and any modifications or additions to the project, to Commission staff to determine if further Commission review is required. The proposed landscape plan and drainage may be subject to further revisions relative to development on abutting properties. The Applicants agree to attend future public hearings of the Conservation Commission for review of development proposals on abutting properties.

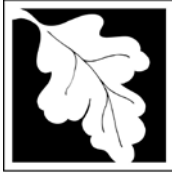
---

***Project Description from NOI:***

The proposed project will provide long-term protection for the entire shoreline at the Charlestown Facility. In the Bus Garage and Bus Storage Area, a raised embankment will be installed, with a top elevation sufficient to protect the site from a 100-year storm in the year 2070, based on the projected sea level rise. The embankment will be supported on a relieving platform constructed at Mean low Water and supported on slightly organic and marine sediments with soilcrete columns. Stone fill will be placed above and, where needed, below and immediately seaward of the platform. The lower portion of the embankment will be protected by riprap. The upper portion of the embankment will consist of a bioengineering slope planted with native vegetation. This vegetation will provide a natural buffer that will serve to improve water quality by filtering stormwater runoff and attenuating pollutants provide additional habitat areas in the transition between the uplands and the shoreline, and provide a more natural means of shoreline protection along the upper face of the embankment. In the Engineering Rail Yard, a new revetment and sheet pile cutoff wall will be installed to stabilize the shoreline and provide flood protection. Along the site's entire waterfront, an easement will be provided to DCR for the multi-use pathway on the top of the embankment or above the revetment.

To create the embankment on the riverside of the DCR pathway easement, some filling on the river side of the current bulkhead will be required. The project will involve work within Land under Ocean/Fish Run, Coastal Beach/Tidal Flat, Coastal bank, Land Subject to Coastal Storm Flowage and Riverfront Area within the City of Boston. The Project will provide new wetland resource area habitat along the northernmost section of the Project shoreline as partial mitigation for this unavoidable impact.

The stormwater improvements that have been incorporated into the Project include replacing existing pipes, manholes and catch basins as needed. All proposed catch basins noted for replacement will be deep sump catch basins with hooded outlets to facilitate the capture of solids and road oils. The small change will immediately add an increase in stormwater treatment that does not exist today. Additional stormwater improvements under consideration include the use of proprietary separators for several systems in the bus garage area, inclusion of a green space/bioretenion area in the Engineering Rail Yard in Somerville, and the relocation of materials handling operations away from the river in the Engineering Rail yard. These changes are expected to greatly improve the water quality of stormwater that will be discharged from the Project site in the future.



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**WPA Form 5 – Order of Conditions**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File # \_\_\_\_\_

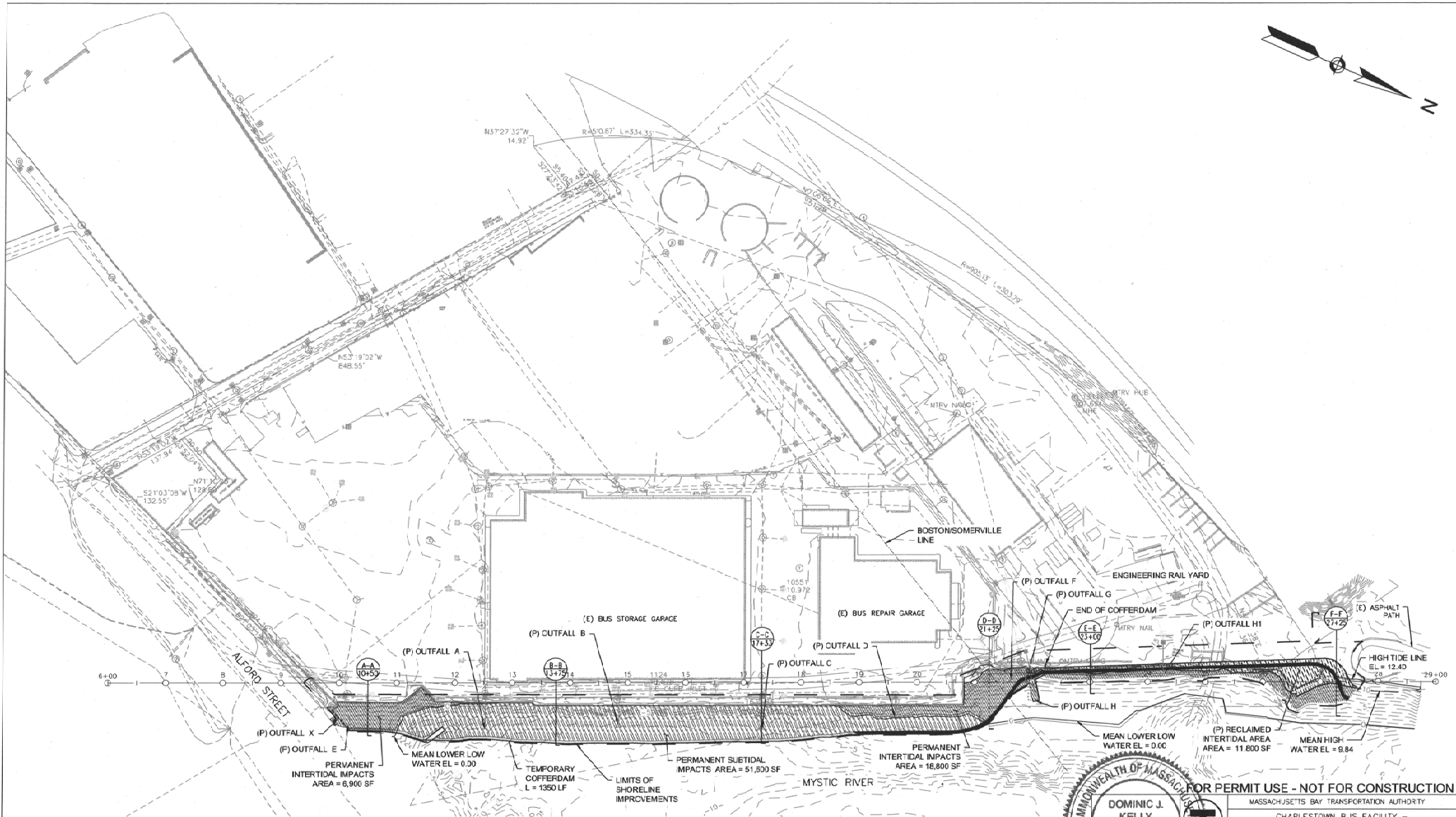
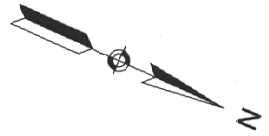
eDEP Transaction # \_\_\_\_\_

City/Town \_\_\_\_\_

**B. Findings (cont.)**

**Coastal Resource Area Impacts:** Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input checked="" type="checkbox"/> Land Under the Ocean	<u>52,700</u> a. square feet	<u>51,600</u> b. square feet		
	<u>                    </u> c. c/y dredged	<u>                    </u> d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	<u>15,720</u> a. square feet	<u>14,620</u> b. square feet	<u>                    </u> c. nourishment	<u>                    </u> d. nourishment
14. <input type="checkbox"/> Coastal Dunes	<u>                    </u> a. square feet	<u>                    </u> b. square feet	<u>                    </u> c. nourishment	<u>                    </u> d. nourishment
15. <input checked="" type="checkbox"/> Coastal Banks	<u>1,220</u> a. linear feet	<u>1,220</u> b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	<u>                    </u> a. square feet	<u>                    </u> b. square feet		
17. <input type="checkbox"/> Salt Marshes	<u>                    </u> a. square feet	<u>                    </u> b. square feet	<u>                    </u> c. square feet	<u>                    </u> d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	<u>                    </u> a. square feet	<u>                    </u> b. square feet		
	<u>                    </u> c. c/y dredged	<u>                    </u> d. c/y dredged		
19. <input type="checkbox"/> Land Containing Shellfish	<u>                    </u> a. square feet	<u>                    </u> b. square feet	<u>                    </u> c. square feet	<u>                    </u> d. square feet
20. <input checked="" type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	<u>395</u> a. c/y dredged	<u>180</u> b. c/y dredged		
21. <input checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	<u>9,800</u> a. square feet	<u>9,800</u> b. square feet		
22. <input type="checkbox"/> Riverfront Area	<u>                    </u> a. total sq. feet	<u>                    </u> b. total sq. feet		
Sq ft within 100 ft	<u>                    </u> c. square feet	<u>                    </u> d. square feet	<u>                    </u> e. square feet	<u>                    </u> f. square feet
Sq ft between 100-200 ft	<u>                    </u> g. square feet	<u>                    </u> h. square feet	<u>                    </u> i. square feet	<u>                    </u> j. square feet



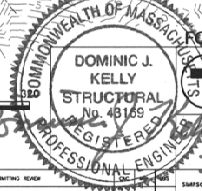
RESOURCE AREA IMPACT QUANTITIES	RESOURCE AREA DREDGE AND FILL QUANTITIES
INTERTIDAL (PERMANENT) = 25,700 SF	INTERTIDAL FILL = 7,860 CY
INTERTIDAL (TEMPORARY) = 400 SF	SUBTIDAL FILL = 21,500 CY
SUBTIDAL (PERMANENT) = 51,600 SF	TOTAL FILL VOLUME = 29,360 CY
SUBTIDAL (TEMPORARY) = 4,000 SF	DREDGED INTERTIDAL = 1,970 CY
RECLAIMED INTERTIDAL = 11,800 SF	DREDGED SUBTIDAL = 180 CY
	ANTICIPATED GROUT SPOILS = 16,200 CY (CONTRACTOR TO CONFIRM PRIOR TO CONSTRUCTION)

**LEGEND**

	PERMANENT INTERTIDAL IMPACTS
	TEMPORARY INTERTIDAL IMPACTS
	PERMANENT SUBTIDAL IMPACTS
	TEMPORARY SUBTIDAL IMPACTS
	RECLAIMED INTERTIDAL AREA

**WETLANDS RESOURCE AREAS WITH IMPACTS**

**NOTE:**  
ALL ELEVATIONS ARE REFERENCED TO MLLW DATUM  
FOR NOAA STATION 8443970 (BOSTON, MA).



**FOR PERMIT USE - NOT FOR CONSTRUCTION**  
 MASSACHUSETTS BAY TRANSPORTATION AUTHORITY  
 CHARLESTOWN BJS FACILITY -  
 SHORELINE STABILIZATION AND YARD IMPROVEMENTS  
 BOSTON, MA, 02129

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D	NAME	DATE
1		DESIGN					
2		REVISION					
3		REVISION					
4		REVISION					
5		REVISION					
6		REVISION					
7		REVISION					
8		REVISION					
9		REVISION					
10		REVISION					

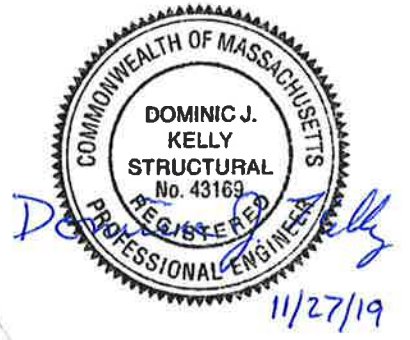
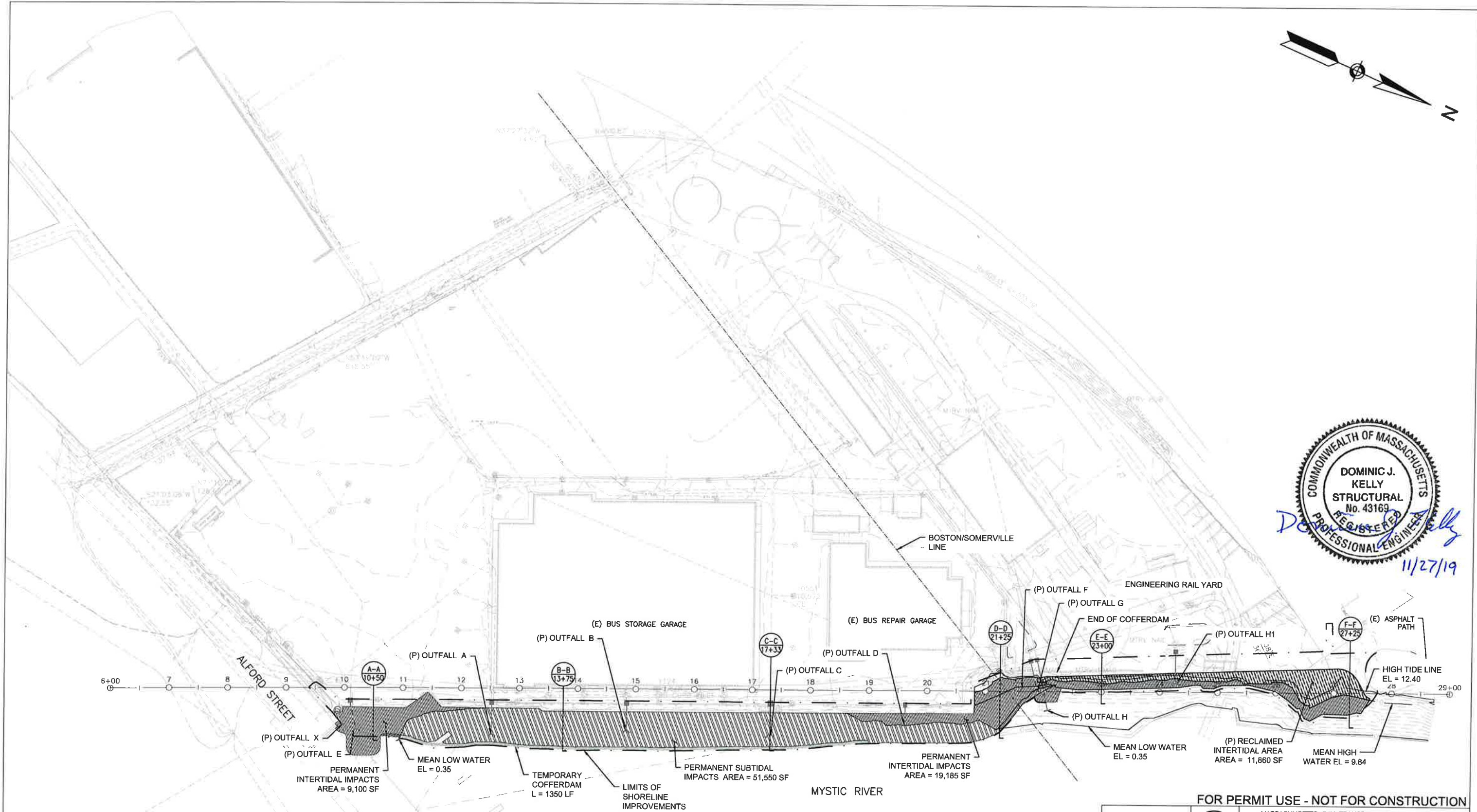
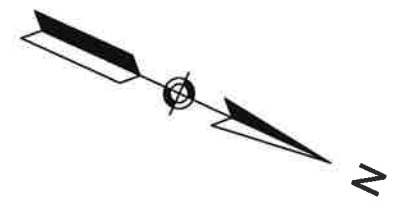
  

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D	NAME	DATE
1		DESIGN					
2		REVISION					
3		REVISION					
4		REVISION					
5		REVISION					
6		REVISION					
7		REVISION					
8		REVISION					
9		REVISION					
10		REVISION					

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D	NAME	DATE
1		DESIGN					
2		REVISION					
3		REVISION					
4		REVISION					
5		REVISION					
6		REVISION					
7		REVISION					
8		REVISION					
9		REVISION					
10		REVISION					



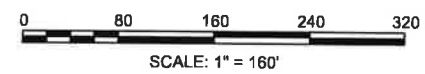


RESOURCE AREA IMPACT QUANTITIES	RESOURCE AREA DREDGE AND FILL QUANTITIES
INTERTIDAL (PERMANENT) = 28,285 SF	INTERTIDAL FILL = 7,850 CY
INTERTIDAL (TEMPORARY) = 165 SF	SUBTIDAL FILL = 21,500 CY
SUBTIDAL (PERMANENT) = 51,550 SF	TOTAL FILL VOLUME = 29,350 CY
SUBTIDAL (TEMPORARY) = 4,000 SF	DREDGED INTERTIDAL = 2,185 CY
RECLAIMED INTERTIDAL = 11,860 SF	DREDGED SUBTIDAL = 180 CY
ANTICIPATED GROUT SPOILS = 16,200 CY (CONTRACTOR TO CONFIRM PRIOR TO CONSTRUCTION)	

**LEGEND**

	PERMANENT INTERTIDAL IMPACTS
	TEMPORARY INTERTIDAL IMPACTS
	PERMANENT SUBTIDAL IMPACTS
	TEMPORARY SUBTIDAL IMPACTS
	RECLAIMED INTERTIDAL AREA

**WETLANDS RESOURCE AREAS WITH IMPACTS**



**NOTE:**  
ALL ELEVATIONS ARE REFERENCED TO MLLW DATUM FOR NOAA STATION 8443970 (BOSTON, MA).

**FOR PERMIT USE - NOT FOR CONSTRUCTION**

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY  
**T** CHARLESTOWN BUS FACILITY – SHORELINE STABILIZATION AND YARD IMPROVEMENTS  
 BOSTON, MA, 02129

PURPOSE: SHORELINE STABILIZATION & COASTAL RESILIENCY  
 APPLICATION BY: MASSACHUSETTS BAY TRANSPORTATION AUTHORITY (MBTA)

REV	DATE	DESCRIPTION	BY	CHKD	APP
01	11/15/19	ISSUE DATE			

DESIGN	DATE	BY	CHKD	APP
ENVIRONMENTAL PERMITTING REVIEW	11/27/19	MBH	MBH	MBH
DESIGN - ENVIRONMENTAL PERMITTING REVIEW	11/27/19	MBH	MBH	MBH
DESIGN - ENVIRONMENTAL PERMITTING REVIEW	11/27/19	MBH	MBH	MBH
DESIGN - ENVIRONMENTAL PERMITTING REVIEW	11/27/19	MBH	MBH	MBH

MANAGER OF DESIGN	NAME	DATE
HORIZ: AS NOTED		
VERT: AS NOTED		
DATE: 11/15/19		

APPROVED BY:	PROJECT MANAGER "NAME"	DATE:

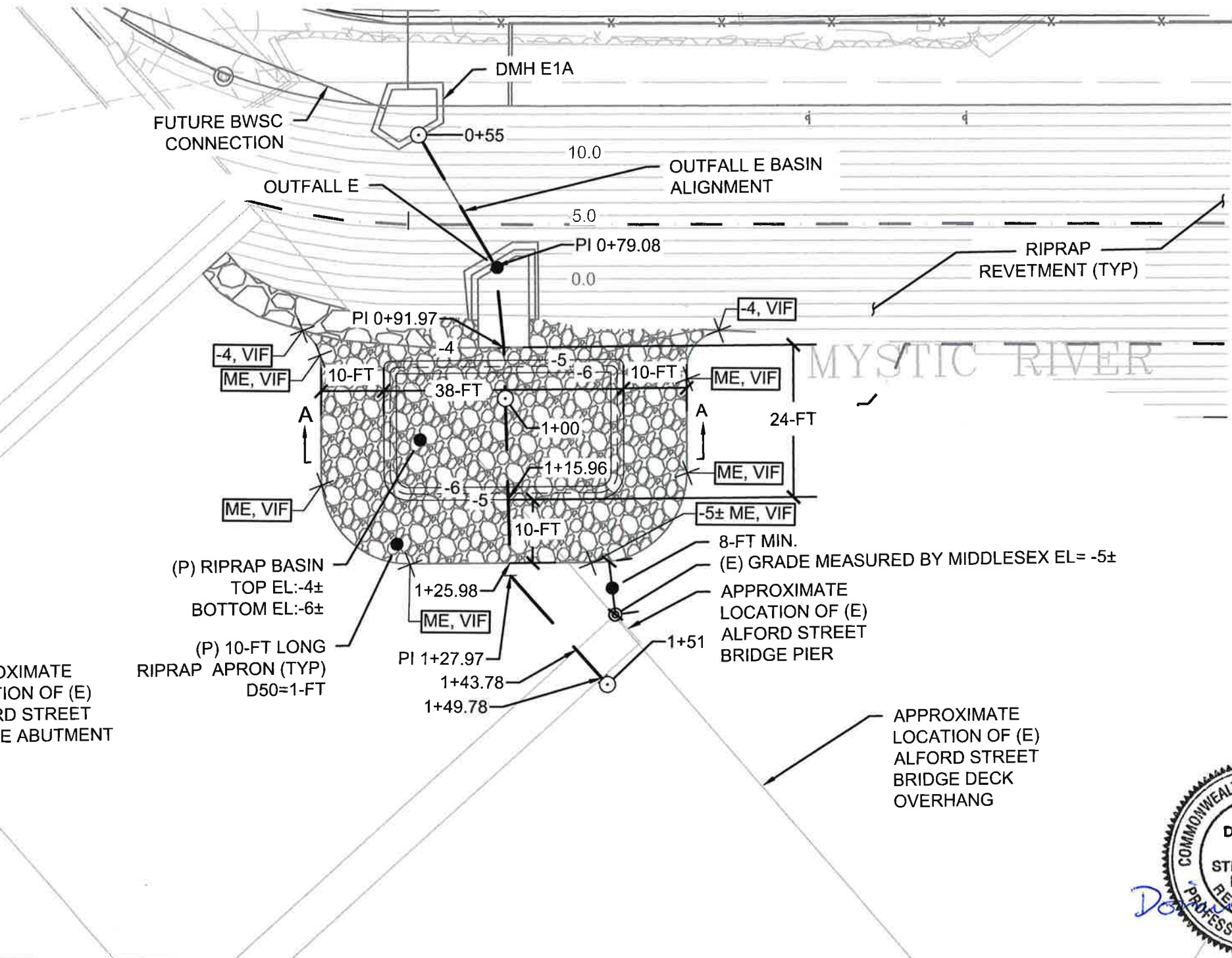
  

PLAN NO.	RESOURCE AREA	ISSUE
SHEET 1 OF 1		





**ALFORD STREET**



MYSTIC RIVER



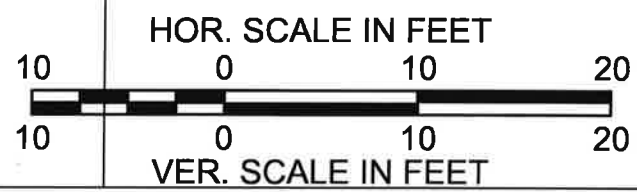
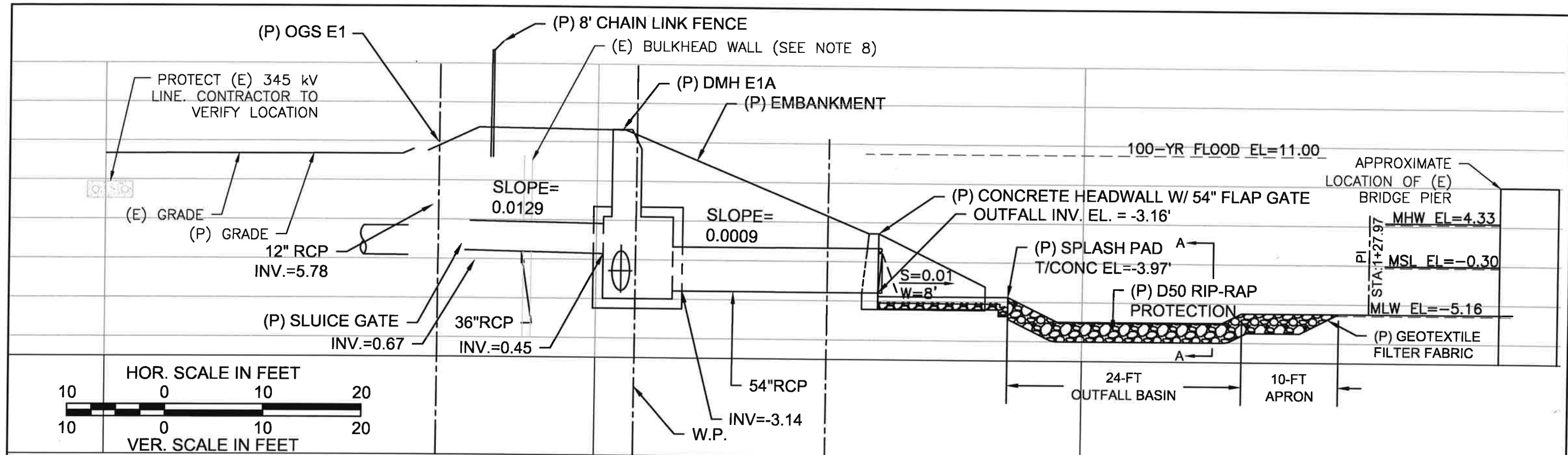
SCALE: 1" = 20'

**NOTES:**

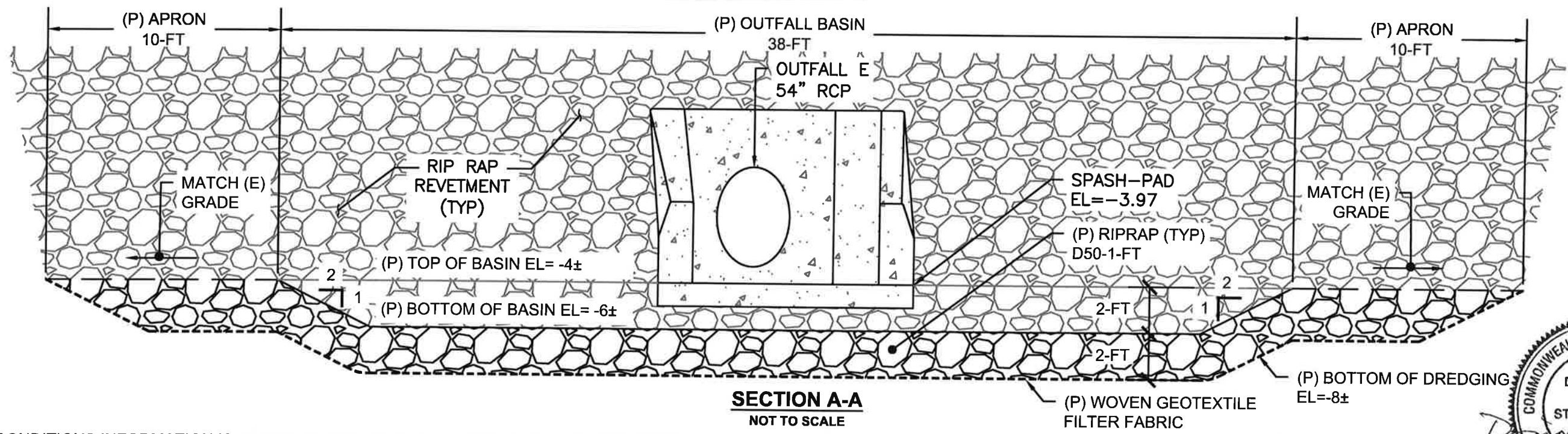
1. EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY FILE PROVIDED ELECTRONICALLY BY C&C CONSULTING ENGINEERS, LLC, DATE 22 FEBRUARY 2017, BY SURVEYED INFORMATION PROVIDED BY APPLIEDORE MARINE ENGINEERING, LLC, DATE APRIL 2015, AND BY SURVEY INFORMATION PROVIDED BY MIDDLESEX CORPORATION ON 2 OCTOBER 2019.
2. REFER TO DRAWINGS TITLED "CHARLESTOWN BUS FACILITY - SHORELINE STABILIZATION AND YARD IMPROVEMENTS", PREPARED BY SGH, DATED 28 JUNE 2017. SEE REVISED RESPONSE TO RFI 024, DATED 17 JULY 2019, FOR ADDITIONAL INFORMATION ON OUTFALL E.
3. ALL ELEVATIONS INDICATED ARE REFERENCED TO THE NAVD88 DATUM, UNLESS OTHERWISE NOTED. ELEVATIONS INDICATED INSIDE OF PARENTHESIS ARE BASED ON MLLW DATUM.

FOR PERMITTING PURPOSE ONLY

<p>Engineering of Structures and Building Enclosures</p> <p>Simpson Gumpertz &amp; Heger Inc. 480 Totten Pond Road Waltham, Massachusetts 02451</p> <p>781.907.9000 fax: 781.907.9009 www.sgh.com</p>	Project: R54CN02 - MBTA SHORELINE RESTORATION		Drawing No.: SK-14A	
	Title: PROPOSED ENERGY DISSIPATOR AT OUTFALL E		Scale: AS NOTED	
Drawn: RJA	Checked: WPK	Approved: PMS	Project No.: 160495.11	
			Date: 27 NOV 2019	



**OUTFALL E PROFILE**



**SECTION A-A**  
NOT TO SCALE

**NOTES:**

- EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY FILE PROVIDED ELECTRONICALLY BY C&C CONSULTING ENGINEERS, LLC, DATE 22 FEBRUARY 2017, BY SURVEYED INFORMATION PROVIDED BY APPLIEDORE MARINE ENGINEERING, LLC, DATE APRIL 2015, AND BY SURVEY INFORMATION PROVIDED BY MIDDLESEX CORPORATION ON 2 OCTOBER 2019.
- REFER TO DRAWINGS TITLED "CHARLESTOWN BUS FACILITY - SHORELINE STABILIZATION AND YARD IMPROVEMENTS", PREPARED BY SGH, DATED 28 JUNE 2017. SEE REVISED RESPONSE TO RFI 024, DATED 17 JULY 2019, FOR ADDITIONAL INFORMATION ON OUTFALL E.
- ALL ELEVATIONS INDICATED ARE REFERENCED TO THE NAVD88 DATUM, UNLESS OTHERWISE NOTED. ELEVATIONS INDICATED INSIDE OF PARENTHESIS ARE BASED ON MLLW DATUM.



FOR PERMITTING PURPOSE ONLY

<b>SIMPSON GUMPERTZ &amp; HEGER</b> Engineering of Structures and Building Enclosures Simpson Gumpertz & Heger Inc. 480 Totten Pond Road Waltham, Massachusetts 02451 781.907.9000 fax: 781.907.9009 www.sgh.com	Project: R54CN02 - MBTA SHORELINE RESTORATION		Drawing No.: SK-14B	
	Title: PROPOSED ENERGY DISSIPATOR AT OUTFALL E			
	Drawn: RJA	Checked: WPK	Approved: PMS	Project No.: 160495.11
	Scale: AS NOTED			Date: 27 NOV 2019

11/27/19