

# Notice of Intent

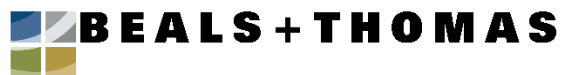
## SUFFOLK DOWNS REDEVELOPMENT: Outdoor Entertainment Venue

**William F. McClellan Highway  
Boston, Massachusetts**



*Prepared for:*  
**The McClellan Highway Development Company, LLC  
c/o The HYM Investment Group, LLC  
One Congress Street  
Boston, Massachusetts**

*Prepared by:*



***Submitted in Compliance with the  
Massachusetts Wetlands Protection Act and the  
Ordinance Protecting Local Wetlands and  
Promoting Climate Change Adaptation in The  
City of Boston***

**January 19, 2022**



January 19, 2022

Boston Conservation Commission  
c/o Nicholas Moreno, Executive Director  
1 City Hall Square, Room 709  
Boston, Massachusetts 02201

Via: Hand Delivery and Email to [cc@boston.gov](mailto:cc@boston.gov)

Reference: Notice of Intent  
Suffolk Downs Redevelopment:  
Outdoor Entertainment Venue  
William F. McClellan Highway  
Boston, Massachusetts  
B+T Project No. 2854.18

Dear Commissioners:

On behalf of the Applicant, The McClellan Highway Development Company, LLC (“Applicant”), Beals and Thomas, Inc. (B+T) respectfully submits this Notice of Intent (NOI) for work within Land Subject to Coastal Storm Flowage (LSCSF), the 100-foot buffer zone to Bank and Bordering Vegetated Wetland (BVW), as well as within the local 25-Foot Waterfront Area regulated under the *Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation in the City of Boston* (the “Ordinance”). Please refer to the enclosed information prepared by B+T in its capacity as the Applicant’s Project Civil Engineer, Surveyor, and Wetland Scientist.

The proposed project (the “Project”) is located on the Boston portion of the Suffolk Downs Redevelopment Site, which is located at 525 William F. McClellan Highway. The Project consists of creation of an interim outdoor entertainment venue, associated infrastructure, and other related site improvements to be located in a portion of the existing infield area (the Venue Project). The venue will consist of a grassed area with temporary stage, restrooms, and vendor booths to remain in place until late 2025. This work is located within the footprint of the site grading designed as part of plans for future redevelopment of the site, and specifically for an area that is planned for a portion of the future Central Common open space area, which grading was previously approved under Order of Conditions (OOC) MassDEP File No. 006-1721. Accordingly, for clarity of the administrative record, this filing reiterates outstanding portions of the previously approved work and seeks to incorporate that remaining Central Common grading work into this Project. Upon approval of the work proposed herein, a Request for Certificate of Compliance will be submitted to close-out the prior OOC for the Central Common grading (MassDEP File No. 006-1721).

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Civil Engineering ▪ Land Surveying ▪ Landscape Architecture ▪ Land Use Permitting ▪ Environmental Planning ▪ Wetland Science

Corporate Office  
144 Turnpike Road  
Southborough, MA 01772

T 508.366.0560 | [www.bealsandthomas.com](http://www.bealsandthomas.com) | F 508.366.4391

Regional Office  
32 Court Street  
Plymouth, MA 02360

This filing is submitted in accordance with the Massachusetts Wetlands Protection Act, MGL Chapter 131, Section 40 and Regulations thereunder at 310 CMR 10.00 (collectively referred to as the "Act"), as well as the Ordinance.

As required, enclosed are the original (with original signature) and an additional copy of the NOI submission package. A digital copy of this filing has been forwarded to your office via e-mail as required. The following information is included for your review:

- Section 1.0: Notice of Intent Forms
- Section 2.0: Project Narrative
- Section 3.0: Abutter Information
- Section 4.0: Stormwater Management Information
- Section 5.0: Plans

As required, a copy of this filing has been provided to the Northeast Regional Office of the Massachusetts Department of Environmental Protection (MassDEP). Pursuant to requirements of the Act and Ordinance, abutters within 300 feet of the property (including those in Revere) will be notified via certified mail, return receipt requested and proof of notification and translation will be provided to the Commission prior to the public hearing.

Enclosed are checks payable to the City of Boston in the amount of \$1,500.00 for the appropriate filing fee required by the City's policy, as well as in the amount of \$600.00 for the filing fee required by the Ordinance. We understand that the City does not accept the local filing fee required by the WPA. A separate check in the amount of \$487.50 has been forwarded to the MassDEP Lock Box to cover the State portion of the filing fee. We understand that the Conservation Commission will coordinate legal notification of the hearing for this NOI in the newspaper, at least seven (7) days prior to the public hearing, and that B+T will be billed by The Boston Herald for this advertisement.

As detailed further in the enclosed narrative, the proposed work will not have an unacceptable significant or cumulative adverse effect upon the Resource Area Values protected by the Ordinance. Therefore, we respectfully request that the Conservation Commission issue an Order of Conditions (OOC) allowing the Project to proceed.

Boston Conservation Commission  
c/o Nicholas Moreno, Executive Director  
January 19, 2022  
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Should you have any questions regarding this matter or require additional information, please contact Jeff Heidelberg at B+T at (508) 366-0560. We thank you for your consideration of this NOI and look forward to meeting with the Commission at the February 2, 2022 public hearing.

Very truly yours,

BEALS AND THOMAS, INC.



Jeffrey A. Heidelberg, PE  
Manager, Urban Development

Enclosures

cc: Boston City Clerk (1 copy via Email)  
MassDEP Northeast Regional Office (1 copy via Certified Mail and Email)  
Revere Conservation Commission (1 copy via Certified Mail)  
Douglas Manz, The McClellan Highway Development Company, LLC, c/o the HYM  
Investment Group, LLC (via Email)  
Michael Barowsky, The McClellan Highway Development Company, LLC, c/o the HYM  
Investment Group, LLC (via Email)  
Leo Rusk, The McClellan Highway Development Company, LLC, c/o The HYM Investment  
Group, LLC (via Email)

MKS/JAH/shm/aak/285418NI001

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## **Section 1.0** **Notice of Intent Forms**

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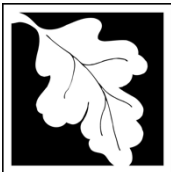
Notice of Intent (WPA Form 3)

Wetland Fee Transmittal Form

Boston Notice of Intent (Local Form)

Checklist for Filing a Notice of Intent with Boston Conservation Commission

Boston Planning and Development Agency Climate Resiliency Checklist



**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:

MassDEP File Number
Document Transaction Number
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>William F. McClellan Highway</u>	<u>Boston</u>	<u>02128</u>
a. Street Address	b. City/Town	c. Zip Code
<u>Latitude and Longitude:</u>	<u>42° 23' 38" N</u>	<u>71° 00' 13" W</u>
	d. Latitude	e. Longitude
<u>Parcel ID: 0102524000</u>	<u>N/A</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Thomas</u>	<u>O'Brien</u>	
a. First Name	b. Last Name	
<u>The McClellan Highway Development Company, LLC</u>		
c. Organization		
<u>c/o The HYM Investment Group, LLC, One Congress Street</u>		
d. Street Address		
<u>Boston</u>	<u>MA</u>	<u>02114</u>
e. City/Town	f. State	g. Zip Code
<u>(617) 248-8905</u>	<u>tobrien@hyminvestments.com</u>	
h. Phone Number	i. Fax Number	j. Email Address

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

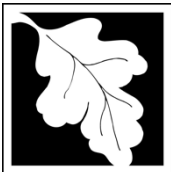
<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Jeffrey</u>	<u>Heidelberg</u>	
a. First Name	b. Last Name	
<u>Beals and Thomas, Inc.</u>		
c. Company		
<u>144 Turnpike Road</u>		
d. Street Address		
<u>Southborough</u>	<u>MA</u>	<u>01772</u>
e. City/Town	f. State	g. Zip Code
<u>(508) 336 0560</u>	<u>jheidelberg@bealsandthomas.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>\$1,000.00</u>	<u>\$487.50</u>	<u>\$512.50 (not accepted by City)</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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

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## A. General Information (continued)

6. General Project Description:

Creation of an interim outdoor entertainment venue, associated infrastructure, and other related site improvements to be located in the future Central Common of the Suffolk Downs Redevelopment Project.

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	133905
a. County	b. Certificate # (if registered land)
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.





**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands

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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.

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	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.  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.



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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 checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	289,000±	
	1. square feet	

4.  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.  Project Involves Stream Crossings

\_\_\_\_\_

a. number of new stream crossings

\_\_\_\_\_

b. number of replacement stream crossings



Massachusetts Department of Environmental Protection  
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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

- 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](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:**

MassMapper  
January 2022

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

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\*

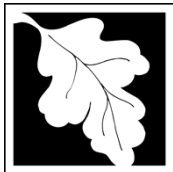
- Percentage/acreage of property to be altered:
  - (a) within wetland Resource Area \_\_\_\_\_ percentage/acreage
  - (b) outside Resource Area \_\_\_\_\_ percentage/acreage
- Assessor’s Map or right-of-way plan of site

- 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 <https://www.mass.gov/endangered-species-act-mesa-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.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

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

- (c)  MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

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, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; 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@mass.gov](mailto:dmf.envreview-south@mass.gov)

Division of Marine Fisheries -  
North Shore Office  
Attn: Environmental Reviewer  
30 Emerson Avenue  
Gloucester, MA 01930  
Email: [dmf.envreview-north@mass.gov](mailto:dmf.envreview-north@mass.gov)

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.

- c.  Is this an aquaculture project?      d.  Yes     No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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

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

- 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.  
Rumney Marshes ACEC
  - 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:
    - 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.

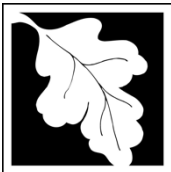
**D. Additional Information**

- 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.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

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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.
 

<u>Suffolk Downs Redevelopment: Outdoor Entertainment Venue</u>	
a. Plan Title	
<u>Beals and Thomas, Inc.</u>	<u>Jeffrey A. Heidelberg, PE</u>
b. Prepared By	c. Signed and Stamped by
<u>January 19, 2022</u>	<u>As noted</u>
d. Final Revision Date	e. Scale
<u>NOI narrative and attachments</u>	<u>January 19, 2022</u>
f. Additional Plan or Document Title	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.

## 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>2613, 2614</u>	<u>January 13, 2022</u>
2. Municipal Check Number	3. Check date
<u>2615</u>	<u>January 13, 2022</u>
4. State Check Number	5. Check date
<u>The McClellan Highway Development Company LLC</u>	
6. Payor name on check: First Name	7. Payor name on check: Last Name



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:

MassDEP File Number

Document Transaction Number

Boston

City/Town

### 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.

1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
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:

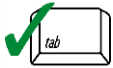
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

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:

William F. McClellan Highway	Boston
a. Street Address	b. City/Town
2615	\$487.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Thomas	O'Brien	
a. First Name	b. Last Name	
The McClellan Highway Development Company, LLC		
c. Organization		
c/o The HYM Investment Group, LLC, One Congress Street		
d. Mailing Address		
Boston	MA	02114
e. City/Town	f. State	g. Zip Code
(617) 248-8905	tobrien@hyminvestments.com	
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

_____	_____	
a. First Name	b. Last Name	
_____		
c. Organization		
_____		
d. Mailing Address		
_____	_____	_____
e. City/Town	f. State	g. Zip Code
_____	_____	_____
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 2(j) other – remaining Central Common Grading	1	\$500	\$500
Category 2(j) other – concert venue	1	\$500	\$500
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<b>Step 5/Total Project Fee:</b>			\$1,000.00
<b>Step 6/Fee Payments:</b>			
Total Project Fee:			\$1,000.00
			a. Total Fee from Step 5
State share of filing Fee:			\$487.50
			b. 1/2 Total Fee <b>less</b> \$12.50
City/Town share of filing Fee:			\$ 512.50 (not accepted by City)

**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.)



**A. GENERAL INFORMATION**

1. Project Location

William F. McClellan Highway a. Street Address	Boston b. City/Town	02128 c. Zip Code
Parcel ID: 0102524000 f. Assessors Map/Plat Number	N/A g. Parcel /Lot Number	

2. Applicant

Thomas a. First Name	O'Brien b. Last Name	The McClellan Highway Development Company, LLC c. Company
c/o The HYM Investment Group, LLC, One Congress Street d. Mailing Address		
Boston e. City/Town	MA f. State	02114 g. Zip Code
(617) 248-8905 h. Phone Number	 i. Fax Number	tobrien@hyminvestments.com j. Email address

3. Property Owner

_____ a. First Name	_____ b. Last Name	_____ c. Company
_____ d. Mailing Address		
_____ e. City/Town	_____ f. State	_____ g. Zip Code
_____ h. Phone Number	_____ i. Fax Number	_____ j. Email address

Check if more than one owner

(If there is more than one property owner, please attach a list of these property owners to this form.)

4. Representative (if any)

Jeffrey a. First Name	Heidelberg b. Last Name	Beals and Thomas, Inc. c. Company
144 Turnpike Road d. Mailing Address		
Southborough e. City/Town	MA f. State	01772 g. Zip Code
(508) 336 0560 h. Phone Number	 i. Fax Number	jheidelberg@bealsandthomas.com j. Email address



5. Is any portion of the proposed project jurisdictional under the Massachusetts Wetlands Protection Act M.G.L. c. 131 §40?

- Yes  No

If yes, please file the WPA Form 3 - Notice of Intent with this form

6. General Information

\_\_\_\_\_  
Creation of an interim outdoor entertainment venue, associated infrastructure, and other related site improvements to be

\_\_\_\_\_  
located in the future Central Common of the Suffolk Downs Redevelopment Project.

7. Project Type Checklist

- |   |   |
|---|---|
| a. <input type="checkbox"/> Single Family Home                | b. <input type="checkbox"/> Residential Subdivision             |
| c. <input type="checkbox"/> Limited Project Driveway Crossing | d. <input checked="" type="checkbox"/> Commercial/Industrial    |
| e. <input type="checkbox"/> Dock/Pier                         | f. <input type="checkbox"/> Utilities                           |
| g. <input type="checkbox"/> Coastal Engineering Structure     | h. <input type="checkbox"/> Agriculture - cranberries, forestry |
| i. <input type="checkbox"/> Transportation                    | j. <input type="checkbox"/> Other                               |

8. Property recorded at the Registry of Deeds

\_\_\_\_\_  
Suffolk

a. County

\_\_\_\_\_  
b. Page Number

\_\_\_\_\_  
c. Book

133905

\_\_\_\_\_  
d. Certificate # (if registered land)

9. Total Fee Paid

\_\_\_\_\_  
\$2,587.50

a. Total Fee Paid

\_\_\_\_\_  
\$487.50

b. State Fee Paid

\_\_\_\_\_  
\$2,100.00

c. City Fee Paid

**B. BUFFER ZONE & RESOURCE AREA IMPACTS**

Buffer Zone Only - Is the project located only in the Buffer Zone of a resource area protected by the Boston Wetlands Ordinance?

- Yes  No

1. Coastal Resource Areas



<u>Resource Area</u>	<u>Resource Area Size</u>	<u>Proposed Alteration*</u>	<u>Proposed Mitigation</u>
<input type="checkbox"/> Coastal Flood Resilience Zone	_____ N/A - not yet defined by city _____ Square feet	_____ Square feet	_____ Square feet
<input type="checkbox"/> 25-foot Waterfront Area	_____ Square feet	_____ Square feet	_____ Square feet
<input type="checkbox"/> 100-foot Salt Marsh Area	_____ Square feet	_____ Square feet	_____ Square feet
<input type="checkbox"/> Riverfront Area	_____ Square feet	_____ Square feet	_____ Square feet

2. Inland Resource Areas

<u>Resource Area</u>	<u>Resource Area Size</u>	<u>Proposed Alteration*</u>	<u>Proposed Mitigation</u>
<input type="checkbox"/> Inland Flood Resilience Zone	_____ Square feet	_____ Square feet	_____ Square feet
<input type="checkbox"/> Isolated Wetlands	_____ Square feet	_____ Square feet	_____ Square feet
<input type="checkbox"/> Vernal Pool	_____ Square feet	_____ Square feet	_____ Square feet
<input type="checkbox"/> Vernal Pool Habitat (vernal pool + 100 ft. upland area)	_____ Square feet	_____ Square feet	_____ Square feet
<input checked="" type="checkbox"/> 25-foot Waterfront Area	88,600± _____ Square feet	15,200± _____ Square feet	_____ Square feet
<input type="checkbox"/> Riverfront Area	_____ Square feet	_____ Square feet	_____ Square feet

**C. OTHER APPLICABLE STANDARDS & REQUIREMENTS**

1. What other permits, variances, or approvals are required for the proposed activity described herein and what is the status of such permits, variances, or approvals?

Environmental Protection Agency, Construction General Permit - to be submitted 30 days prior to construction \_\_\_\_\_

Boston Planning and Development Agency, Article 80B Large Project Review and Development Plan Approval - received for Master Plan building and roadway layout \_\_\_\_\_

Boston Water and Sewer Commission (BWSC) Coordination - to be submitted prior to construction \_\_\_\_\_

Boston Inspectional Services Department, Use of Premises Permits - to be submitted prior to construction \_\_\_\_\_

Boston Inspectional Services Department, Structural Permits - to be submitted prior to construction \_\_\_\_\_

Boston Inspectional Services Department, Electric Permits (for generators) - to be submitted prior to occupancy \_\_\_\_\_



2. 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://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm>.

- Yes  No

If yes, the project is subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18).

**A. Submit Supplemental Information for Endangered Species Review**

Percentage/acreage of property to be altered:

(1) within wetland Resource Area \_\_\_\_\_  
percentage/acreage

(2) outside Resource Area \_\_\_\_\_  
percentage/acreage

Assessor's Map or right-of-way plan of site

3. Is any portion of the proposed project within an Area of Critical Environmental Concern?

- Yes  No

If yes, provide the name of the ACEC: Rumney Marshes ACEC \_\_\_\_\_

4. Is the proposed project subject to provisions of the Massachusetts Stormwater Management Standards?

Yes. *Attach a copy of the Stormwater Checklist & Stormwater Report as required.*

- Applying for a Low Impact Development (LID) site design credits*
- A portion of the site constitutes redevelopment*
- Proprietary BMPs are included in the Stormwater Management System*

No. *Check below & include a narrative as to why the project is exempt*

- Single-family house*
- Emergency road repair*
- Small Residential Subdivision (less than or equal to 4 single family houses or less than or equal to 4 units in a multifamily housing projects) with no discharge to Critical Areas*

5. Is the proposed project subject to Boston Water and Sewer Commission Review?

- Yes  No



**D. 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 Protection Ordinance.

\_\_\_\_\_  
Signature of Applicant

1/13/22  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Property Owner (if different)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Representative (if any)

1/18/22  
\_\_\_\_\_  
Date

## **Checklist for Filing a Notice of Intent with Boston Conservation Commission**

In order for the Boston Conservation Commission to effectively process your Notice of Intent, BCC requests that you complete the checklist below and include it with your submission. If you should need assistance please contact Commission Staff: 617-635-3850 ([cc@boston.gov](mailto:cc@boston.gov)).

Please Submit the Following to the Conservation Commission:

- Two copies (a signed original and 1 copy) of a completed Notice of Intent (WPA Form 3)
- Two copies (a signed original and 1 copy) of a completed Boston Notice of Intent (Local Form)
- Two copies of plans (reduced to 11" X 17") in their final form with engineer's stamp affixed supporting calculations and other documentation necessary to completely describe the proposed work and mitigating measures. Plans must include existing conditions, the proposed project, erosion controls and mitigation measures, grading and spot elevations and all wetland resource areas and associated buffer zones. Some projects may require both an aerial view of the plans along with a profile view of plans depending on the scope of work.
- Two copies of an 8 ½" x 11" section of the [USGS quadrangle map](#) of the area, containing sufficient information for the Conservation Commission and the Department to locate the site of the work.
- (If applicable) Two copies the Federal Emergency Management Agency Flood Insurance Rate Map for the project site. FEMA Flood Maps: <https://msc.fema.gov/portal>.
- N/A  Two copies of the determination regarding the Natural Heritage and Endangered Species Program: Review Section C. Other Applicable Standards and Requirements of the Notice of Intent, page 4 of 8, pertaining to wildlife habitat. The Conservation Commission and the [Natural Heritage & Endangered Species Program](#) have the maps necessary to make this determination.
- (If applicable) Two hard copies of a Stormwater Report to document compliance with the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q), including associated drainage calculations for rooftops, parking lots, driveways, etc., for the required design storm events.
- (If applicable) A narrative detailing best management practices for stormwater management as set forth in the Stormwater Management Standards of the Massachusetts Department of Environmental Protection and any separate standards and guidelines prepared by the City and the Boston Water and Sewer Commission.
- (If applicable) Two hard copies of the Checklist for Stormwater Report
- Details of the stormwater management system, including: catch basins, oil separating tanks, detention basins, outfalls, sewer connections, etc.
- Any photographs related to the project representing the wetland resource areas.
- Two copies of a detailed project narrative describing the following: an overview of the entire project, the work proposed within wetland resource areas and/or buffer zones; how the performance standards specific to the wetland resource areas will be met (listing out each performance standard); a consideration of the effect that projected sea level rise, changes in storm intensity and frequency, and other consequences of climate change may have on the resource areas and proposed activities; construction equipment and material involved; and measures to protect wetland resource areas and mitigate impacts. The applicant shall also include narrative on how they plan to integrate climate change and adaptation planning considerations into their project to promote climate resilience to protect and promote Resource Area Values and functions into the future.
- Two copies of an Abutters List, Affidavit of Service and [Abutter Notification](#), filed concurrently with the Notice of Intent. Abutter notices shall be sent in both English and the second most commonly spoken language(s) in the neighborhood(s) where the project is proposed. Notices shall also include Babel notice cards for additional translation and language access services. [All abutters within 300' of the project](#)

## **Checklist for Filing a Notice of Intent with Boston Conservation Commission**

[property line](#) must be notified including those in a neighboring municipality. In such an instance, a copy of the filing must also be sent to the local Conservation Commission of the neighboring municipality.  
EXCEPTION: When work is in land under water bodies and waterways or on a tract of land greater than 50 acres, written notification must only be given to abutters within 300 feet of the “project site.”

N/A;   
no buildings  
proposed

Two copies of the BPDA Climate Resiliency Checklist (for new buildings). This can be completed online at <http://www.bostonplans.org/planning/planning-initiatives/article-37-green-building-guidelines>. Please print the pdf that you will receive via email after completion and include it in your submission.

**Electronic copies.** Documents may be submitted via email, or via an email link to downloadable documents.



To minimize the use of non-recyclable materials ***please do not include vinyl or plastic binders, bindings, folders or covers with the filing.*** Staples and binder clips are good choices.



NOTE: Project filings should be prepared and submitted using the online [Climate Resiliency Checklist](#).

## A.1 - Project Information

Project Name:	Outdoor Entertainment Venue		
Project Address:	William F. McClellan Highway		
Project Address Additional:	Suffolk Downs		
Filing Type (select)	Initial (PNF, EPNF, NPC or other substantial filing) Design / Building Permit (prior to final design approval), or Construction / Certificate of Occupancy (post construction completion)		
Filing Contact	Jeff Heidelberg	Beals and Thomas, Inc	JHeidelberg@bealsandthomas.com 508-366-0560
Is MEPA approval required	no		1/19/2022

## A.3 - Project Team

Owner / Developer:	McClellan Highway Development Company, LLC
Architect:	N/A
Engineer:	Beals and Thomas, Inc.
Sustainability / LEED:	
Permitting:	Beals and Thomas, Inc.
Construction Management:	

## A.3 - Project Description and Design Conditions

List the principal Building Uses:	Entertainment Venue
List the First Floor Uses:	N/A
List any Critical Site Infrastructure and or Building Uses:	N/A

### Site and Building:

Site Area:	585,000	SF	Building Area:	N/A	SF
Building Height:	varies - 50'	Ft	Building Height:	N/A	Stories
Existing Site Elevation – Low:	14	Ft BCB	Existing Site Elevation – High:	25	Ft BCB
Proposed Site Elevation – Low:	14	Ft BCB	Proposed Site Elevation – High:	25	Ft BCB
Proposed First Floor Elevation:	N/A	Ft BCB	Below grade levels:	N/A	Stories

### Article 37 Green Building:

LEED Version - Rating System :	N/A	LEED Certification:	N/A	Yes / No
Proposed LEED rating:	Certified/Silver/ Gold/Platinum	Proposed LEED point score:	N/A	Pts.

**Building Envelope**

When reporting R values, differentiate between R discontinuous and R continuous. For example, use “R13” to show R13 discontinuous and use R10c.i. to show R10 continuous. When reporting U value, report total assembly U value including supports and structural elements.

Roof:	<input type="text" value="(R)"/>	Exposed Floor:	<input type="text" value="(R)"/>
Foundation Wall:	<input type="text" value="(R)"/>	Slab Edge (at or below grade):	<input type="text" value="(R)"/>

Vertical Above-grade Assemblies (%'s are of total vertical area and together should total 100%):

Area of Opaque Curtain Wall & Spandrel Assembly:	<input style="width: 100px;" type="text" value="(%)"/>	Wall & Spandrel Assembly Value:	<input style="width: 100px;" type="text" value="(U)"/>
Area of Framed & Insulated / Standard Wall:	<input style="width: 100px;" type="text" value="(%)"/>	Wall Value	<input style="width: 100px;" type="text" value="(R)"/>
Area of Vision Window:	<input style="width: 100px;" type="text" value="%"/>	Window Glazing Assembly Value:	<input style="width: 100px;" type="text" value="(U)"/>
		Window Glazing SHGC:	<input style="width: 100px;" type="text" value="(SHGC)"/>
Area of Doors:	<input style="width: 100px;" type="text" value="%"/>	Door Assembly Value:	<input style="width: 100px;" type="text" value="(U)"/>

**Energy Loads and Performance**

For this filing – describe how energy loads & performance were determined

Annual Electric:	<input style="width: 100px;" type="text" value="(kWh)"/>	Peak Electric:	<input style="width: 100px;" type="text" value="(kW)"/>
Annual Heating:	<input style="width: 100px;" type="text" value="(MMbtu/hr)"/>	Peak Heating:	<input style="width: 100px;" type="text" value="(MMbtu)"/>
Annual Cooling:	<input style="width: 100px;" type="text" value="(Tons/hr)"/>	Peak Cooling:	<input style="width: 100px;" type="text" value="(Tons)"/>
Energy Use - Below ASHRAE 90.1 - 2013:	<input style="width: 100px;" type="text" value="%"/>	Have the local utilities reviewed the building energy performance?:	<input style="width: 100px;" type="text" value="Yes / no"/>
Energy Use - Below Mass. Code:	<input style="width: 100px;" type="text" value="%"/>	Energy Use Intensity:	<input style="width: 100px;" type="text" value="(kBtu/SF)"/>

**Back-up / Emergency Power System**

Electrical Generation Output:	<input style="width: 100px;" type="text" value="(kW)"/>	Number of Power Units:	<input style="width: 100px;" type="text"/>
System Type:	<input style="width: 100px;" type="text" value="(kW)"/>	Fuel Source:	<input style="width: 100px;" type="text"/>

**Emergency and Critical System Loads** (in the event of a service interruption)

Electric:	<input style="width: 100px;" type="text" value="(kW)"/>	Heating:	<input style="width: 100px;" type="text" value="(MMbtu/hr)"/>
		Cooling:	<input style="width: 100px;" type="text" value="(Tons/hr)"/>

---

## B – Greenhouse Gas Reduction and Net Zero / Net Positive Carbon Building Performance

Reducing GHG emissions is critical to avoiding more extreme climate change conditions. To achieve the City's goal of carbon neutrality by 2050 new buildings performance will need to progressively improve to net carbon zero and positive.

### B.1 – GHG Emissions - Design Conditions

For this Filing - Annual Building GHG Emissions:  (Tons)

For this filing - describe how building energy performance has been integrated into project planning, design, and engineering and any supporting analysis or modeling:

Describe building specific passive energy efficiency measures including orientation, massing, envelop, and systems:

Describe building specific active energy efficiency measures including equipment, controls, fixtures, and systems:

Describe building specific load reduction strategies including on-site renewable, clean, and energy storage systems:

Describe any area or district scale emission reduction strategies including renewable energy, central energy plants, distributed energy systems, and smart grid infrastructure:

Describe any energy efficiency assistance or support provided or to be provided to the project:

### B.2 - GHG Reduction - Adaptation Strategies

Describe how the building and its systems will evolve to further reduce GHG emissions and achieve annual carbon net zero and net positive performance (e.g. added efficiency measures, renewable energy, energy storage, etc.) and the timeline for meeting that goal (by 2050):

---

## C - Extreme Heat Events

Annual average temperature in Boston increased by about 2° F in the past hundred years and will continue to rise due to climate change. By the end of the century, the average annual temperature could be 56° (compared to 46° now) and the number of days above 90° (currently about 10 a year) could rise to 90.

### C.1 – Extreme Heat - Design Conditions

Temperature Range - Low:	<input type="text" value="Deg."/>	Temperature Range - High:	<input type="text" value="Deg."/>
Annual Heating Degree Days:	<input type="text"/>	Annual Cooling Degree Days	<input type="text"/>

What Extreme Heat Event characteristics will be / have been used for project planning

Days - Above 90°:	<input type="text" value="#"/>	Days - Above 100°:	<input type="text" value="#"/>
Number of Heatwaves / Year:	<input type="text" value="#"/>	Average Duration of Heatwave (Days):	<input type="text" value="#"/>

Describe all building and site measures to reduce heat-island effect at the site and in the surrounding area:

**C.2 - Extreme Heat – Adaptation Strategies**

Describe how the building and its systems will be adapted to efficiently manage future higher average temperatures, higher extreme temperatures, additional annual heatwaves, and longer heatwaves:

Describe all mechanical and non-mechanical strategies that will support building functionality and use during extended interruptions of utility services and infrastructure including proposed and future adaptations:

**D - Extreme Precipitation Events**

From 1958 to 2010, there was a 70 percent increase in the amount of precipitation that fell on the days with the heaviest precipitation. Currently, the 10-Year, 24-Hour Design Storm precipitation level is 5.25". There is a significant probability that this will increase to at least 6" by the end of the century. Additionally, fewer, larger storms are likely to be accompanied by more frequent droughts.

**D.1 – Extreme Precipitation - Design Conditions**

10 Year, 24 Hour Design Storm:

Describe all building and site measures for reducing storm water run-off:

**D.2 - Extreme Precipitation - Adaptation Strategies**

Describe how site and building systems will be adapted to efficiently accommodate future more significant rain events (e.g. rainwater harvesting, on-site storm water retention, bio swales, green roofs):

**E – Sea Level Rise and Storms**

Under any plausible greenhouse gas emissions scenario, sea levels in Boston will continue to rise throughout the century. This will increase the number of buildings in Boston susceptible to coastal flooding and the likely frequency of flooding for those already in the floodplain.

Is any portion of the site in a FEMA SFHA?

Yes

What Zone:

AE

Current FEMA SFHA Zone Base Flood Elevation:

17.5

Ft BCB

Is any portion of the site in a BPDA Sea Level Rise - Flood Hazard Area? Use the online [BPDA SLR-FHA Mapping Tool](#) to assess the susceptibility of the project site.

Yes

**If you answered YES to either of the above questions, please complete the following questions. Otherwise you have completed the questionnaire; thank you!**

### E.1 – Sea Level Rise and Storms – Design Conditions

Proposed projects should identify immediate and future adaptation strategies for managing the flooding scenario represented on the BPDA Sea Level Rise - Flood Hazard Area (SLR-FHA) map, which depicts a modeled 1% annual chance coastal flood event with 40 inches of sea level rise (SLR). Use the online [BPDA SLR-FHA Mapping Tool](#) to identify the highest Sea Level Rise - Base Flood Elevation for the site. The Sea Level Rise - Design Flood Elevation is determined by adding either 24” of freeboard for critical facilities and infrastructure and any ground floor residential units OR 12” of freeboard for other buildings and uses.

Sea Level Rise - Base Flood Elevation:

19.5

Ft BCB

Sea Level Rise - Design Flood Elevation:

20.5

Ft BCB

First Floor Elevation:

N/A

Ft BCB

Site Elevations at Building:

N/A (15-17)

Ft BCB

Accessible Route Elevation:

N/A

Ft BCB

Describe site design strategies for adapting to sea level rise including building access during flood events, elevated site areas, hard and soft barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Grading of the Central Common has been designed to increase flood storage capacity of the overall site. Extensive resiliency analysis has been performed for the Master Plan and phased development of the project.

Describe how the proposed Building Design Flood Elevation will be achieved including dry / wet flood proofing, critical systems protection, utility service protection, temporary flood barriers, waste and drain water back flow prevention, etc.:

The proposed outdoor entertainment venue will not be in use during significant storm events.

Describe how occupants might shelter in place during a flooding event including any emergency power, water, and waste water provisions and the expected availability of any such measures:

Events proposed at the outdoor entertainment venue will be canceled at times of extreme events.

Describe any strategies that would support rapid recovery after a weather event:

Structures proposed as part of the Venue Project are temporary in nature and can be moved/relocated as needed.

## E.2 – Sea Level Rise and Storms – Adaptation Strategies

Describe future site design and or infrastructure adaptation strategies for responding to sea level rise including future elevating of site areas and access routes, barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Refer to Section 2.4.3 of the enclosed narrative for additional information regarding adaptation strategies

Describe future building adaptation strategies for raising the Sea Level Rise Design Flood Elevation and further protecting critical systems, including permanent and temporary measures:

The grading of the Central Common will provide additional flood storage for the overall site. The area's temporary use as an entertainment venue will take advantage of these lowered grades.

A pdf and word version of the Climate Resiliency Checklist is provided for informational use and off-line preparation of a project submission. **NOTE: Project filings should be prepared and submitted using the [online Climate Resiliency Checklist](#).**

For questions or comments about this checklist or Climate Change best practices, please contact:  
[John.Dalzell@boston.gov](mailto:John.Dalzell@boston.gov)

**Section 2.0**  
**Project Narrative**

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## **2.0 PROJECT NARRATIVE**

### **2.1 Introduction**

The Applicant has previously met with the Commission respecting plans for the Suffolk Downs Redevelopment Project, which involves the phased redevelopment of an approximately 161-acre former thoroughbred horse racing facility located within East Boston and Revere (the “Master Plan Property”). Approximately 109 acres of the overall Master Plan Property lie in Boston (such portion, the “Boston Master Plan Property”), and approximately 52 acres are located in Revere. The Boston Master Plan Property can be further identified by reference to Boston Assessor’s Parcel 0102524000 and is generally bounded by the Boston/Revere City line to the north, the Orient Heights neighborhood to the south, MBTA tracks to the east, and the William F. McClellan Highway and an oil tank facility to the west.

The overall Suffolk Downs Redevelopment Project will transform the Master Plan Property from a previously disturbed and underutilized property isolated from surrounding neighborhoods into a dynamic mixed-use neighborhood with associated infrastructure and improvements, including a network of publicly accessible open spaces (the “Master Plan”). While the Master Plan addresses the long-term use of the Master Plan Property within both the City of Revere and City of Boston, the work associated with this Project is limited to a portion of the Boston Master Plan Property.

This NOI proposes to construct an interim outdoor entertainment venue and associated site improvements and infrastructure within the infield of the existing racetrack between Sales Creek to the north and the Horseshoe Pond to the south. This venue will serve for a limited time as an interim use of the infield area prior to the construction of the final condition of this area as proposed in the Master Plan. The venue will consist of a grassed area with temporary stage, restrooms, and vendor booths. These activities, which are a portion of the Project covered in this NOI, are collectively referred to as the “Venue Project.”



Work associated with the Venue Project is located within the footprint of planned grading work associated with the Master Plan's future Central Common open space area, which was previously approved on April 22, 2020 under Order of Conditions (OOC) MassDEP File No. 006-1721. A portion of that previously-approved work has been completed; however, the final grades of the interim Venue Project will differ from the final grades associated with the future Central Common in locations. Due to the extent of work proposed with the Venue Project, amending the existing Central Common Order of Conditions is not being proposed. Therefore, for clarity of the administrative record, this NOI reiterates the unfinished portions of work associated with the future Central Common grading (the "Central Common Project"), which will be completed following the area's use as an outdoor entertainment venue.

The site grading previously approved for the Central Common Project will provide on-site flood storage in accordance with the overall resiliency goals of the Master Plan. Completion of the Central Common Project is planned to be the final condition of the relevant portions of the Central Common area. The outstanding work associated with the Central Common Project will be undertaken once use of the Venue Project has ended. This NOI reiterates only the portions of the Central Common Project that have not been completed; accordingly, work that has been completed to date is not reiterated herein.

Collectively, the Project described in this NOI includes both the outstanding portions of the previously-approved Central Common Project, as well as the Venue Project. Upon approval of the work described herein, the Applicant will prepare and submit a Certificate of Compliance (COC) to close out the previously-approved OOC for the Central Common Project for the work completed under that OOC.

## 2.2 Existing Conditions

The Boston Master Plan Property is generally bounded by William F. McClellan Highway and an oil tank facility to the west, the Orient Heights neighborhood to the south, MBTA tracks to the east, and the Boston/Revere City line to the north. The proposed limit of work (the "Project Site") is located in the northeastern portion of the Boston Master Plan Property, in the infield of the former thoroughbred racetrack. Please refer to the enclosed site plans and locus map in Section 5.0.

The majority of state-jurisdictional resource areas within the Project Site were previously confirmed by an Order of Resource Area Delineation (ORAD) issued by the Boston Conservation Commission on September 20, 2017 (MassDEP File No. 006-1546). A subsequent OOC issued by the Boston Conservation Commission on February 22, 2018 (MassDEP File No. 006-1568) confirmed additional Bank delineation along the easterly portion of the Project Site. Finally, certain features subject to regulation under the Ordinance are located within the Boston Master Plan Property, and were more specifically identified in the previously-approved OOC No. 006-1811. The relevant confirmed resource areas are depicted on the accompanying plans in Section 5.0, and these resource areas are summarized below:

- Portions of the Project Site lie within the current 100-year floodplain and are therefore regulated as Land Subject to Coastal Storm Flowage (LSCSF). Please note that the limits of LSCSF depicted on the enclosed plans are based on the latest elevation provided by the Federal Emergency Management Agency (FEMA). The extent of LSCSF has been updated to reflect site conditions at the start of the interim outdoor venue project, based upon the Central Common grading that will be completed by that time. Subsequently, additional previously approved Central Common grading work will continue, which is not reflected in the depicted LSCSF extent.
- Sales Creek, which is located to the northeast of the infield area along the Revere municipal boundary, has multiple associated resource areas including Bank, Bordering Vegetated Wetland (BVW), Land Under Waterbodies and Waterways (LUWW), and 25-foot Riverfront Area (RFA). The fringe of BVW consists largely of common reed (*Phragmites australis*). The Rumney Marshes Area of Critical Environmental Concern (ACEC) also extends along Sales Creek, with the associated limits being the extent of WPA jurisdiction, excluding the 100-year floodplain (LSCSF).
- The manmade Horseshoe Pond in the center of the infield area has Bank that consists of a rock/rip-rap edge, as well as Land Under Water Bodies and Waterways.
- An intermittent stream parallel to the eastern straightaway of the racetrack along the eastern Boston Master Plan Property boundary has associated Bank. This stream is identified as the "H Series" intermittent stream.
- A 100-foot buffer zone extends outward from Bank and BVW.

- In addition to the above-described state-jurisdictional areas, resource areas established by the Ordinance include a 25-foot Waterfront Area that extends horizontally from Bank and state and local RFA. Additionally, we understand that coastal wetlands pursuant to the Ordinance include Bank that is subject to coastal storm flowage. Therefore, the on-site banks of Sales Creek, the Horseshoe Pond, and the H-series intermittent stream are also local Coastal Bank.

The Project Site is not mapped as either Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife and no certified or potential vernal pools are present.



*View looking northwest across infield Central Common grading work towards grandstand building.  
Photograph dated January 14, 2022.*

## 2.3 Proposed Conditions

### Future Central Common Grading

The previously-approved but outstanding work associated with the Central Common Project includes grading activities to bring the elevation of the applicable areas to the planned grade proposed as part of the Master Plan, as shown on the attached plans. Once the proposed grades are achieved, the disturbed areas will be loamed and seeded or sodded.

The applicable grading area will be accessed by way of a crushed stone construction entrance crossing the existing dirt racetrack off a parking area adjacent to Tomasello Drive. The existing fence in the vicinity of the proposed site access will be removed prior to the commencement of site work and will be replaced at the conclusion of the Project. Once the Project is completed, the crushed stone construction entrance will be removed from the Project Site and disposed of in accordance with State standards or reused on site.

Stockpiling of excavated material from the Central Common Project may be necessary as indicated on the plans, as well as stockpiling for future phases of the Master Plan. Stockpiles will be secured with sediment control barriers and covered or stabilized when left untouched for greater than seven days.

### **Outdoor Entertainment Venue**

Prior to completing the grading associated with the Central Common Project, the Applicant proposes to construct site improvements and infrastructure to support an outdoor entertainment venue within the same area. This outdoor entertainment venue will serve as an interim site use prior to the construction of the final condition of this area proposed in the Master Plan, which is anticipated to commence no sooner than late 2025. The improvements associated with the venue are interim in nature and will be removed upon commencement of Phase 2-B as indicated in the Master Plan.

Upon completion of grading, the outdoor entertainment venue area will be loamed and surfaced with a native seed mix or sod. Various surface treatments, consisting of bituminous concrete, gravel, and stone dust will be placed as indicated on the enclosed plans to accommodate various interim structures, as well as pedestrian, service, and emergency vehicular access to the venue.

The venue will be enclosed with chain link fence. Interim structures to provide amenities, such as food and beverage, merchandise, restrooms, and a VIP area, will be installed on gravel or stone dust pads, with bituminous concrete ramps for accessibility where necessary. A gravel drive, generally located outside the fence, will provide service and emergency access around and into the venue. Bituminous concrete will provide vehicular access from an existing parking area to the stage, to allow for emergency and event preparation access. Pedestrians will enter the outdoor entertainment area via interim ticket gates. An interim box office will also be constructed.

Parking for the proposed venue will reuse existing parking areas. Interim structures associated with tour production, as well as artist, venue and promoter trailers, will be housed on existing impervious area. Utility tie-ins such as water and electric service, as well as an irrigation system for the lawn area, will also be installed. Overhead electric lines will also be installed.

Jersey barriers will be placed along the southern Project Site boundary, including in the 100-foot buffer zone to the H-series intermittent stream, as an additional security measure for pedestrians traveling to the venue by the MBTA Blue Line. These interim barriers are located on existing impervious surface.

Erosion controls and stormwater management facilities are proposed to mitigate potential impacts that the Project could have on the existing watershed. Stormwater facilities are proposed to control peak runoff rates as a result of an increase in impervious areas. The proposed stormwater facilities have been designed to comply with the City of Boston Ordinances, the Massachusetts Department of Environmental Protection (MassDEP) 2008 Stormwater Management Handbook, and the Massachusetts Wetlands Protection Act. Please refer to the Stormwater Management Summary in Section 4.0 for documentation regarding compliance with applicable standards and regulations.

## 2.4 Required Filing Information

### 2.4.1 Wetland Resource Areas

Please refer to Section 2.2 for a discussion of the existing wetland resource areas on the property. A discussion of the work within wetland resource areas is provided below.

#### **Land Subject to Coastal Storm Flowage (310 CMR 10.04)**

The remaining portion of the previously-approved Central Common Project are location-dependent in that they require connection to and work within the LSCSF to achieve the stated goals of increasing the property's resiliency to future storm events. Specifically, a primary purpose of the Project is to help the site and surrounding area better accommodate future advanced storm events and to enhance the existing stormwater infrastructure present throughout the Project Site. Therefore, it is not possible for the Central Common Project to achieve complete avoidance of LSCSF while simultaneously satisfying the stated resiliency goals. The Project will have a net benefit on the functions and values of the LSCSF.

The Venue Project is interim in nature. Work within the LSCSF associated with the Venue Project includes construction of the interim structures and associated pads, as well as the service and emergency access drive, and related site improvements. Impervious areas within LSCSF associated with the Venue Project have been minimized to the extent necessary for vehicular access and necessary accessibility improvements required by the Americans with Disabilities Act and Massachusetts Architectural Access Board.

While this area is currently mapped as LSCSF based on the current Flood Insurance Rate Map (FIRM) prepared by FEMA, the Suffolk Downs Redevelopment resiliency model indicates that the elevation of the 100-year floodplain is lower than that depicted by FEMA. The Applicant is seeking a Letter of Map Revision (LOMR) from FEMA to revise the 100-year floodplain.

**Waterfront Area (Ordinance Sections 7-1.4.b) and 7-1.4.c)**

The Ordinance defines Waterfront Area in Section 7-1.4.b) as follows: *“The portion of the buffer zone which extends twenty-five (25) feet horizontally from the edge of the following wetland resource areas:*

- 1. Any coastal beach, dune, bank, tidal flats, rocky intertidal shores, salt marshes or land containing shellfish; or*
- 2. Any inland bank, lake, pond, intermittent stream, brook, creek or riverfront area.”*

Grading associated with the lowering of the Central Common is proposed within the 25-foot Waterfront Area associated with Sales Creek. This work was previously approved by the Commission. Work associated with the Venue Project is located outside of the Waterfront Area.

The Ordinance indicates in Section 7-1.4.c), *The Commission therefore may require that any person filing an application (hereinafter, the Applicant) restore or maintain a strip of continuous, undisturbed or restored vegetative cover or waterfront public access throughout the Waterfront Area, unless the Commission determines, based on adequate evidence, that the area or part of it may be altered without harm to the values of the resource areas protected by the Ordinance. Such disturbed areas must be minimized to the greatest extent possible*

Work within the Waterfront Area associated with the Central Common Project will not significantly change the area's existing character. No structures or impervious surfaces associated with the Venue Project are proposed within the Waterfront Area.

The work proposed within the Waterfront Area as part of the Central Common Project will facilitate future public access to the Central Common and within these Waterfront Areas. In the future, the Central Common is planned to serve as the defining approximately 12-acre publicly accessible open space, providing a community focal point with a broad range of landscaping environments and treatments. Future development within the Waterfront Area, including the above-described enhancements, will be addressed through future NOI filings. In the interim, the Central Common will allow for limited access through the Venue Project.

**Buffer Zone (Ordinance Sections 7-1.4.b) and 7-1.4.c)**

Although not considered a resource area under the Act, the 100-foot buffer zone is considered a local resource area. The Ordinance defines Buffer Zone in Section 7-1.4.b) as follows: *"The areas 100 feet horizontally lateral from the boundary of any Resource Area, including: freshwater or coastal wetland (excluding LSCSF), marsh, wet meadow, bog, swamp, vernal pool, spring, bank, reservoir, stream, brook, creek, river, lake, pond of any size, beach, dune, estuary, flat, or the ocean."*

The grading proposed for the Central Common Project, as well as construction of the interim structures and associated pads, the service and emergency access drive, and related site improvements associated with the Venue Project, are located within the 100-foot Buffer Zone to Bank/BVW associated with Sales Creek, and Buffer Zone to Bank of the Horseshoe Pond. Jersey barriers will be placed along the southern property boundary, including in the 100-foot buffer zone to the H-series intermittent stream, as an additional security measure for pedestrians traveling to the venue by the MBTA Blue Line. These jersey barriers will be placed on existing impervious area.

The Ordinance indicates in Section 7-1.4.c), "*The Buffer Zone is presumed important to the protection of the resource areas because activities undertaken in close proximity to resource areas have a reasonable probability of adverse impact upon the wetland or other resource, either immediately, as a consequence of construction, or over time, as a consequence of daily operation or existence of the activities. These adverse impacts from construction and use can include, without limitation, erosion, siltation, loss of groundwater recharge, degraded water quality, loss of wildlife habitat, degradation of wetland plant habitat, alteration of hydrology, soil contamination, and proliferation of invasive plants.*"

Appropriate erosion and siltation controls are proposed during the construction period as indicated on the enclosed plans, and the Project Site will be ultimately stabilized such that long-term erosion/siltation will not occur. Impervious areas within the 100-foot Buffer Zone associated with the interim Venue Project have been minimized to the extent necessary for heavy-duty vehicular access and accessibility. Water quality will not be degraded by the Project. No work is proposed within wetland plant habitat. As discussed elsewhere herein, the Master Plan Property provides limited notable wildlife habitat value, and the future overall Suffolk Downs Redevelopment Project will result in significant open spaces as well as enhanced natural resources through appropriate plantings and invasive species management. The overall redevelopment project has undertaken a comprehensive evaluation of hydrology and flooding considerations and incorporates a significant resiliency design plan to protect on and off-site areas now and in the future.

***Area of Critical Environmental Concern within the Buffer Zone***

Although not itself a resource area, we understand that the City places greater importance on reviewing work in Areas of Critical Environmental Concern (ACEC) that are within the Buffer Zone. Grading associated with the previously approved Central Common Project, as well as interim features associated with the Venue Project, are located within the Rumney Marshes ACEC. Minimal impervious areas are proposed within the ACEC at this time. Please refer to Section 2.4.2 for the information relating to ACECs that is required by the Commission.



## 2.4.2 Performance Standards

### **Land Subject to Coastal Storm Flowage**

Specific performance standards for LSCSF have not been adopted by either the State or City at this time. However, we understand based on the draft Phase II regulations that the City intends for this resource area to be significant to the Ordinance's protected interests/values of storm damage prevention, flood control, protection of wildlife and wildlife habitat, prevention of pollution, erosion and sedimentation control, and to mitigate the impacts of climate change. The previously approved Central Common Project will allow the footprint of this area to be directly connected to and become a part of the floodplain, directly supporting the storm damage prevention and flood control interests. The grading associated with the Central Common Project is informed by the detailed Master Plan resiliency flood model. The interim roadways and structures proposed as part of the Venue Project are temporary in nature, and are minimal in footprint such that the existing LSCSF will not be adversely affected. Limited wildlife habitat is located within the LSCSF due to its existing disturbed nature. Lastly, erosion and sedimentation controls are proposed between both Projects and resource areas as indicated on the plans to preclude sedimentation of down-gradient resources. Additionally, the Project incorporates stormwater facilities to address potential pollutant sources from new impervious areas associated with the outdoor entertainment venue.

### **Waterfront Area**

Specific performance standards have not been established for work in the Waterfront Area. As discussed in Section 2.4.1, future NOI filings will address the proposed final condition within the Waterfront Area on the property.

### **Buffer Zone**

Specific performance standards for work in the Buffer Zone have not been established by the State or City. However, work within the Buffer Zone will not impact the associated resource areas' ability to protect the Interests and Values of the Act and Ordinance. Please refer to discussion elsewhere herein, in particular Sections 2.4.1 and 2.5.

***Area of Critical Environmental Concern within the Buffer Zone***

ACEC information required by the Boston Conservation Commission filing guidance is provided below:

1. *A description and numerical value of the current and post-project impervious surface coverage*

There are presently no impervious surfaces in the ACEC within the Project Site, and only 460 sf of impervious surfaces associated with the Venue Project are proposed within the ACEC at this time. This minor quantity of impervious area provides accessibility associated with the restroom facilities; the restrooms were sited in this location to achieve the required two percent grade for accessibility. The Venue Project represents an interim use of this area. Future impervious surfaces will be quantified in association with the applicable NOIs submitted for specific building and/or roadway work.

2. *A site plan detailing an inventory of trees and other vegetation*

The enclosed plans depict certain individual trees as well as treed areas. Notable trees are not present within the ACEC. Further, the majority of the ACEC in which work is proposed is largely previously disturbed from the former racetrack use on the property. The invasive common reed (*Phragmites australis*) dominates areas along Sales Creek.

3. *A description of current and post-project wildlife corridors and public access (where applicable)*

The Project Site is situated within a densely developed urban area. Given its currently open nature, it is likely that various wildlife travel within the property. With the exception of flight corridors for birds, wildlife corridors to areas outside the property may be limited due to the surrounding roads and train tracks. Similarly, waterway corridors along Sales Creek and within the ACEC are constrained by roadways, the train tracks, existing on and off-site culverts, and the Bennington Street pump station. The Project will not impact what wildlife corridors may exist since other open areas of the property in both Boston and Revere will remain. Future development/building phases of the overall Master Plan will establish a significant connected network of open spaces and will also daylight portions of Sales Creek.

The Project Site is part of the larger Suffolk Downs Master Plan redevelopment, which will provide over 40 acres of open space or 25% of the site area as publicly accessible for recreational opportunities, including areas within the ACEC.

4. *A land conservation plan or maintenance plan (where applicable)*

The Master Plan's open space plan was previously presented informally to the Conservation Commission. The Applicant has committed to significant areas of open space for the Master Plan as described elsewhere herein. Future redevelopment will include land conservation and maintenance plans of the open space areas as applicable. Such plans will include maintenance for publicly accessible open space areas, as well as invasive species management plans.

5. *An alternatives analysis describing all alternatives to the proposal as to minimize or eliminate adverse impacts to the protected resources.*

A detailed alternatives analysis for the proposed Master Plan development was included in the FEIR submitted to MEPA on December 2, 2019. These Master Plan alternatives were noted in the MEPA FEIR for the Project to have approximately equal impacts to the ACEC.

### **2.4.3 Consideration of Climate Change and Resiliency**

The Master Plan minimizes the negative impacts of climate change and other natural hazards by implementing a phased resiliency strategy. Future aspects of the Master Plan redevelopment will also build the capacity of resource areas to minimize the negative impacts of climate change by daylighting sections of Sales Creek, for example. In addition to the flooding resiliency plan described below, the overall Master Plan will also address extreme temperatures and drought from climate change, which will be addressed in future NOI filings for individual roadway and building developments. Further, the overall redevelopment also maintains hydrology to wetlands through a master planned stormwater management design, which considers future climate and precipitation increases.

The Master Plan resiliency design has been established through the implementation of a HEC-RAS model, which has been developed in coordination with the Massachusetts Office of Coastal Zone Management (MassCZM) and MassDEP. This model has been utilized to evaluate multiple scenarios and advanced storm events, including the 2070 advanced storm event with the Master Plan fully developed. The phases of the Master Plan were also evaluated individually to develop an implementation plan for the resiliency measures within the Boston Master Plan Property.

The primary objective of the resiliency plan is to help the property and surrounding area better accommodate future advanced storm events and to enhance the existing stormwater infrastructure present throughout the property. The Master Plan is location-dependent in that it requires connection to and work within the LSCSF to achieve the goals of increasing the overall Master Plan's resiliency to climate change, and in particular future storm events.

As previously noted, the previously-approved Central Common Project includes site grading, which will provide on-site flood storage in accordance with the overall resiliency goals of the Master Plan. Completed portions of the Central Common Project included lowering the Central Common by approximately six feet, enabling it to be directly connected to and become a part of the floodplain. The Central Common Project supports various Master Plan phases and will provide on-site flood storage in accordance with the overall resiliency design of the Master Plan. As previously described herein, this first phase of the resiliency plan was previously permitted through OOC MassDEP File No. 006-1721 and construction has commenced. Outstanding portions of the work are reiterated in this filing for clarity of the Administrative Record, as previously described herein.

A copy of Sections A) and E) of the Boston Planning and Development Agency Climate Resiliency Checklist is included in Section 1.0. Please also see the below information regarding Climate Change Resilience considerations of the Venue Project:

*Sea Level Rise and Changes in Coastal and Stormwater Flooding*

The Venue Project is located within LSCSF; however, the Venue Project represents an interim use of the site and is anticipated to be in place until late 2025. Accordingly, consideration of long-term sea level rise and changes in coastal and stormwater flooding are not applicable to this site use. The site will not be in use as an outdoor entertainment venue during large storm events; as such, the lowered elevation/grade of the Central Common Project will provide flood storage capacity during extreme precipitation events. Subsequent to this interim use, this area will become the Central Common open space and flood resilience mitigation area.

*Increased Heat Waves*

The Venue Project represents an outdoor use of the site. Minimal impervious surfaces will be installed for accessibility and service/emergency access; accordingly, the heat island effect, particularly as it pertains to wetland resource area impacts, is anticipated to be minimal over the five-year use of the site as an entertainment venue. Furthermore, this area will become the pervious Central Common open space area subsequent to this interim use.

*Extreme Precipitation Events and Changing Precipitation Patterns*

The Venue Project represents an interim, seasonal use of the site; accordingly, long-term changes in precipitation patterns are not applicable.

Show-specific engineering and rigging review by a licensed engineer will occur and, if required, additional concrete ballasting would be added to support the stage. Trash cans will be stored in between events and not left out in the open at the venue. In the event of weather conditions that still allow shows to proceed, sandbags or cinderblocks will be placed at the bottom of the trash cans to weigh them down. Portojohns will be self-ballasted. Tents will either be ballasted with weight (concrete or water) or staked into the ground.

The site will not be in use as an outdoor entertainment venue during large storm events; accordingly, the lowered elevation/grade of the Central Common Project will provide flood storage capacity during extreme precipitation events.

*Stormwater Runoff*

The proposed sediment forebay has been sized to treat the first one inch of rainfall; as a result, the Venue Project will not result in sedimentation of resource areas.

**2.4.4 Construction Information**

Specific construction means and methods will be determined by the contractor; however, general information is provided below.

Standard earthmoving and compacting equipment will be utilized for earthworks operations of the Project. Standard structure erection equipment will be used for installation and placement of concert venue facilities.

Either a mobile stage or a structured stage will be utilized, depending on the event and/or use. A mobile stage is a truck mounted stage and is a standalone and self-ballasted engineered stage. These stages have hydraulic systems within the truck, which is supplemented with manpower, to set up the stage structure. A structured stage is an engineered structure that is built with manpower and heavy equipment. A crane may be used; however, most systems would be “self-climbing,” meaning that the roof is built on the stage and raised with motor control to the appropriate trim height.

Upon construction start, the sedimentation control measures will be installed as specified. Following installation of the sedimentation control measures, the sediment forebay will be installed followed by site grading activities. These activities include installation of surface treatments. Utilities will be installed followed by site and venue features. Once the sitework is completed the site will be stabilized with loam and seed (or sod). Sedimentation control measures will be inspected as outlined in Section 2.2.4 of the draft Stormwater Pollution Prevention Plan enclosed in Section 4.0, and removed upon close out of the Order of Conditions.

#### **2.4.5 Avoidance, Minimization, and Mitigation for Work within Wetland Resource Areas**

Multiple state and local resource areas are present on-site, including jurisdictional areas created by the Ordinance which was adopted after establishing the overall Master Plan with MEPA, and which was in-process with the BPDA at the time of Ordinance adoption. It is impracticable to avoid work in resource areas given their location and extent on-site and the Applicant's objective to redevelop the existing property into a vibrant mixed-use development that provides a unique opportunity to create additional housing, spur economic development, mitigate climate change impacts, and improve connections between several adjoining neighborhoods.

That said, the Master Plan avoids, minimizes, and mitigates wetland resource area impacts by:

- Redeveloping a historically disturbed property;
- Reducing the footprint of work within and immediately adjacent to wetlands and waterways (no in-wetland/in-water work proposed with this filing);
- Improving the character of wetlands/waters (future NOIs will address Horseshoe Pond Bank improvements, invasive species management in and near wetlands, and daylighting of sections of Sales Creek, for example); and
- Focusing on the goals of the Ordinance, particularly regarding resiliency to climate change.

This Project consists of previously-approved grading to support the resiliency of the future development, as well as an interim site use as an outdoor entertainment venue. Portions of the work associated with the Venue Project are located within the previously-approved limit of work associated with the Central Common Project; additional portions of the Venue Project work are located outside of jurisdictional areas. As such mitigation beyond construction period Best Management Practices (BMPs) is not warranted. With regard to the work outlined in this NOI specifically, it is generally located on previously developed portions of the property. Disturbed areas will be stabilized, and BMPs will be implemented during construction, such as the installation and management of erosion and sedimentation controls consisting of straw wattles with silt fence, stabilized construction entrances and other stabilization measures such as seeding.

Also, soil stockpiles will be enclosed by straw wattles with silt fence, as well as stabilized when left untouched for greater than seven days. A construction waste management plan will be developed to remove, sort for recycling, and properly dispose of construction debris. Finally, on-site refueling of machinery will occur outside of resource areas.

The Venue Project will be stabilized with loam and seed or sod prior to its use, precluding sedimentation of resource areas. The chain link fence bounding the Venue Project will preclude trash and debris from entering wetlands and water bodies. The site will be cleaned and debris will be removed following each event at the venue.

## **2.5 Interests and Values of the Act and Ordinance**

The following is a discussion of the relationship of the Project to the interests of the Act as defined by 310 CMR 10.01(2) and the Ordinance as defined by 7-1.4 (a). The Project is not anticipated to result in adverse impacts to the resource area interests or values as described below.

### **2.5.1 Protection of Public, Private and Surface Water and Groundwater Supply and Quality**

The Project Site is not located within or tributary to a Zone I or II or other groundwater or drinking water supply area. Therefore, the public, private, surface, and ground water supply and quality interests and values will be upheld.

### **2.5.2 Short- and Long-term Coastal and Stormwater Flood Control, Storm Damage Prevention, and Flood Conveyance and Storage**

Please refer to Section 2.4 for a discussion of how the Project addresses these interests and values. Succinctly, the Central Common Project includes grading that will support the overall Master Plan redevelopment resiliency strategy, and as such, the short- and long-term coastal and stormwater flood control, storm damage prevention, and flood conveyance and storage interests and values are addressed. The Venue Project represents an interim use of the site and is anticipated to be in place until late 2025. Portions of the work associated with the Venue Project are located within the previously-approved limit of work associated with the Central Common Project; additional portions of the Venue Project work are located outside of jurisdictional areas.



### **2.5.3 Prevention of Pollution and Erosion and Sedimentation Control**

Appropriate erosion and sedimentation control measures are proposed as depicted on the enclosed plans. Furthermore, the Project will adhere to the Environmental Protection Agency's 2017 Construction General Permit (EPA CGP) as more than one acre of earthwork will occur.

Therefore, the pollution and erosion/sedimentation control interests and values will be upheld.

### **2.5.4 Protection of Fisheries, Shellfisheries, Rare and Endangered Plant and Animal Species and Habitat, Wetland Plant Habitat, and Wildlife Habitat**

The proposed work area is generally previously disturbed and does not function as important wildlife, fish or shellfish habitat. Furthermore, portions of the limit of work were previously approved in association with the Central Common Project, the outstanding portions of which are reiterated herein. Impacts to vegetated wetlands are not proposed. There are no areas of mapped Natural Heritage & Endangered Species Program (NHESP) Estimated or Priority Habitat or certified or potential vernal pools within the Master Plan Property.

Further, the future Master Plan Project will incorporate significant open space and wetland resource area enhancements. The Central Common Project is a necessary component to achieve the overall resiliency strategy, and the Venue Project will serve as an interim use prior to the final development.

Therefore, the fisheries, shellfisheries, Rare and Endangered Plant and Animal Species and Habitat, wetland plant habitat, and wildlife habitat interests and values will be maintained.

### **2.5.5 Recreation**

The previously-approved Central Common Project will support the overall resiliency of Suffolk Downs Master Plan redevelopment, which will provide 40 acres of open space, or 25% of the total property, for various forms of recreation and public access. As previously noted, the open space strategy was discussed with the Conservation Commission at a prior meeting on March 3, 2021, and open space areas proposed as part of future phases of the Master Plan will be addressed in forthcoming Notices of Intent. The Venue Project will provide an outdoor entertainment venue as an interim site use. Accordingly, the Project upholds the recreational value of the Ordinance.

**2.5.6 Protection of Public Health, Safety, and Welfare**

No work is proposed within wetlands or waterways; accordingly, the Project will not impact the ability of these resource areas to address public health, safety and welfare interests. Furthermore, the general public will be discouraged from contact with open water through use of pedestrian barriers and a chain link fence bounding the Venue Project. The Project will employ standard construction procedures and safety measures to ensure the protection of public health, safety, and welfare as these interests relate to wetland resource areas.

**2.5.7 Climate Change Impact Mitigation**

Please refer to Section 2.4.3 for information regarding Climate Change Impact Mitigation. The Project will not result in adverse impacts to resource areas either as they currently exist or are reasonably anticipated to exist considering projected impacts of climate change.

## **Section 3.0** **Abutter Information**

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Boston List of Abutters

Revere Certified List of Abutters

Evidence of Reasonable Effort to Identify Mailing Address for Government  
Agencies and Subdivisions

Affidavit of Service for Abutter Notification

Notification to Abutters (English, Spanish, and Babel Notice)

Translation Certification







145 BENNINGTON ST 101 3-27-15C-101 LUC: 102 RAMIREZ DORY E BURITICA 145 BENNINGTON ST UNIT 101 Revere, MA 02151	145 BENNINGTON ST 111 3-27-15C-111 LUC: 102 LAGREZE KEITH STEWART SANT'ANNA MEGAHN MORRIS 145 BENNINGTON ST UNIT 111 Revere, MA 02151	145 BENNINGTON ST 201 3-27-15C-201 LUC: 102 SEPULVEDA LUZ E 145 BENNINGTON ST UNIT 201 Revere, MA 02151
145 BENNINGTON ST 102 3-27-15C-102 LUC: 102 CORDISCO ANDREW 145 BENNINGTON ST UNIT 102 Revere, MA 02151	145 BENNINGTON ST 112 3-27-15C-112 LUC: 102 YANG LIN 145 BENNINGTON ST UNIT 112 Revere, MA 02151	145 BENNINGTON ST 202 3-27-15C-202 LUC: 102 JOYA JUAN 145 BENNINGTON ST UNIT 202 Revere, MA 02151
145 BENNINGTON ST 103 3-27-15C-103 LUC: 102 FARNSWORTH JUSTIN 145 BENNINGTON ST UNIT 103 Revere, MA 02151	145 BENNINGTON ST 113 3-27-15C-113 LUC: 102 KSHIRSAGAR PRIYAL S 145 BENNINGTON ST UNIT 113 REVERE, MA 02151	145 BENNINGTON ST 203 3-27-15C-203 LUC: 102 PHIN DAVID V 145 BENNINGTON ST UNIT 203 REVERE, MA 02151
145 BENNINGTON ST 104 3-27-15C-104 LUC: 102 MORENO LUIS 145 BENNINGTON ST UNIT 104 REVERE, MA 02151	145 BENNINGTON ST 114 3-27-15C-114 LUC: 102 BOUDIAB YASSINE 145 BENNINGTON ST UNIT 114 Revere, MA 02151	145 BENNINGTON ST 204 3-27-15C-204 LUC: 102 IKONOMI ERINDA 24 EL CANEY RD WORCESTER, MA 01603
145 BENNINGTON ST 105 3-27-15C-105 LUC: 102 PIOR GRACE M 145 BENNINGTON ST UNIT 105 Revere, MA 02151	145 BENNINGTON ST 115 3-27-15C-115 LUC: 102 TEJADA YEFERSON A VASQUEZ ABRIL ANGELA 145 BENNINGTON ST UNIT 115 Revere, MA 02151	145 BENNINGTON ST 205 3-27-15C-205 LUC: 102 BULLES KATHERINE 145 BENNINGTON ST UNIT 205 Revere, MA 02151
145 BENNINGTON ST 106 3-27-15C-106 LUC: 102 WU YIU WING 145 BENNINGTON ST UNIT 106 Revere, MA 02151	145 BENNINGTON ST 116 3-27-15C-116 LUC: 102 ZHAO YUE DING XIAOQING 145 BENNINGTON ST UNIT 116 Revere, MA 02151	145 BENNINGTON ST 206 3-27-15C-206 LUC: 102 TOUSSAINT DANIELA PIERRE 145 BENNINGTON ST UNIT 206 Revere, MA 02151
145 BENNINGTON ST 107 3-27-15C-107 LUC: 102 CARDONA NELSON 145 BENNINGTON ST UNIT 107 Revere, MA 02151	145 BENNINGTON ST 117 3-27-15C-117 LUC: 102 PERRY BRIAN MCMAHON KRISTINE 145 BENNINGTON ST UNIT 117 Revere, MA 02151	145 BENNINGTON ST 207 3-27-15C-207 LUC: 102 WELLMAN LYNN M 145 BENNINGTON ST UNIT 207 Revere, MA 02151
145 BENNINGTON ST 108 3-27-15C-108 LUC: 102 ST HILLIEN GUY-ROBERT ST HILLIEN MYRIAME 145 BENNINGTON ST UNIT 108 Revere, MA 02151	145 BENNINGTON ST 118 3-27-15C-118 LUC: 102 PRUITT MARK A DIAZ CESAR 145 BENNINGTON ST UNIT 118 Revere, MA 02151	145 BENNINGTON ST 208 3-27-15C-208 LUC: 102 PIQUES MARCO A 145 BENNINGTON ST UNIT 208 Revere, MA 02151
145 BENNINGTON ST 109 3-27-15C-109 LUC: 102 SHAH VISHAL SHAH KINNARI 145 BENNINGTON ST UNIT 109 REVERE, MA 02151	145 BENNINGTON ST 119 3-27-15C-119 LUC: 102 BABCHYCK DEBORAH A BABCHYCK BARRY M 145 BENNINGTON ST UNIT 119 Revere, MA 02151	145 BENNINGTON ST 209 3-27-15C-209 LUC: 102 PETILLO BRIDGETTE 145 BENNINGTON ST UNIT 209 Revere, MA 02151
145 BENNINGTON ST 110 3-27-15C-110 LUC: 102 KOUTROUBIS VASILIOS 14 LITTLE NAHANT RD NAHANT, MA 01908	145 BENNINGTON ST 120 3-27-15C-120 LUC: 102 LUELLA SURETTE IRREVOCABLE TRU NELSON SHARON TRUSTEE 145 BENNINGTON ST UNIT 120 Revere, MA 02151	145 BENNINGTON ST 210 3-27-15C-210 LUC: 102 TURNER DUSTIN L 145 BENNINGTON ST UNIT 210 Revere, MA 02151

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DATE: 7/19/21

145 BENNINGTON ST 211 LUC: 102 VERZILLI DAVID R 145 BENNINGTON ST UNIT 211 REVERE, MA 02151	3-27-15C-211	145 BENNINGTON ST 301 LUC: 102 RIOS DIEGO 145 BENNINGTON ST UNIT 301 Revere, MA 02151	3-27-15C-301	145 BENNINGTON ST 311 LUC: 102 BOCI TOMI 145 BENNINGTON ST UNIT 311 REVERE, MA 02151	3-27-15C-311
145 BENNINGTON ST 212 LUC: 102 BURNS EMILY J 145 BENNINGTON ST UNIT 212 Revere, MA 02151	3-27-15C-212	145 BENNINGTON ST 302 LUC: 102 SILVA CLAUDIA 145 BENNINGTON ST UNIT 302 Revere, MA 02151	3-27-15C-302	145 BENNINGTON ST 312 LUC: 102 STEIDEL NADIA STEIDEL GEORGE 145 BENNINGTON ST UNIT 312 Revere, MA 02151	3-27-15C-312
145 BENNINGTON ST 213 LUC: 102 BOROFSKY KENNETH N 145 BENNINGTON ST UNIT 213 Revere, MA 02151	3-27-15C-213	145 BENNINGTON ST 303 LUC: 102 LANE ANDREA 145 BENNINGTON ST UNIT 303 Revere, MA 02151	3-27-15C-303	145 BENNINGTON ST 313 LUC: 102 BELMONTE STEPHEN J 145 BENNINGTON ST UNIT 313 Revere, MA 02151	3-27-15C-313
145 BENNINGTON ST 214 LUC: 102 CHESLEY EVERETT A 145 BENNINGTON ST UNIT 214 Revere, MA 02151	3-27-15C-214	145 BENNINGTON ST 304 LUC: 102 RICH KENNETH RICH RACHEL 6 CABRAL DR MIDDLETON, MA 01949	3-27-15C-304	145 BENNINGTON ST 314 LUC: 102 ZHENG WENXIA XU LANG 145 BENNINGTON ST UNIT 314 REVERE, MA 02151	3-27-15C-314
145 BENNINGTON ST 215 LUC: 102 GOMEZ ANA M 145 BENNINGTON ST UNIT 215 REVERE, MA 02151	3-27-15C-215	145 BENNINGTON ST 305 LUC: 102 SABOUI RAMIN RAMIN SABOIN AKA RAMIN E 38 PLEASANT PARK RD WINTHROP, MA 02152	3-27-15C-305	145 BENNINGTON ST 315 LUC: 102 ANGILLY ROBERT 145 BENNINGTON ST UNIT 315 Revere, MA 02151	3-27-15C-315
145 BENNINGTON ST 216 LUC: 102 CONSTANTINO FILIPE 145 BENNINGTON ST UNIT 216 REVERE, MA 02151	3-27-15C-216	145 BENNINGTON ST 306 LUC: 102 SOM TINA TAM 145 BENNINGTON ST UNIT 306 Revere, MA 02151	3-27-15C-306	145 BENNINGTON ST 316 LUC: 102 SELIM EDRES A ADELY ENAAM Z 145 BENNINGTON ST UNIT 316 Revere, MA 02151	3-27-15C-316
145 BENNINGTON ST 217 LUC: 102 CASTELBLANCO VERONICA PLATA 145 BENNINGTON ST UNIT 217 Revere, MA 02151	3-27-15C-217	145 BENNINGTON ST 307 LUC: 102 FAN LI FAN WEI 983 MAIN ST WINCHESTER, MA 01890	3-27-15C-307	145 BENNINGTON ST 317 LUC: 102 KOSTA RAIMOND KOSTA BLERTA 145 BENNINGTON ST UNIT 317 Revere, MA 02151	3-27-15C-317
145 BENNINGTON ST 218 LUC: 102 SHERIKIAN KEGHAM KEVIN 145 BENNINGTON ST UNIT 218 Revere, MA 02151	3-27-15C-218	145 BENNINGTON ST 308 LUC: 102 KEVIN OMALLEY 221 MILLS AVE REVERE, MA 02151	3-27-15C-308	145 BENNINGTON ST 318 LUC: 102 KOUFU KARIKA 145 BENNINGTON ST UNIT 318 Revere, MA 02151	3-27-15C-318
145 BENNINGTON ST 219 LUC: 102 RODRIGUEZ JOSE LIFE ESTATE RODRIGUEZ PRICILA LIFE ESTATE 145 BENNINGTON ST UNIT 219 Revere, MA 02151	3-27-15C-219	145 BENNINGTON ST 309 LUC: 102 TAM HIG WAH 17 EVERETT ST MALDEN, MA 02148	3-27-15C-309	145 BENNINGTON ST 319 LUC: 102 LEUCI PAULA 145 BENNINGTON ST UNIT 319 Revere, MA 02151	3-27-15C-319
145 BENNINGTON ST 220 LUC: 102 SEIPIO SUSANA 145 BENNINGTON ST UNIT 220 REVERE, MA 02151	3-27-15C-220	145 BENNINGTON ST 310 LUC: 102 LOPES FERNANDA 19 COUNTRYSIDE LN READING, MA 01867	3-27-15C-310	145 BENNINGTON ST 320 LUC: 102 DECOFF THOMAS A 145 BENNINGTON ST UNIT 320 Revere, MA 02151	3-27-15C-320

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 DATE: 7/19/20



BENNINGTON ST 3-27-16A  
LUC: 920  
COMMONWEALTH OF MASSACHUSETTS  
20 SOMERSET ST  
BOSTON, MA 02108

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BENNINGTON ST 3-27-16B  
LUC: 920  
COMMONWEALTH OF MASSACHUSETTS  
20 SOMERSET ST  
BOSTON, MA 02108

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WASHBURN AVE 3-28-17C  
LUC: 132  
SD BEACHMONT, LLC  
C/O THE HYM INVESTMENT GROUP, LLC  
1 CONGRESS ST  
11TH FLOOR  
BOSTON, MA 02114

---

RAILROAD LOCATIO 3-28-18  
LUC: 920  
MASS BAY TRANS AUTHORITY  
10 PARK PL  
BOSTON, MA 02116

---

220 REVERE BEACH PKWY 4-80-14C  
LUC: 390  
MCCLELLAN HIGHWAY DEVELOPMENT COMPANY LLC  
C/O HYM INVESTMENT GROUP LLC  
1 CONGRESS ST  
10TH FLR  
BOSTON, MA 02114

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LEE BURBANK HWY 5-120A1-1  
LUC: 920  
COMMONWEALTH OF MASSACHUSETTS  
20 SOMERSET ST  
BOSTON, MA 02108

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36 LEE BURBANK HWY 1 5-120A1-2A-1  
LUC: 920  
MASSACHUSETTS PORT AUTHORITY  
1 HARBOR SIDE DR  
EAST BOSTON, MA 02128-2909

---

36 LEE BURBANK HWY 2 5-120A1-2A-2  
LUC: 338  
MASSACHUSETTS PORT AUTHORITY  
1 HARBOR SIDE DR  
SUITE 2005  
EAST BOSTON, MA 02128

---

LEE BURBANK HWY 5-120B-21A  
LUC: 420  
TOSCO TERMINAL COMPANY  
C/O IRVING OIL LTD  
P O BOX 868  
CALAIS, ME 04619 CANADA

---

41 LEE BURBANK HWY 5-120B-21B  
LUC: 334  
HESS REALTY LLC  
C/O SPEEDWAY LLC  
539 SOUTH MAIN ST  
FINDLAY, OH 45840

BELLE ISLE INLET 5-80-1A  
LUC: 420  
IRVING OIL TERMINALS INC  
C/O IRVING OIL LTD  
P O BOX 868  
CALAIS, ME 04619

---

BELLE ISLE INLET 5-80-1B  
LUC: 920  
MASSACHUSETTS PORT AUTHORITY  
1 HARBOR SIDE DR  
EAST BOSTON, MA 02128

---

LEE BURBANK HWY 5-80-2  
LUC: 420  
IRVING OIL TERIMINALS INC  
ATTN: IRVING OIL LTD  
P O BOX 868  
CALAIS, ME 04619

---

WESTERLY SIDE OF 5-80-3  
LUC: 420  
IRVING OIL TERMINALS INC  
C/O IRVING OIL LTD  
P O BOX 868  
CALAIS, ME 04619

---

49 LEE BURBANK HWY 5-80-4  
LUC: 420  
GLOBAL COMPANIES LLC  
ATTN: TERMINAL OPERATIONS  
800 SOUTH ST  
SUITE 500  
WALTHAM, MA 02454

---

36-40 FURLONG DR 1 6-80-10C-1  
LUC: 344  
TARGET CORPORATION T-1942  
C/O PROPERTY TAX TPN-0950  
P O BOX 9456  
MINNEAPOLIS, MN 55440-9456

---

36-40 FURLONG DR 2 6-80-10D-2  
LUC: 344  
CEDAR-REVERE LLC  
44 SOUTH BAYLES AVE  
SUITE 304  
PORT WASHINGTON, NY 11050-3767

---

51 LEE BURBANK HWY 6-80-5A  
LUC: 420  
GLOBAL COMPANIES LLC  
ATTN; TERMINAL OPERATIONS  
800 SOUTH ST  
SUITE 500  
WALTHAM, MA 02454

---

101 LEE BURBANK HWY 6-80-7A  
LUC: 420  
GLOBAL REVCO TERMINAL LLC  
GLOBAL REVCO TERMINAL, LLC  
140 LEE BURBANK HWY  
Revere, MA 02151

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CITY OF REVERE

DATE: 7/14/21



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Last updated: 7/11/21

# CONTACT BOSTON CITY HALL

City Hall is open to the public Monday through Friday, from 9 a.m. - 5 p.m. Appointments are no longer needed for in-person services. You can [check our departments page](#) to view information for all City of Boston departments.

Still have questions? Contact:

## MAYOR'S OFFICE



617-635-4500



[MAYOR@BOSTON.GOV](mailto:MAYOR@BOSTON.GOV)



1 CITY HALL SQUARE, SUITE 500  
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## Contact Us

### Address

Main Office

251 Causeway Street, 9th Floor, Boston, MA 02114

[Directions](#) →

### Phone

Main Office (617) 626-1250

Open M-F 9am-5pm

### Online

[mass.parks@mass.gov](mailto:mass.parks@mass.gov)

[DCR Public Records Request](#) →

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## Mailing Address

Massachusetts Port Authority  
One Harborside Drive, Suite 200S  
East Boston, MA 02128

Monday, July 19, 2021




### Additional Details (optional)

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Mode

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### Contact Info

First Name\*

Jane

Last Name\*

Smith

Email\*

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Boston, MA 02116

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City of Boston  
Environment



City of Boston  
Mayor Martin J. Walsh

**AFFIDAVIT OF SERVICE  
FOR ABUTTER NOTIFICATION**

**Under the Massachusetts Wetlands Protection Act  
and Boston Wetlands Ordinance**

I, Mary Kate Schneeweis, hereby certify under pains and penalties of perjury that that at least one week prior to the public hearing, I gave notice to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act and/or the Boston Wetlands Ordinance by The McClellan Highway Development Company, LLC for creation of an interim outdoor entertainment venue, associated infrastructure, and other related site improvements to be located in the future Central Common of the Suffolk Downs Redevelopment Project, located at William F. McClellan Highway.

The Abutter Notification For, the list of abutters to whom it was given, and their addresses are attached to this Affidavit of Service.

Mary Kate Schneeweis  
Name

January 19, 2021  
Date



**NOTIFICATION TO ABUTTERS  
BOSTON CONSERVATION COMMISSION**

In accordance with the Massachusetts Wetlands Protection Act, Massachusetts General Laws Chapter 131, Section 40, and the Boston Wetlands Ordinance, you are hereby notified as an abutter to a project filed with the Boston Conservation Commission.

A. The McClellan Highway Development Company, LLC has filed a Notice of Intent with the Boston Conservation Commission seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, section 40) and Boston Wetlands Ordinance.

B. The address of the lot where the activity is proposed is William F. McClellan Highway\_\_\_\_\_.

C. The project involves creation of an interim outdoor entertainment venue, associated infrastructure, and other . related site improvements to be located in the future Central Common of the Suffolk Downs Redevelopment Project

D. Copies of the Notice of Intent may be obtained by contacting the Boston Conservation Commission at [CC@boston.gov](mailto:CC@boston.gov).

E. Copies of the Notice of Intent may be obtained from \_\_\_\_\_ the Applicant's Representative, Beals and Thomas, Inc. \_\_\_\_\_ by contacting them at (508) 366-0560 \_\_\_\_\_ between the hours of 8:00 AM and 5:00 PM, Monday - Friday \_\_\_\_\_.

F. In accordance with the Chapter 20 of the Acts of 2021, the public hearing will take place **virtually** at <https://zoom.us/j/6864582044>. If you are unable to access the internet, you can call 1-929-205-6099, enter Meeting ID 686 458 2044 # and use # as your participant ID.

G. Information regarding the date and time of the public hearing may be obtained from the **Boston Conservation Commission** by emailing [CC@boston.gov](mailto:CC@boston.gov) or calling (617) 635-3850 between the hours of 9 AM to 5 PM, **Monday through Friday**.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the **Boston Herald**.

NOTE: Notice of the public hearing, including its date, time, and place, will be posted on [www.boston.gov/public-notice](http://www.boston.gov/public-notice) and in Boston City Hall not less than forty-eight (48) hours in advance. If you would like to provide comments, you may attend the public hearing or send written comments to [CC@boston.gov](mailto:CC@boston.gov) or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

NOTE: If you would like to provide comments, you may attend the public hearing or send written comments to [CC@boston.gov](mailto:CC@boston.gov) or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

NOTE: You also may contact the Boston Conservation Commission or the Department of Environmental Protection Northeast Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call: the Northeast Region: (978) 694-3200.

NOTE: If you plan to attend the public hearing and are in need of interpretation, please notify staff at [CC@boston.gov](mailto:CC@boston.gov) by 12 PM the day before the hearing.



City of Boston  
Environment



**NOTIFICACIÓN PARA PROPIETARIOS Y/O VECINOS COLINDANTES  
COMISIÓN DE CONSERVACIÓN DE BOSTON**

De conformidad con la Ley de protección de los humedales de Massachusetts, el Capítulo 131, Sección 40 de las Leyes Generales de Massachusetts y la Ordenanza sobre los humedales de Boston, por la presente queda usted notificado como propietario o vecino colindante de un proyecto presentado ante la Comisión de Conservación de Boston.

- A. La empresa McClellan Highway Development Company, LLC ha presentado una solicitud a la Comisión de Conservación de Boston pidiendo permiso para modificar una zona sujeta a protección en virtud de la Ley de protección de los humedales (Leyes generales, capítulo 131, sección 40) y la Ordenanza sobre los humedales de Boston.
- B. La dirección del lote donde se propone la actividad es William F. McClellan Highway.
- C. El proyecto consiste en la creación de un lugar de entretenimiento provisional al aire libre, la infraestructura respectiva y otras mejoras correspondientes del sitio, el cual se encontrará ubicado en el futuro Central Common del Proyecto de Reurbanización de Suffolk Downs.
- D. Se pueden obtener copias del Aviso de Intención comunicándose con la Comisión de Conservación de Boston en [CC@boston.gov](mailto:CC@boston.gov).
- E. Las copias de la notificación de intención pueden obtenerse de parte del Representante del Solicitante, Beals and Thomas, Inc., llamando al (508) 366-0560, entre las 8:00 AM y 5:00 PM, de lunes a viernes.
- F. De acuerdo con el Decreto Ejecutivo de la Mancomunidad de Massachusetts que suspende ciertas disposiciones de la Ley de reuniones abiertas, la audiencia pública se llevará a cabo virtualmente en <https://zoom.us/j/6864582044>. Si no puede acceder a Internet, puede llamar al 1-929-205-6099, ingresar ID de reunión 686 458 2044 # y usar # como su ID de participante.
- G. La información relativa a la fecha y hora de la audiencia pública puede solicitarse a la Comisión de Conservación de Boston por correo electrónico a [CC@boston.gov](mailto:CC@boston.gov) o llamando al (617) 635-4416 entre las 9 AM y las 5 PM, de lunes a viernes.

NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en el Boston Herald con al menos cinco (5) días de antelación.

NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en [www.boston.gov/public-notices](http://www.boston.gov/public-notices) y en el Ayuntamiento de Boston con no menos de cuarenta y ocho (48) horas de antelación. Si desea formular comentarios, puede asistir a la audiencia pública o enviarlos por escrito a [CC@boston.gov](mailto:CC@boston.gov) o al Ayuntamiento de Boston, Departamento de Medio Ambiente, Sala 709, 1 City Hall Square, Boston, MA 02201.

NOTA: También puede comunicarse con la Comisión de Conservación de Boston o con la Oficina Regional del Noreste del Departamento de Protección Ambiental para obtener más información sobre esta solicitud o la Ley de Protección de Humedales. Para comunicarse con el DEP, llame a la Región Noreste: (978) 694-3200.

NOTA: si tiene previsto asistir a la audiencia pública y necesita servicios de interpretación, sírvase informar al personal en [CC@boston.gov](mailto:CC@boston.gov) antes de las 12 PM del día anterior a la audiencia.

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**CITY of BOSTON**

| CITY HALL SQUARE BOSTON, MA 02201-2021 | ROOM 709 | 617-635-3850 | [ENVIRONMENT@BOSTON.GOV](mailto:ENVIRONMENT@BOSTON.GOV)





## BABEL NOTICE

English:

**IMPORTANT!** This document or application contains **important information** about your rights, responsibilities and/or benefits. It is crucial that you understand the information in this document and/or application, and we will provide the information in your preferred language at no cost to you. If you need them, please contact us at [cc@boston.gov](mailto:cc@boston.gov) or 617-635-3850.

Spanish:

**¡IMPORTANTE!** Este documento o solicitud contiene **información importante** sobre sus derechos, responsabilidades y/o beneficios. Es fundamental que usted entienda la información contenida en este documento y/o solicitud, y le proporcionaremos la información en su idioma preferido sin costo alguno para usted. Si los necesita, póngase en contacto con nosotros en el correo electrónico [cc@boston.gov](mailto:cc@boston.gov) o llamando al 617-635-3850.

Haitian Creole:

**AVI ENPÒTAN!** Dokiman oubyen aplikasyon sa genyen **enfòmasyon ki enpòtan** konsènan dwa, responsablite, ak/oswa benefis ou yo. Li enpòtan ke ou konprann enfòmasyon ki nan dokiman ak/oubyen aplikasyon sa, e n ap bay enfòmasyon an nan lang ou prefere a, san ou pa peye anyen. Si w bezwen yo, tanpri kontakte nou nan [cc@boston.gov](mailto:cc@boston.gov) oswa 617-635-3850.

Traditional Chinese:

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Vietnamese:

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Arabic:

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## Affidavit of Authenticity

The undersigned, **MAPA Translations, Inc.**, hereby states as proof that the below translation provided to **Beals & Thomas LLC** on behalf **The McClellan Highway Development Company LLC** is a certified translation:

12/21/2021 Spanish Translation

Client: Beals & Thomas  
Division: City of Boston  
Project: City of Boston Environment (Boston Conservation Commission)  
Document: Notification to Abutters  
Word Count: 495  
Requested by Mary Kate Schneeweis on 12-17-2021  
Job Number: DEC2021-178

I declare, to the best of my knowledge and belief, the information herein is true, correct, and complete.

Name: Drita Protopapa

Date: December 21, 2021

Signature: *Drita Protopapa*

**Section 4.0**  
**Stormwater Management Information**

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TO: Boston Conservation Commission  
c/o Nicholas Moreno, Executive Director  
1 City Hall Square, Room 709  
Boston, Massachusetts 02201

FROM: Beals and Thomas, Inc.

DATE: January 19, 2022

REFERENCE: Stormwater Management Summary  
Suffolk Downs Redevelopment  
Outdoor Entertainment Venue - Notice of Intent  
Boston, Massachusetts  
B+T Project No. 2854.18

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The proposed project (the “Project”) entails site improvements and infrastructure to support the creation of an interim outdoor entertainment venue to be located in a portion of the existing infield area. The venue will serve as an interim site use prior to the construction of the final condition of this area proposed in the Master Plan, which is anticipated to commence no sooner than late 2025. The improvements associated with the venue are generally temporary in nature and will be removed upon commencement of future work.

Construction of the proposed venue will result in an increase of impervious area. Specifically, various surface treatments, consisting of bituminous concrete, gravel, and stone dust will be placed as indicated on the enclosed plans to accommodate various temporary structures, as well as pedestrian and vehicular access to the venue. Jersey barriers will also be placed along the southern property boundary, including in the 100-foot buffer zone to the H-series intermittent stream, as an additional security measure. These temporary barriers are not anticipated to alter flood flow paths or velocity.

Upon completion of grading, all other areas within the Project Site will be loamed and seeded with a native grass mix or sod. During the design phase of the site layout, consideration was given to conserving environmentally sensitive features and minimizing impact on the existing hydrology. To mitigate increased stormwater flow rates associated with the proposed impervious area, a sediment forebay has been proposed. The sediment forebay is intended to capture runoff from the proposed vehicular access drive adjacent to the stage area and drain into an existing trench drain, consistent with the existing hydrology of the Site.

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Civil Engineering ▪ Land Surveying ▪ Landscape Architecture ▪ Land Use Permitting ▪ Environmental Planning ▪ Wetland Science

Boston Conservation Commission  
c/o Nicholas Moreno, Executive Director  
January 19, 2022  
Page 2

In the future phase(s) of the development, a new stormwater management system will be constructed to provide treatment and peak runoff rate attenuation for later development phases that include the finalization of the roadways and building construction. A subsequent Notice of Intent(s) will be filed for these phase(s) and will detail the proposed stormwater management system.

#### **LIST OF ATTACHMENTS**

- ATTACHMENT 1: SOIL DATA
- ATTACHMENT 2: PRE- AND POST-DEVELOPMENT HYDROLOGIC ANALYSES
- ATTACHMENT 3: SITE OWNER'S MANUAL

The following summary details how this Project complies with the Massachusetts Department of Environmental Protection (MassDEP) ten Stormwater Standards.

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**STANDARD 1:**            **No new stormwater conveyance (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.**

Most of the impervious areas of the Site are existing, and runoff from these areas will follow the same conveyance under proposed conditions. Some new impervious areas will sheet stormwater to nearby wetlands and waters of the Commonwealth; however, these areas will not be subject to sanding or salting due to the seasonal usage of the Site and therefore will not have an adverse impact.

---

**STANDARD 2:**            **Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.**

The stormwater management design will control post-development peak discharge rates for the 2-, 10-, and 100-year, 24-hour storms so as to maintain pre-development peak discharge rates.

The following table summarizes the peak runoff rates for the pre- and post-development conditions at the main design points.

	2 Year		10 Year		100 Year	
	<i>Pre</i>	Post	<i>Pre</i>	Post	<i>Pre</i>	Post
Design Point 1: Sales Creek (cfs)	14.29	12.23	42.35	34.31	72.32	59.49
Design Point 2: Horseshoe Pond (cfs)	1.34	0.58	4.38	1.74	7.72	3.00

Pre- and Post-Development Hydrologic Analyses to support these peak runoff rates are included in Attachment 2.

**STANDARD 3: Loss of annual recharge to groundwater shall be eliminated or minimized through the use of environmentally sensitive site design, low impact development techniques, stormwater management practices and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil types. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.**

MassDEP recognizes that it may be difficult to recharge the required volume on certain sites because of soil conditions. The Natural Resources Conservation Service (“NRCS”) Web Soil Survey indicates that soils within the racetrack consist of Udorthents soils with wet substratum. These soils are located in 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 dredging. The Project Site’s existing parking area and grandstand areas are listed as Urban land with wet substratum. These soils consist of developed areas within udorthents, wet substratum. No hydrologic soil class is assigned to these soil types, but permeability is typically low.

Test pits performed on the Project Site in 2012 indicated consistent fill material generally throughout the Project Site. The top 24-inches of soil are classified as either poorly graded sand or silty sand. Below 24-inches, the soil is mostly unclassified fill, poorly graded sand, silty sand, or clayey sand. The groundwater elevation was found to vary throughout the Suffolk Downs Property, however within the vicinity of this Project Site, the groundwater elevation was found to be at 9’ to 10’ BCB.

Due to high groundwater and low permeability, opportunities for infiltration are limited. As the design for the final condition of the Site advances to a higher-level of detail, incorporating green infrastructure techniques such as bioretention, stormwater reuse for irrigation and tree filters will be evaluated, which may increase on-site infiltration. Additionally, publicly accessible green spaces will include a layer of imported planting soils that will be more permeable and less compacted than what is currently on-site, further helping to increase the potential of on-site infiltration. To reiterate, the proposed venue is only temporary in nature and will be constructed as an interim condition.

Care has been taken in the design to maintain the hydrology of the down-gradient wetlands and waterbodies. Sales Creek appears to be the local groundwater discharge point, as well as the hydrogeologic divide on-site. The stormwater management system will maintain the same hydrologic pattern under proposed conditions as compared to existing conditions, in which the



majority of the Project Site discharges to Sales Creek. The post-development stormwater peak runoff will approximate the pre-developed peak runoff rates to Sales Creek, which indicates that adequate stream flow will be maintained.

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**STANDARD 4:**            **Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS).**

Due to the seasonal usage of the proposed Site, roadways and other impervious areas will not be subject to sanding or salting. For this reason, the overall TSS loading for the Project will be negligible. Furthermore, during the months when the proposed Site is in use, trash and debris will be cleared from the Site after each use.

The proposed Project includes stormwater management BMPs designed for water quality treatment, which include a sediment forebay and trench drains. These BMPs were sized to capture and treat the flow rate associated with the first 1.0-inch of runoff from tributary impervious surfaces. All proposed stormwater management BMPs will be operated and maintained to ensure continued water quality treatment of runoff. The Site Owner's Manual complies with the Long-Term Pollution Prevention Plan (Standard 4) and the Long-Term Operation and Maintenance Plan (Standard 9) requirements of the 2008 Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards. The Manual outlines source control and pollution prevention measures and maintenance requirements of stormwater best management practices (BMPs) associated with the proposed development.

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**STANDARD 5:**            **For land uses with higher potential pollutant loads (LHPPLs), source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable.**

The proposed Project is not associated with stormwater discharges from land uses with higher potential pollutant loads.

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**STANDARD 6: Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas. Critical areas are Outstanding Resource Waters, shellfish beds, swimming beaches, coldwater fisheries and recharge areas for public water supplies.**

The proposed BMPs are consistent with the Stormwater Management Handbook for use within critical areas. The stormwater management system has been designed to capture and treat the first 1.0-inch of runoff as stipulated in the Stormwater Management Handbook. A sediment forebay and trench drains are proposed to remove pollutants from the first 1.0-inch of runoff from tributary impervious areas. Due to the seasonal nature of the Site, and since all measures will be temporary with a low production of sediment, no pretreatment is needed before discharge.

The Massachusetts Surface Water Quality Standards (314 CMR 4.00) indicates that both Sales Creek and the H-series intermittent stream are Class SA Outstanding Resource Waters (ORW). Pursuant to the Surface Water Quality Standards, these waters are designated as an excellent habitat for fish, other aquatic life, wildlife, and shall have an excellent aesthetic value.

Belle Isle Marsh consists of approximately 241-acres and is part of the larger Rumney Marsh Area of Critical Environmental Concern (ACEC). Belle Isle Marsh is designated as a shellfish growing area by the Division of Marine Fisheries but is currently listed as an area where shellfish growing is prohibited.

Both ORWs and shellfish growing areas are classified as critical areas.

In compliance with the NPDES Construction General Permit requirements for a critical area, soil stabilization measures must be implemented immediately whenever earth-disturbing activities are temporarily or permanently ceased on any portion of the Site. Earth-disturbing activities are temporarily ceased when clearing, grading, and excavation within any area of a site that will not include a permanent structure will not resume for a period of seven (7) or more calendar days, but such activities will resume in the future. Additionally, the inspection of the erosion and sediment controls will occur once every seven (7) days and within 24 hours of the end of a storm event of 0.25-inch or greater.

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**STANDARD 7:**            **Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable. However, if it is not practicable to meet all the Standards, new (retrofitted or expanded) stormwater management systems must be designed to improve existing conditions.**

The Project complies with all standards of the Stormwater Management Handbook.

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**STANDARD 8:**            **A plan to control construction-related impacts during erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.**

A Stormwater Pollution Prevention Plan (SWPPP) will be developed to comply with Section 3 of the NPDES Construction General Permit for Stormwater Discharges prior to construction; thus fulfilling the requirements of Standard 8.

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**STANDARD 9:**            **A Long-Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.**

The Site Owner's Manual complies with the Long-Term Pollution Prevention Plan (Standard 4) and the Long-Term Operation and Maintenance Plan (Standard 9) requirements of the 2008 Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards. The Manual outlines source control and pollution prevention measures and maintenance requirements of the stormwater best management practices (BMPs) associated with the proposed development.

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**STANDARD 10:**            **All illicit discharges to the stormwater management system are prohibited.**

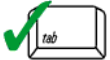
There will be no illicit discharges to the proposed stormwater management system associated with the proposed Project.



# 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.<sup>1</sup> 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 8<sup>2</sup>
- 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.

<sup>1</sup> 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.

<sup>2</sup> 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



*Jeffrey A. Heidelberg* 1/19/22  
Signature and Date

### Checklist

**Project Type:** Is the application for new development, redevelopment, or a mix of new and redevelopment?

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



# Checklist for Stormwater Report

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## 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

- 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

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## Checklist (continued)

### Standard 2: Peak Rate Attenuation

- 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

- 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 Field<sup>1</sup>
- 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.

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



# Checklist for Stormwater Report

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## 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

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

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## 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 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

- 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

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## Checklist (continued)

### Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- 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

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

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## 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

- 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

- 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.

## Attachment 1

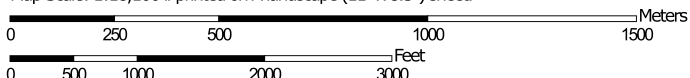
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Soil Data

Hydrologic Soil Group—Norfolk and Suffolk Counties, Massachusetts  
(Suffolk Downs Redevelopment Hydrologic Soil Group)



Map Scale: 1:18,100 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



Hydrologic Soil Group—Norfolk and Suffolk Counties, Massachusetts  
(Suffolk Downs Redevelopment Hydrologic Soil Group)

### MAP LEGEND

**Area of Interest (AOI)**









 Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**





-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

**Soil Rating Lines**

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

**Soil Rating Points**






-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Norfolk and Suffolk Counties, Massachusetts  
Survey Area Data: Version 12, Sep 15, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 30, 2011—Aug 25, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Norfolk and Suffolk Counties, Massachusetts (MA616)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Water		9.0	1.4%
65	Ipswich mucky peat, 0 to 2 percent slopes, very frequently flooded	A/D	40.2	6.1%
325D	Newport silt loam, 15 to 25 percent slopes	B	64.9	9.9%
603	Urban land, wet substratum, 0 to 3 percent slopes		298.6	45.4%
610	Beaches		1.3	0.2%
627C	Newport-Urban land complex, 3 to 15 percent slopes	B	85.2	13.0%
653	Udorthents, sandy	A	2.0	0.3%
655	Udorthents, wet substratum		156.3	23.8%
<b>Totals for Area of Interest</b>			<b>657.6</b>	<b>100.0%</b>

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



## Attachment 2

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Pre-Development Hydrologic Analysis  
Post-Development Hydrologic Analysis

## PRE-DEVELOPMENT HYDROLOGIC ANALYSIS

### OBJECTIVE

To determine the pre-development peak rates of runoff from the site for the 2-, 10-, and 100-year storm events.

### CONCLUSION(S)

#### Peak Runoff Rates

The following numbers represent the peak rates of runoff from the site under pre-development conditions:

Storm Event	Design Point 1: Sales Creek (cfs)	Design Point 2: Horseshoe Pond (cfs)
2-year	14.29	1.34
BWSC 10-year	42.35	4.38
BWSC 100-year	72.32	7.72

### CALCULATION METHODS

1. CN and T<sub>c</sub> determined based on TR-55 methodology.
2. Runoff rates computed using HydroCAD version 10.10-5a.
3. Area take-offs performed using Civil 3D.

### ASSUMPTIONS

1. Pre-development conditions are site conditions prior to all site work (demolition, surcharge).
2. Surface cover types and boundaries have been estimated based upon MassGIS, USGS Color Ortho Imagery 2016, aerial photography viewed on Google Earth, and AutoCAD file 285402B004N.dwg.
3. Urban Land, Udorthents, and Ipswich Mucky Peat modeled as Hydrologic soil class “C” soils.
4. Rainfall depth for 10-year storm event and 100-year storm event based on “BWSC Climate Change Risk Assessment, Findings and Mitigation/Adaptation Strategies for Wastewater and Storm Drainage” dated 01/28/2015.

### SOURCES OF DATA/ EQUATIONS

1. Pre-Development Conditions Watershed Map, dated 12/30/2021, prepared by Beals and Thomas, Inc. (285418P444A-001).
2. TR-55 Urban Hydrology for Small Watersheds, SCS, 1986.
3. NRCS Soil Survey for Norfolk and Suffolk Counties, downloaded from Web Soil Survey 2.0 on 05/04/2017.
4. Existing catchment EDA-2 is the same as catchment EDA-1 in the approved calculation “Existing Conditions Hydrology” for Suffolk Downs Redevelopment – Central Common Regrading, dated 1/15/2020 (285402CS056.pdf).

REV	CALC. BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
0	RFK	12/30/2021	KJP	01/03/2022	JAH	01/18/2022

285418CS002A.docx

**LIST OF ATTACHMENTS**

1. Pre-Development Conditions Watershed Map, dated 12/30/2021, prepared by Beals and Thomas, Inc.
2. Pre-Development Conditions Hydrology Report from HydroCAD file 285418HC001A, dated 12/30/2021.

REV	CALC. BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
0	RFK	12/30/2021	KJP	01/03/2022	JAH	01/18/2022

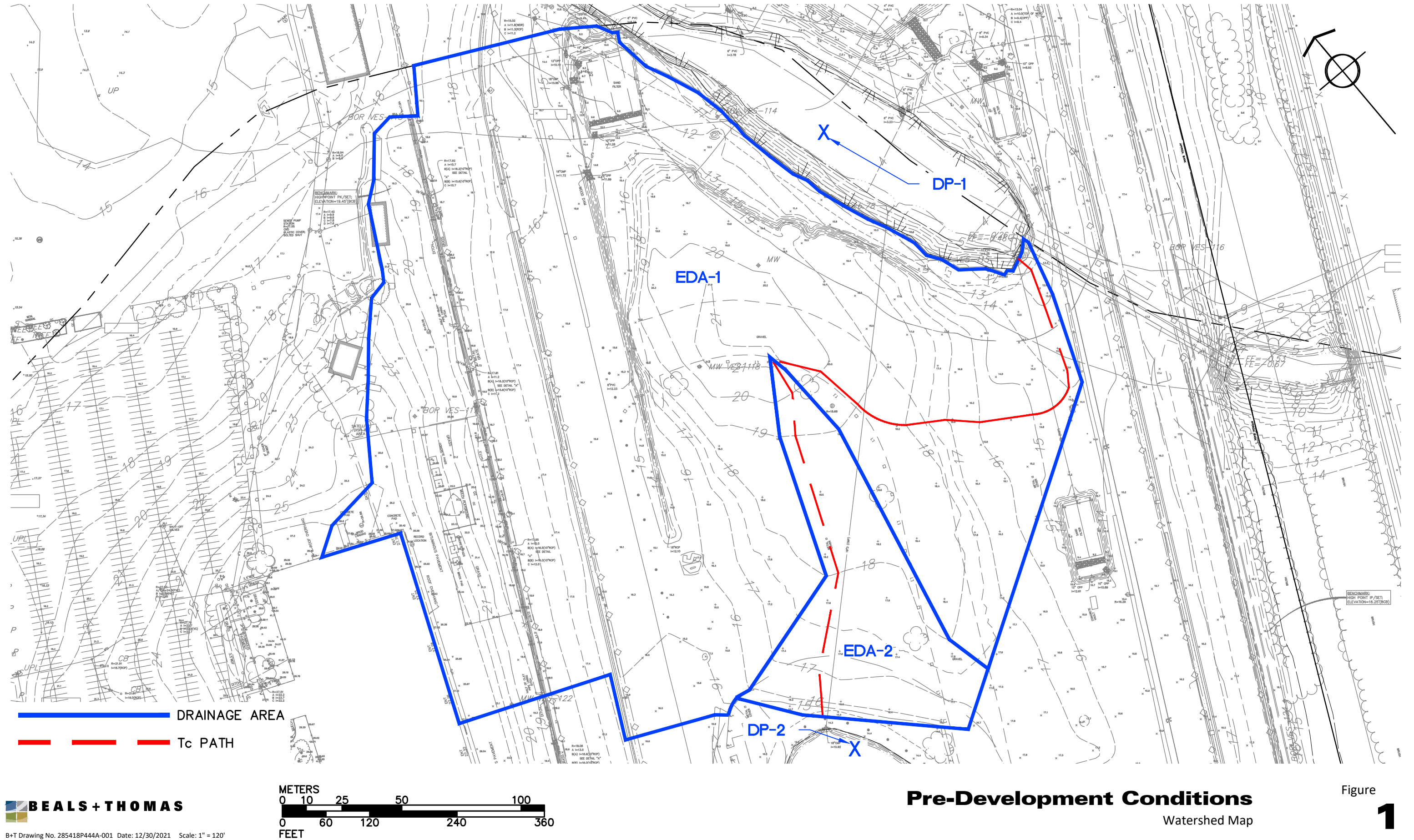
285418CS002A.docx

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Civil Engineering ▪ Land Surveying ▪ Landscape Architecture ▪ Land Use Permitting ▪ Environmental Planning ▪ Wetland Science

# Suffolk Downs Redevelopment - Outdoor Entertainment Venue

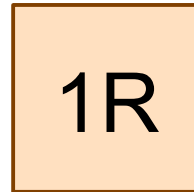
Boston, Massachusetts





EDA-1

EDA-1



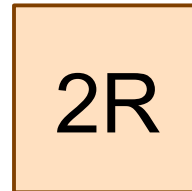
1R

Design Point 1: Sales Creek



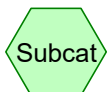
EDA-2

EDA-2



2R

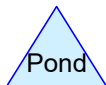
Design Point 2: Horseshoe Pond



Subcat



Reach



Pond



Link

**Routing Diagram for 285418HC001A**

Prepared by Beals and Thomas, Inc., Printed 12/30/2021  
HydroCAD® 10.10-6a s/n 04493 © 2020 HydroCAD Software Solutions LLC

**285418HC001A**

Prepared by Beals and Thomas, Inc.

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Page 2

**Rainfall Events Listing (selected events)**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	BWSC-002yr	Type III 24-hr		Default	24.00	1	3.20	2
2	BWSC-010yr	Type III 24-hr		Default	24.00	1	6.00	2
3	BWSC-100yr	Type III 24-hr		Default	24.00	1	8.78	2

**285418HC001A**

Prepared by Beals and Thomas, Inc.

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Printed 12/30/2021

Page 3

**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
12.547	74	>75% Grass cover, Good, HSG C (EDA-1, EDA-2)
1.815	87	Dirt roads, HSG C (EDA-1)
0.054	89	Gravel roads, HSG C (EDA-1)
1.881	98	Unconnected pavement, HSG C (EDA-1)
0.020	98	Water Surface, HSG C (EDA-1)
<b>16.317</b>	<b>78</b>	<b>TOTAL AREA</b>

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment EDA-1: EDA-1** Runoff Area=14.640 ac 12.98% Impervious Runoff Depth>1.21"  
Flow Length=635' Tc=17.5 min UI Adjusted CN=77 Runoff=14.29 cfs 1.472 af

**Subcatchment EDA-2: EDA-2** Runoff Area=1.677 ac 0.00% Impervious Runoff Depth>1.03"  
Flow Length=507' Tc=18.1 min CN=74 Runoff=1.34 cfs 0.144 af

**Reach 1R: Design Point 1: Sales Creek** Inflow=14.29 cfs 1.472 af  
Outflow=14.29 cfs 1.472 af

**Reach 2R: Design Point 2: Horseshoe Pond** Inflow=1.34 cfs 0.144 af  
Outflow=1.34 cfs 0.144 af

**Total Runoff Area = 16.317 ac Runoff Volume = 1.617 af Average Runoff Depth = 1.19"**  
**88.35% Pervious = 14.416 ac 11.65% Impervious = 1.901 ac**



**Summary for Subcatchment EDA-1: EDA-1**

Runoff = 14.29 cfs @ 12.26 hrs, Volume= 1.472 af, Depth> 1.21"  
 Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Adj	Description
10.870	74		>75% Grass cover, Good, HSG C
1.815	87		Dirt roads, HSG C
0.054	89		Gravel roads, HSG C
1.881	98		Unconnected pavement, HSG C
0.020	98		Water Surface, HSG C
14.640	79	77	Weighted Average, UI Adjusted
12.739			87.02% Pervious Area
1.901			12.98% Impervious Area
1.881			98.95% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0172	0.14		<b>Sheet Flow, Grass</b>
					Grass: Short n= 0.150 P2= 3.20"
0.1	8	0.0172	0.92		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.3	68	0.0147	0.85		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.5	74	0.0135	0.81		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.0	55	0.0182	0.94		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.7	46	0.0217	1.03		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.5	75	0.0133	0.81		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.3	65	0.0153	0.87		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
3.0	118	0.0085	0.65		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.9	52	0.0192	0.97		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.2	24	0.1250	2.47		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
17.5	635	Total			

**Summary for Subcatchment EDA-2: EDA-2**

Runoff = 1.34 cfs @ 12.27 hrs, Volume= 0.144 af, Depth> 1.03"

Routed to Reach 2R : Design Point 2: Horseshoe Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Description
1.677	74	>75% Grass cover, Good, HSG C
1.677		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		<b>Sheet Flow, grass</b> Grass: Short n= 0.150 P2= 3.20"
1.1	59	0.0169	0.91		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
6.7	198	0.0050	0.49		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
3.8	136	0.0074	0.60		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.7	44	0.0227	1.05		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.0	7	0.1429	2.65		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.2	13	0.0333	1.28		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
18.1	507	Total			

**Summary for Reach 1R: Design Point 1: Sales Creek**

Inflow Area = 14.640 ac, 12.98% Impervious, Inflow Depth > 1.21" for BWSC-002yr event  
Inflow = 14.29 cfs @ 12.26 hrs, Volume= 1.472 af  
Outflow = 14.29 cfs @ 12.26 hrs, Volume= 1.472 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Design Point 2: Horseshoe Pond**

Inflow Area = 1.677 ac, 0.00% Impervious, Inflow Depth > 1.03" for BWSC-002yr event  
Inflow = 1.34 cfs @ 12.27 hrs, Volume= 0.144 af  
Outflow = 1.34 cfs @ 12.27 hrs, Volume= 0.144 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment EDA-1: EDA-1** Runoff Area=14.640 ac 12.98% Impervious Runoff Depth>3.47"  
Flow Length=635' Tc=17.5 min UI Adjusted CN=77 Runoff=42.35 cfs 4.231 af

**Subcatchment EDA-2: EDA-2** Runoff Area=1.677 ac 0.00% Impervious Runoff Depth>3.17"  
Flow Length=507' Tc=18.1 min CN=74 Runoff=4.38 cfs 0.443 af

**Reach 1R: Design Point 1: Sales Creek** Inflow=42.35 cfs 4.231 af  
Outflow=42.35 cfs 4.231 af

**Reach 2R: Design Point 2: Horseshoe Pond** Inflow=4.38 cfs 0.443 af  
Outflow=4.38 cfs 0.443 af

**Total Runoff Area = 16.317 ac Runoff Volume = 4.674 af Average Runoff Depth = 3.44"**  
**88.35% Pervious = 14.416 ac 11.65% Impervious = 1.901 ac**

**Summary for Subcatchment EDA-1: EDA-1**

Runoff = 42.35 cfs @ 12.24 hrs, Volume= 4.231 af, Depth> 3.47"  
 Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Adj	Description
10.870	74		>75% Grass cover, Good, HSG C
1.815	87		Dirt roads, HSG C
0.054	89		Gravel roads, HSG C
1.881	98		Unconnected pavement, HSG C
0.020	98		Water Surface, HSG C
14.640	79	77	Weighted Average, UI Adjusted
12.739			87.02% Pervious Area
1.901			12.98% Impervious Area
1.881			98.95% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0172	0.14		<b>Sheet Flow, Grass</b>
					Grass: Short n= 0.150 P2= 3.20"
0.1	8	0.0172	0.92		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.3	68	0.0147	0.85		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.5	74	0.0135	0.81		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.0	55	0.0182	0.94		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.7	46	0.0217	1.03		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.5	75	0.0133	0.81		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.3	65	0.0153	0.87		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
3.0	118	0.0085	0.65		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.9	52	0.0192	0.97		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.2	24	0.1250	2.47		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
17.5	635	Total			

**Summary for Subcatchment EDA-2: EDA-2**

Runoff = 4.38 cfs @ 12.25 hrs, Volume= 0.443 af, Depth> 3.17"

Routed to Reach 2R : Design Point 2: Horseshoe Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Description
1.677	74	>75% Grass cover, Good, HSG C
1.677		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		<b>Sheet Flow, grass</b> Grass: Short n= 0.150 P2= 3.20"
1.1	59	0.0169	0.91		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
6.7	198	0.0050	0.49		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
3.8	136	0.0074	0.60		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.7	44	0.0227	1.05		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.0	7	0.1429	2.65		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.2	13	0.0333	1.28		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
18.1	507	Total			

**Summary for Reach 1R: Design Point 1: Sales Creek**

Inflow Area = 14.640 ac, 12.98% Impervious, Inflow Depth > 3.47" for BWSC-010yr event  
Inflow = 42.35 cfs @ 12.24 hrs, Volume= 4.231 af  
Outflow = 42.35 cfs @ 12.24 hrs, Volume= 4.231 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs



**Summary for Reach 2R: Design Point 2: Horseshoe Pond**

Inflow Area = 1.677 ac, 0.00% Impervious, Inflow Depth > 3.17" for BWSC-010yr event  
Inflow = 4.38 cfs @ 12.25 hrs, Volume= 0.443 af  
Outflow = 4.38 cfs @ 12.25 hrs, Volume= 0.443 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**285418HC001A**

Type III 24-hr BWSC-100yr Rainfall=8.78"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment EDA-1: EDA-1** Runoff Area=14.640 ac 12.98% Impervious Runoff Depth>5.98"  
Flow Length=635' Tc=17.5 min UI Adjusted CN=77 Runoff=72.32 cfs 7.292 af

**Subcatchment EDA-2: EDA-2** Runoff Area=1.677 ac 0.00% Impervious Runoff Depth>5.61"  
Flow Length=507' Tc=18.1 min CN=74 Runoff=7.72 cfs 0.784 af

**Reach 1R: Design Point 1: Sales Creek** Inflow=72.32 cfs 7.292 af  
Outflow=72.32 cfs 7.292 af

**Reach 2R: Design Point 2: Horseshoe Pond** Inflow=7.72 cfs 0.784 af  
Outflow=7.72 cfs 0.784 af

**Total Runoff Area = 16.317 ac Runoff Volume = 8.076 af Average Runoff Depth = 5.94"**  
**88.35% Pervious = 14.416 ac 11.65% Impervious = 1.901 ac**

**Summary for Subcatchment EDA-1: EDA-1**

Runoff = 72.32 cfs @ 12.24 hrs, Volume= 7.292 af, Depth> 5.98"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Adj	Description
10.870	74		>75% Grass cover, Good, HSG C
1.815	87		Dirt roads, HSG C
0.054	89		Gravel roads, HSG C
1.881	98		Unconnected pavement, HSG C
0.020	98		Water Surface, HSG C
14.640	79	77	Weighted Average, UI Adjusted
12.739			87.02% Pervious Area
1.901			12.98% Impervious Area
1.881			98.95% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0172	0.14		<b>Sheet Flow, Grass</b>
					Grass: Short n= 0.150 P2= 3.20"
0.1	8	0.0172	0.92		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.3	68	0.0147	0.85		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.5	74	0.0135	0.81		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.0	55	0.0182	0.94		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.7	46	0.0217	1.03		<b>Shallow Concentrated Flow, Grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.5	75	0.0133	0.81		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
1.3	65	0.0153	0.87		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
3.0	118	0.0085	0.65		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.9	52	0.0192	0.97		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
0.2	24	0.1250	2.47		<b>Shallow Concentrated Flow, grass</b>
					Short Grass Pasture Kv= 7.0 fps
17.5	635	Total			

**Summary for Subcatchment EDA-2: EDA-2**

Runoff = 7.72 cfs @ 12.25 hrs, Volume= 0.784 af, Depth> 5.61"

Routed to Reach 2R : Design Point 2: Horseshoe Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Description
1.677	74	>75% Grass cover, Good, HSG C
1.677		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		<b>Sheet Flow, grass</b> Grass: Short n= 0.150 P2= 3.20"
1.1	59	0.0169	0.91		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
6.7	198	0.0050	0.49		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
3.8	136	0.0074	0.60		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.7	44	0.0227	1.05		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.0	7	0.1429	2.65		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
0.2	13	0.0333	1.28		<b>Shallow Concentrated Flow, grass</b> Short Grass Pasture Kv= 7.0 fps
18.1	507	Total			

**Summary for Reach 1R: Design Point 1: Sales Creek**

Inflow Area = 14.640 ac, 12.98% Impervious, Inflow Depth > 5.98" for BWSC-100yr event  
Inflow = 72.32 cfs @ 12.24 hrs, Volume= 7.292 af  
Outflow = 72.32 cfs @ 12.24 hrs, Volume= 7.292 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Design Point 2: Horseshoe Pond**

Inflow Area = 1.677 ac, 0.00% Impervious, Inflow Depth > 5.61" for BWSC-100yr event  
Inflow = 7.72 cfs @ 12.25 hrs, Volume= 0.784 af  
Outflow = 7.72 cfs @ 12.25 hrs, Volume= 0.784 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

## POST-DEVELOPMENT HYDROLOGIC ANALYSIS

### OBJECTIVE

To determine the post-development peak rates of runoff from the site for the 2-, 10-, and 100-year storm events.

### CONCLUSION(S)

#### Peak Runoff Rates

The following numbers represent the peak rates of runoff from the site under post-development conditions:

Storm Event	Design Point 1: Sales Creek (cfs)	Design Point 2: Horseshoe Pond (cfs)
2-year	12.23	0.58
BWSC 10-year	34.31	1.74
BWSC 100-year	59.49	3.00

Post-development peak runoff rates are less than pre-development rates in accordance with the MassDEP Stormwater Handbook.

### CALCULATION METHODS

1. CN and T<sub>c</sub> determined based on TR-55 methodology.
2. Runoff rates computed using HydroCAD version 10.10-5a.
3. Area take-offs performed using Civil 3D.

### ASSUMPTIONS

1. Surface cover types and boundaries have been estimated based upon MassGIS, USGS Color Ortho Imagery 2016, aerial photography viewed on Google Earth, and AutoCAD file 285402B004N.dwg.
2. Proposed Surface Treatment A and B (heavy and light duty bituminous concrete) were modeled as impervious pavement with a curve number (CN) of 98.
3. Proposed Surface Treatment C and D (gravel drive and pad) were modeled as gravel roads with a CN of 89.
4. Proposed Surface Treatment E (stone dust pad) was modeled as gravel roads with a CN of 89.
5. For a conservative design approach, the trench drains with crushed stone were modeled as gravel roads with a CN of 89.
6. All proposed event structures and accessories were not considered in this analysis because they are all temporary in nature and will not create any earth disturbance upon setup.
7. Urban Land, Udorthents, and Ipswich Mucky Peat modeled as Hydrologic soil class "C" soils.
8. Based on information from Table 2.3.3 in Volume 3, Chapter 1 of the Massachusetts Stormwater Handbook, the on-site soils are assumed to have an infiltration rate of 0.17 in/hr.

REV	CALC. BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
0	RFK	12/30/2021	KJP	01/03/2022	JAH	01/18/2022

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9. For design purposes, the groundwater elevation is assumed to be at 10' BCB based on a "Groundwater Elevation Contours" exhibit of the Suffolk Downs site, prepared by GEI Consultants, dated 12/27/2006.
10. Rainfall depth for 10-year storm event and 100-year storm event based on "BWSC Climate Change Risk Assessment, Findings and Mitigation/Adaptation Strategies for Wastewater and Storm Drainage" dated 01/28/2015.

### SOURCES OF DATA/ EQUATIONS

1. Post-Development Conditions Watershed Map, dated 12/30/2021, prepared by Beals and Thomas, Inc. (285418P444A-002).
2. TR-55 Urban Hydrology for Small Watersheds, SCS, 1986.
3. NRCS Soil Survey for Norfolk and Suffolk Counties, downloaded from Web Soil Survey 2.0 on 05/04/2017.

### LIST OF ATTACHMENTS

1. Post-Development Conditions Watershed Map, dated 12/30/2021, prepared by Beals and Thomas, Inc.
2. Post-Development Conditions Hydrology Report from HydroCAD file 285418HC001A, dated 12/30/2021.

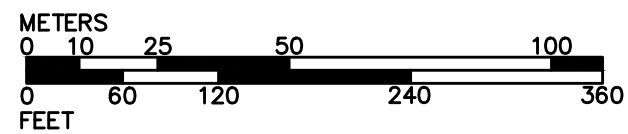
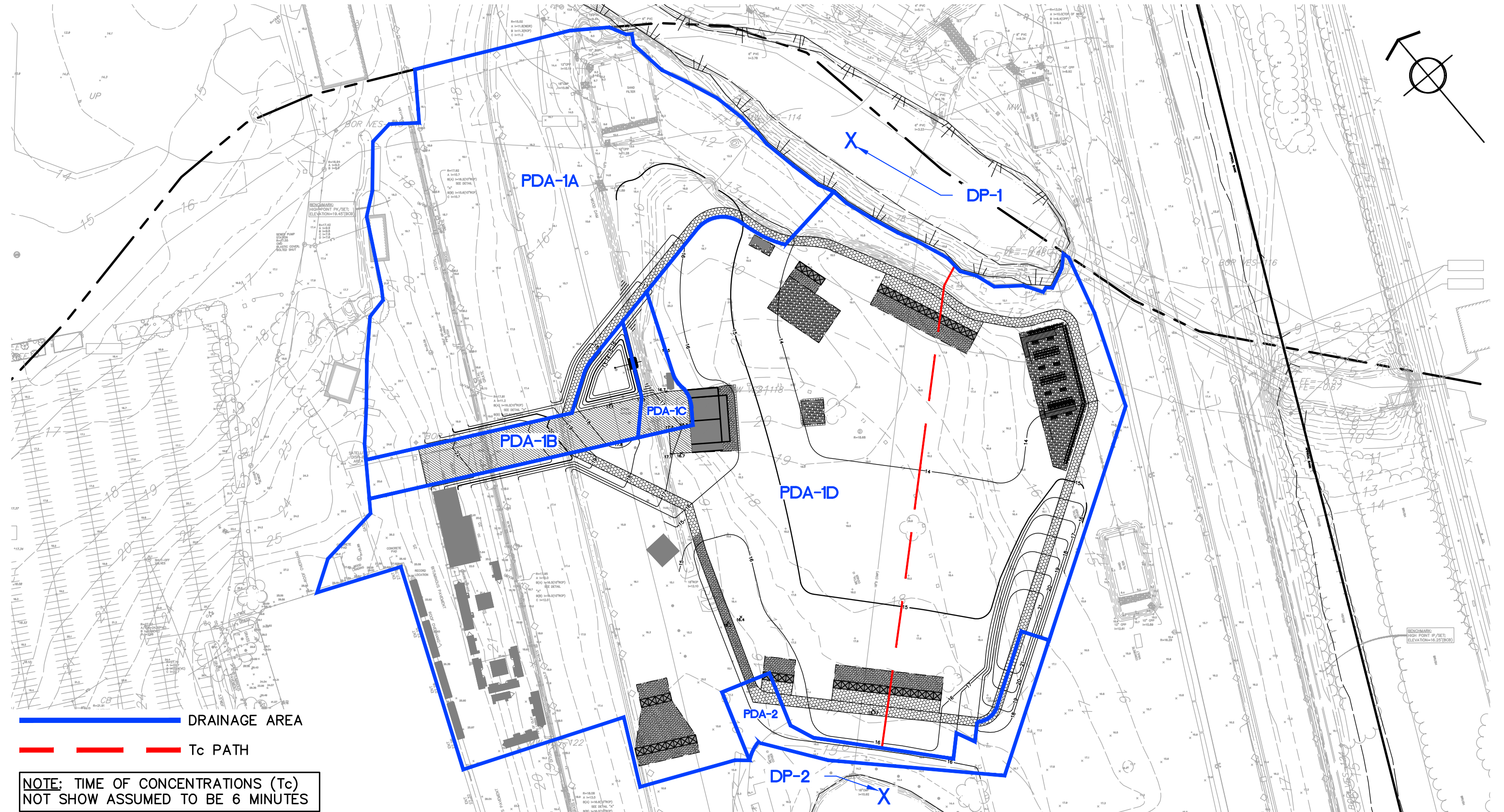
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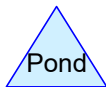
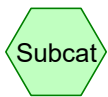
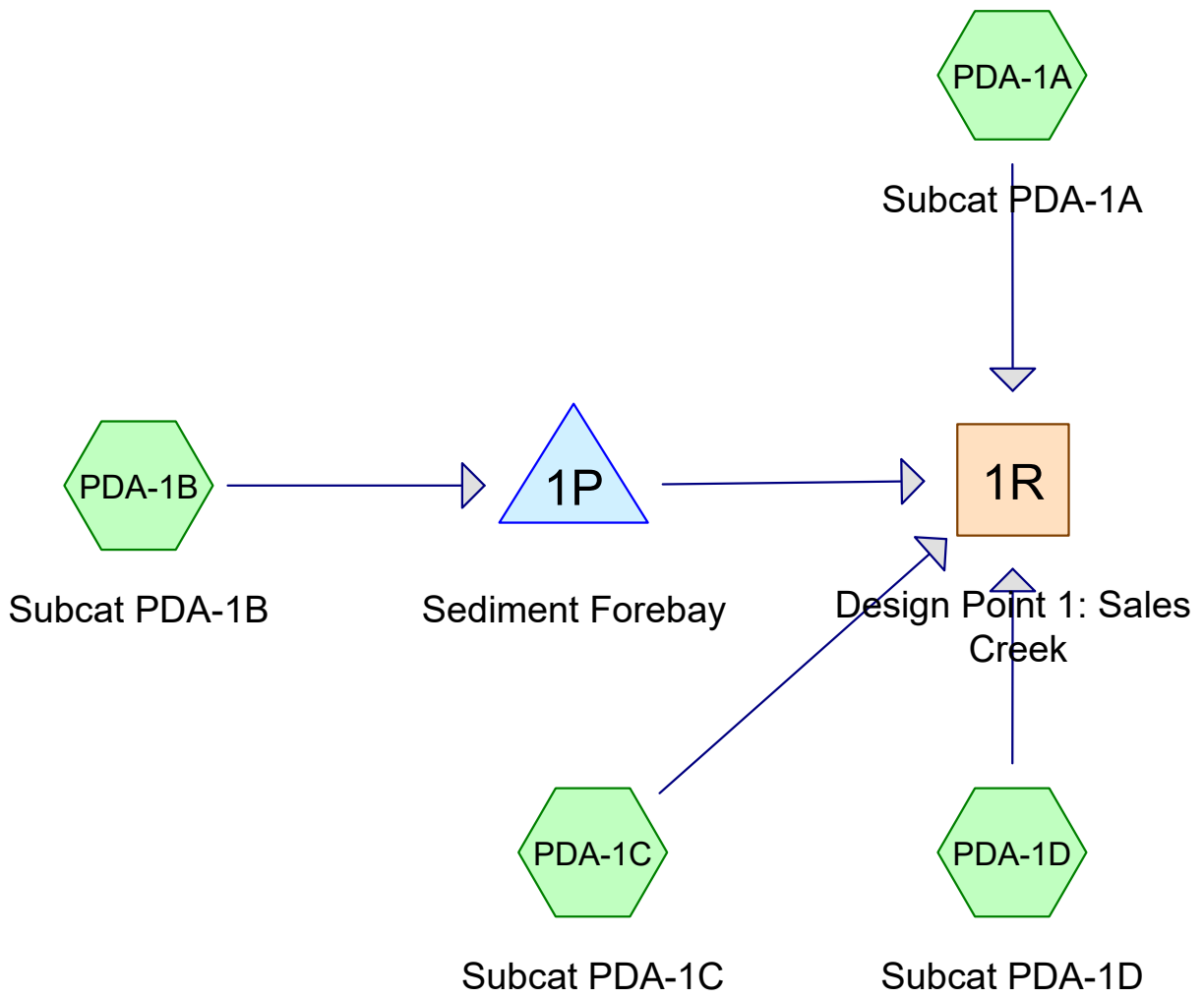
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# Suffolk Downs Redevelopment - Outdoor Entertainment Venue

Boston, Massachusetts





**Routing Diagram for 285418HC002A**

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**Rainfall Events Listing (selected events)**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	BWSC-002yr	Type III 24-hr		Default	24.00	1	3.20	2
2	BWSC-010yr	Type III 24-hr		Default	24.00	1	6.00	2
3	BWSC-100yr	Type III 24-hr		Default	24.00	1	8.78	2

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**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
10.310	74	>75% Grass cover, Good, HSG C (PDA-1A, PDA-1B, PDA-1C, PDA-1D, PDA-2)
1.712	87	Dirt roads, HSG C (PDA-1A, PDA-1D)
2.007	89	Gravel roads, HSG C (PDA-1A, PDA-1C, PDA-1D, PDA-2)
2.280	98	Unconnected pavement, HSG C (PDA-1A, PDA-1B, PDA-1C, PDA-1D)
0.007	98	Water Surface, HSG C (PDA-1A)
<b>16.317</b>	<b>81</b>	<b>TOTAL AREA</b>

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: Subcat PDA-1A** Runoff Area=4.518 ac 19.91% Impervious Runoff Depth>1.47"  
Tc=6.0 min UI Adjusted CN=81 Runoff=7.59 cfs 0.553 af

**Subcatchment PDA-1B: Subcat PDA-1B** Runoff Area=0.540 ac 76.57% Impervious Runoff Depth>2.35"  
Tc=6.0 min CN=92 Runoff=1.42 cfs 0.106 af

**Subcatchment PDA-1C: Subcat PDA-1C** Runoff Area=0.195 ac 37.35% Impervious Runoff Depth>1.76"  
Tc=6.0 min CN=85 Runoff=0.39 cfs 0.029 af

**Subcatchment PDA-1D: Subcat PDA-1D** Runoff Area=10.614 ac 8.49% Impervious Runoff Depth>1.27"  
Flow Length=653' Tc=27.7 min UI Adjusted CN=78 Runoff=9.05 cfs 1.119 af

**Subcatchment PDA-2: Subcat PDA-2** Runoff Area=0.449 ac 0.00% Impervious Runoff Depth>1.15"  
Tc=6.0 min CN=76 Runoff=0.58 cfs 0.043 af

**Reach 1R: Design Point 1: Sales Creek** Inflow=12.23 cfs 1.786 af  
Outflow=12.23 cfs 1.786 af

**Reach 2R: Design Point 2: Horseshoe Pond** Inflow=0.58 cfs 0.043 af  
Outflow=0.58 cfs 0.043 af

**Pond 1P: Sediment Forebay** Peak Elev=14.17' Storage=2,297 cf Inflow=1.42 cfs 0.106 af  
Discarded=0.01 cfs 0.012 af Primary=0.11 cfs 0.086 af Outflow=0.12 cfs 0.099 af

**Total Runoff Area = 16.317 ac Runoff Volume = 1.849 af Average Runoff Depth = 1.36"**  
**85.98% Pervious = 14.029 ac 14.02% Impervious = 2.287 ac**

**Summary for Subcatchment PDA-1A: Subcat PDA-1A**

Runoff = 7.59 cfs @ 12.10 hrs, Volume= 0.553 af, Depth> 1.47"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Adj	Description
2.260	74		>75% Grass cover, Good, HSG C
0.982	87		Dirt roads, HSG C
0.377	89		Gravel roads, HSG C
0.007	98		Water Surface, HSG C
0.892	98		Unconnected pavement, HSG C
4.518	83	81	Weighted Average, UI Adjusted
3.619			80.09% Pervious Area
0.899			19.91% Impervious Area
0.892			99.19% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Subcatchment PDA-1B: Subcat PDA-1B**

Runoff = 1.42 cfs @ 12.09 hrs, Volume= 0.106 af, Depth> 2.35"

Routed to Pond 1P : Sediment Forebay

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Description
0.414	98	Unconnected pavement, HSG C
0.127	74	>75% Grass cover, Good, HSG C
0.540	92	Weighted Average
0.127		23.43% Pervious Area
0.414		76.57% Impervious Area
0.414		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

Summary for Subcatchment PDA-1C: Subcat PDA-1C

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 1.76"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Description
0.095	74	>75% Grass cover, Good, HSG C
0.028	89	Gravel roads, HSG C
0.073	98	Unconnected pavement, HSG C
0.195	85	Weighted Average
0.122		62.65% Pervious Area
0.073		37.35% Impervious Area
0.073		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Tc



**Summary for Subcatchment PDA-1D: Subcat PDA-1D**

Runoff = 9.05 cfs @ 12.41 hrs, Volume= 1.119 af, Depth> 1.27"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Adj	Description
7.425	74		>75% Grass cover, Good, HSG C
0.730	87		Dirt roads, HSG C
1.557	89		Gravel roads, HSG C
0.901	98		Unconnected pavement, HSG C
10.614	79	78	Weighted Average, UI Adjusted
9.713			91.51% Pervious Area
0.901			8.49% Impervious Area
0.901			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	50	0.0070	0.10		<b>Sheet Flow, Tc-1</b> Grass: Short n= 0.150 P2= 3.20"
9.6	312	0.0060	0.54		<b>Shallow Concentrated Flow, Tc-2</b> Short Grass Pasture Kv= 7.0 fps
9.1	241	0.0040	0.44		<b>Shallow Concentrated Flow, Tc-3</b> Short Grass Pasture Kv= 7.0 fps
0.4	50	0.0900	2.10		<b>Shallow Concentrated Flow, Tc-4</b> Short Grass Pasture Kv= 7.0 fps
27.7	653	Total			

**Summary for Subcatchment PDA-2: Subcat PDA-2**

Runoff = 0.58 cfs @ 12.10 hrs, Volume= 0.043 af, Depth> 1.15"

Routed to Reach 2R : Design Point 2: Horseshoe Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Type III 24-hr BWSC-002yr Rainfall=3.20"

Area (ac)	CN	Description
0.404	74	>75% Grass cover, Good, HSG C
0.045	89	Gravel roads, HSG C
0.449	76	Weighted Average
0.449		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Reach 1R: Design Point 1: Sales Creek**

Inflow Area = 15.867 ac, 14.41% Impervious, Inflow Depth > 1.35" for BWSC-002yr event  
Inflow = 12.23 cfs @ 12.35 hrs, Volume= 1.786 af  
Outflow = 12.23 cfs @ 12.35 hrs, Volume= 1.786 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Design Point 2: Horseshoe Pond**

Inflow Area = 0.449 ac, 0.00% Impervious, Inflow Depth > 1.15" for BWSC-002yr event  
Inflow = 0.58 cfs @ 12.10 hrs, Volume= 0.043 af  
Outflow = 0.58 cfs @ 12.10 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Pond 1P: Sediment Forebay**

Inflow Area = 0.540 ac, 76.57% Impervious, Inflow Depth > 2.35" for BWSC-002yr event  
 Inflow = 1.42 cfs @ 12.09 hrs, Volume= 0.106 af  
 Outflow = 0.12 cfs @ 13.07 hrs, Volume= 0.099 af, Atten= 91%, Lag= 59.0 min  
 Discarded = 0.01 cfs @ 13.07 hrs, Volume= 0.012 af  
 Primary = 0.11 cfs @ 13.07 hrs, Volume= 0.086 af  
 Routed to Reach 1R : Design Point 1: Sales Creek

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Peak Elev= 14.17' @ 13.07 hrs Surf.Area= 2,321 sf Storage= 2,297 cf

Plug-Flow detention time= 227.4 min calculated for 0.098 af (93% of inflow)  
 Center-of-Mass det. time= 191.7 min ( 988.9 - 797.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	7,723 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	1,622	0	0
14.00	2,207	1,915	1,915
15.00	2,882	2,545	4,459
16.00	3,645	3,264	7,723

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	<b>0.170 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 10.00'
#2	Primary	15.00'	<b>9.0' long + 3.0 ' SideZ x 11.0' breadth Riprap Spillway</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64
#3	Primary	13.00'	<b>2.0" Vert. Standpipe Outlet</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.01 cfs @ 13.07 hrs HW=14.17' (Free Discharge)

↑1=Exfiltration ( Controls 0.01 cfs)

**Primary OutFlow** Max=0.11 cfs @ 13.07 hrs HW=14.17' (Free Discharge)

↑2=Riprap Spillway ( Controls 0.00 cfs)

↑3=Standpipe Outlet (Orifice Controls 0.11 cfs @ 5.02 fps)

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: Subcat PDA-1A** Runoff Area=4.518 ac 19.91% Impervious Runoff Depth>3.88"  
Tc=6.0 min UI Adjusted CN=81 Runoff=20.01 cfs 1.461 af

**Subcatchment PDA-1B: Subcat PDA-1B** Runoff Area=0.540 ac 76.57% Impervious Runoff Depth>5.07"  
Tc=6.0 min CN=92 Runoff=2.94 cfs 0.228 af

**Subcatchment PDA-1C: Subcat PDA-1C** Runoff Area=0.195 ac 37.35% Impervious Runoff Depth>4.30"  
Tc=6.0 min CN=85 Runoff=0.95 cfs 0.070 af

**Subcatchment PDA-1D: Subcat PDA-1D** Runoff Area=10.614 ac 8.49% Impervious Runoff Depth>3.56"  
Flow Length=653' Tc=27.7 min UI Adjusted CN=78 Runoff=26.04 cfs 3.149 af

**Subcatchment PDA-2: Subcat PDA-2** Runoff Area=0.449 ac 0.00% Impervious Runoff Depth>3.38"  
Tc=6.0 min CN=76 Runoff=1.74 cfs 0.126 af

**Reach 1R: Design Point 1: Sales Creek** Inflow=34.31 cfs 4.851 af  
Outflow=34.31 cfs 4.851 af

**Reach 2R: Design Point 2: Horseshoe Pond** Inflow=1.74 cfs 0.126 af  
Outflow=1.74 cfs 0.126 af

**Pond 1P: Sediment Forebay** Peak Elev=15.09' Storage=4,718 cf Inflow=2.94 cfs 0.228 af  
Discarded=0.02 cfs 0.019 af Primary=0.77 cfs 0.171 af Outflow=0.79 cfs 0.190 af

**Total Runoff Area = 16.317 ac Runoff Volume = 5.034 af Average Runoff Depth = 3.70"**  
**85.98% Pervious = 14.029 ac 14.02% Impervious = 2.287 ac**

**Summary for Subcatchment PDA-1A: Subcat PDA-1A**

Runoff = 20.01 cfs @ 12.09 hrs, Volume= 1.461 af, Depth> 3.88"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Adj	Description
2.260	74		>75% Grass cover, Good, HSG C
0.982	87		Dirt roads, HSG C
0.377	89		Gravel roads, HSG C
0.007	98		Water Surface, HSG C
0.892	98		Unconnected pavement, HSG C
4.518	83	81	Weighted Average, UI Adjusted
3.619			80.09% Pervious Area
0.899			19.91% Impervious Area
0.892			99.19% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Subcatchment PDA-1B: Subcat PDA-1B**

Runoff = 2.94 cfs @ 12.09 hrs, Volume= 0.228 af, Depth> 5.07"

Routed to Pond 1P : Sediment Forebay

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Description
0.414	98	Unconnected pavement, HSG C
0.127	74	>75% Grass cover, Good, HSG C
0.540	92	Weighted Average
0.127		23.43% Pervious Area
0.414		76.57% Impervious Area
0.414		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>



**Summary for Subcatchment PDA-1C: Subcat PDA-1C**

Runoff = 0.95 cfs @ 12.09 hrs, Volume= 0.070 af, Depth> 4.30"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Description
0.095	74	>75% Grass cover, Good, HSG C
0.028	89	Gravel roads, HSG C
0.073	98	Unconnected pavement, HSG C
0.195	85	Weighted Average
0.122		62.65% Pervious Area
0.073		37.35% Impervious Area
0.073		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Subcatchment PDA-1D: Subcat PDA-1D**

Runoff = 26.04 cfs @ 12.38 hrs, Volume= 3.149 af, Depth> 3.56"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Adj	Description
7.425	74		>75% Grass cover, Good, HSG C
0.730	87		Dirt roads, HSG C
1.557	89		Gravel roads, HSG C
0.901	98		Unconnected pavement, HSG C
10.614	79	78	Weighted Average, UI Adjusted
9.713			91.51% Pervious Area
0.901			8.49% Impervious Area
0.901			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	50	0.0070	0.10		<b>Sheet Flow, Tc-1</b> Grass: Short n= 0.150 P2= 3.20"
9.6	312	0.0060	0.54		<b>Shallow Concentrated Flow, Tc-2</b> Short Grass Pasture Kv= 7.0 fps
9.1	241	0.0040	0.44		<b>Shallow Concentrated Flow, Tc-3</b> Short Grass Pasture Kv= 7.0 fps
0.4	50	0.0900	2.10		<b>Shallow Concentrated Flow, Tc-4</b> Short Grass Pasture Kv= 7.0 fps
27.7	653	Total			

**Summary for Subcatchment PDA-2: Subcat PDA-2**

Runoff = 1.74 cfs @ 12.09 hrs, Volume= 0.126 af, Depth> 3.38"  
Routed to Reach 2R : Design Point 2: Horseshoe Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
Type III 24-hr BWSC-010yr Rainfall=6.00"

Area (ac)	CN	Description
0.404	74	>75% Grass cover, Good, HSG C
0.045	89	Gravel roads, HSG C
0.449	76	Weighted Average
0.449		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Reach 1R: Design Point 1: Sales Creek**

Inflow Area = 15.867 ac, 14.41% Impervious, Inflow Depth > 3.67" for BWSC-010yr event  
Inflow = 34.31 cfs @ 12.35 hrs, Volume= 4.851 af  
Outflow = 34.31 cfs @ 12.35 hrs, Volume= 4.851 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Design Point 2: Horseshoe Pond**

Inflow Area = 0.449 ac, 0.00% Impervious, Inflow Depth > 3.38" for BWSC-010yr event  
Inflow = 1.74 cfs @ 12.09 hrs, Volume= 0.126 af  
Outflow = 1.74 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Pond 1P: Sediment Forebay**

Inflow Area = 0.540 ac, 76.57% Impervious, Inflow Depth > 5.07" for BWSC-010yr event  
 Inflow = 2.94 cfs @ 12.09 hrs, Volume= 0.228 af  
 Outflow = 0.79 cfs @ 12.45 hrs, Volume= 0.190 af, Atten= 73%, Lag= 21.9 min  
 Discarded = 0.02 cfs @ 12.45 hrs, Volume= 0.019 af  
 Primary = 0.77 cfs @ 12.45 hrs, Volume= 0.171 af  
 Routed to Reach 1R : Design Point 1: Sales Creek

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Peak Elev= 15.09' @ 12.45 hrs Surf.Area= 2,950 sf Storage= 4,718 cf

Plug-Flow detention time= 252.2 min calculated for 0.190 af (83% of inflow)  
 Center-of-Mass det. time= 184.3 min ( 961.0 - 776.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	7,723 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	1,622	0	0
14.00	2,207	1,915	1,915
15.00	2,882	2,545	4,459
16.00	3,645	3,264	7,723

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	<b>0.170 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 10.00'
#2	Primary	15.00'	<b>9.0' long + 3.0 ' SideZ x 11.0' breadth Riprap Spillway</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64
#3	Primary	13.00'	<b>2.0" Vert. Standpipe Outlet</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.02 cfs @ 12.45 hrs HW=15.09' (Free Discharge)

↑1=Exfiltration ( Controls 0.02 cfs)

**Primary OutFlow** Max=0.76 cfs @ 12.45 hrs HW=15.09' (Free Discharge)

↑2=Riprap Spillway (Weir Controls 0.61 cfs @ 0.75 fps)

↑3=Standpipe Outlet (Orifice Controls 0.15 cfs @ 6.82 fps)

**285418HC002A**

Type III 24-hr BWSC-100yr Rainfall=8.78"

Prepared by Beals and Thomas, Inc.

Printed 12/30/2021

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment PDA-1A: Subcat PDA-1A** Runoff Area=4.518 ac 19.91% Impervious Runoff Depth>6.48"  
 Tc=6.0 min UI Adjusted CN=81 Runoff=32.75 cfs 2.438 af

**Subcatchment PDA-1B: Subcat PDA-1B** Runoff Area=0.540 ac 76.57% Impervious Runoff Depth>7.81"  
 Tc=6.0 min CN=92 Runoff=4.42 cfs 0.352 af

**Subcatchment PDA-1C: Subcat PDA-1C** Runoff Area=0.195 ac 37.35% Impervious Runoff Depth>6.96"  
 Tc=6.0 min CN=85 Runoff=1.50 cfs 0.113 af

**Subcatchment PDA-1D: Subcat PDA-1D** Runoff Area=10.614 ac 8.49% Impervious Runoff Depth>6.09"  
 Flow Length=653' Tc=27.7 min UI Adjusted CN=78 Runoff=44.09 cfs 5.384 af

**Subcatchment PDA-2: Subcat PDA-2** Runoff Area=0.449 ac 0.00% Impervious Runoff Depth>5.87"  
 Tc=6.0 min CN=76 Runoff=3.00 cfs 0.220 af

**Reach 1R: Design Point 1: Sales Creek** Inflow=59.49 cfs 8.215 af  
 Outflow=59.49 cfs 8.215 af

**Reach 2R: Design Point 2: Horseshoe Pond** Inflow=3.00 cfs 0.220 af  
 Outflow=3.00 cfs 0.220 af

**Pond 1P: Sediment Forebay** Peak Elev=15.27' Storage=5,257 cf Inflow=4.42 cfs 0.352 af  
 Discarded=0.02 cfs 0.021 af Primary=3.55 cfs 0.279 af Outflow=3.57 cfs 0.300 af

**Total Runoff Area = 16.317 ac Runoff Volume = 8.507 af Average Runoff Depth = 6.26"**  
**85.98% Pervious = 14.029 ac 14.02% Impervious = 2.287 ac**

**Summary for Subcatchment PDA-1A: Subcat PDA-1A**

Runoff = 32.75 cfs @ 12.09 hrs, Volume= 2.438 af, Depth> 6.48"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Adj	Description
2.260	74		>75% Grass cover, Good, HSG C
0.982	87		Dirt roads, HSG C
0.377	89		Gravel roads, HSG C
0.007	98		Water Surface, HSG C
0.892	98		Unconnected pavement, HSG C
4.518	83	81	Weighted Average, UI Adjusted
3.619			80.09% Pervious Area
0.899			19.91% Impervious Area
0.892			99.19% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>



**Summary for Subcatchment PDA-1B: Subcat PDA-1B**

Runoff = 4.42 cfs @ 12.09 hrs, Volume= 0.352 af, Depth> 7.81"  
Routed to Pond 1P : Sediment Forebay

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Description
0.414	98	Unconnected pavement, HSG C
0.127	74	>75% Grass cover, Good, HSG C
0.540	92	Weighted Average
0.127		23.43% Pervious Area
0.414		76.57% Impervious Area
0.414		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Subcatchment PDA-1C: Subcat PDA-1C**

Runoff = 1.50 cfs @ 12.09 hrs, Volume= 0.113 af, Depth> 6.96"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Description
0.095	74	>75% Grass cover, Good, HSG C
0.028	89	Gravel roads, HSG C
0.073	98	Unconnected pavement, HSG C
0.195	85	Weighted Average
0.122		62.65% Pervious Area
0.073		37.35% Impervious Area
0.073		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Subcatchment PDA-1D: Subcat PDA-1D**

Runoff = 44.09 cfs @ 12.37 hrs, Volume= 5.384 af, Depth> 6.09"

Routed to Reach 1R : Design Point 1: Sales Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Adj	Description
7.425	74		>75% Grass cover, Good, HSG C
0.730	87		Dirt roads, HSG C
1.557	89		Gravel roads, HSG C
0.901	98		Unconnected pavement, HSG C
10.614	79	78	Weighted Average, UI Adjusted
9.713			91.51% Pervious Area
0.901			8.49% Impervious Area
0.901			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	50	0.0070	0.10		<b>Sheet Flow, Tc-1</b> Grass: Short n= 0.150 P2= 3.20"
9.6	312	0.0060	0.54		<b>Shallow Concentrated Flow, Tc-2</b> Short Grass Pasture Kv= 7.0 fps
9.1	241	0.0040	0.44		<b>Shallow Concentrated Flow, Tc-3</b> Short Grass Pasture Kv= 7.0 fps
0.4	50	0.0900	2.10		<b>Shallow Concentrated Flow, Tc-4</b> Short Grass Pasture Kv= 7.0 fps
27.7	653	Total			

**Summary for Subcatchment PDA-2: Subcat PDA-2**

Runoff = 3.00 cfs @ 12.09 hrs, Volume= 0.220 af, Depth> 5.87"

Routed to Reach 2R : Design Point 2: Horseshoe Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type III 24-hr BWSC-100yr Rainfall=8.78"

Area (ac)	CN	Description
0.404	74	>75% Grass cover, Good, HSG C
0.045	89	Gravel roads, HSG C
0.449	76	Weighted Average
0.449		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry, Minimum Tc</b>

**Summary for Reach 1R: Design Point 1: Sales Creek**

Inflow Area = 15.867 ac, 14.41% Impervious, Inflow Depth > 6.21" for BWSC-100yr event  
Inflow = 59.49 cfs @ 12.12 hrs, Volume= 8.215 af  
Outflow = 59.49 cfs @ 12.12 hrs, Volume= 8.215 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Design Point 2: Horseshoe Pond**

Inflow Area = 0.449 ac, 0.00% Impervious, Inflow Depth > 5.87" for BWSC-100yr event  
Inflow = 3.00 cfs @ 12.09 hrs, Volume= 0.220 af  
Outflow = 3.00 cfs @ 12.09 hrs, Volume= 0.220 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

**Summary for Pond 1P: Sediment Forebay**

Inflow Area = 0.540 ac, 76.57% Impervious, Inflow Depth > 7.81" for BWSC-100yr event  
 Inflow = 4.42 cfs @ 12.09 hrs, Volume= 0.352 af  
 Outflow = 3.57 cfs @ 12.16 hrs, Volume= 0.300 af, Atten= 19%, Lag= 4.4 min  
 Discarded = 0.02 cfs @ 12.16 hrs, Volume= 0.021 af  
 Primary = 3.55 cfs @ 12.16 hrs, Volume= 0.279 af  
 Routed to Reach 1R : Design Point 1: Sales Creek

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Peak Elev= 15.27' @ 12.16 hrs Surf.Area= 3,086 sf Storage= 5,257 cf

Plug-Flow detention time= 181.7 min calculated for 0.300 af (85% of inflow)  
 Center-of-Mass det. time= 118.8 min ( 885.0 - 766.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	7,723 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	1,622	0	0
14.00	2,207	1,915	1,915
15.00	2,882	2,545	4,459
16.00	3,645	3,264	7,723

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	<b>0.170 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 10.00'
#2	Primary	15.00'	<b>9.0' long + 3.0 ' SideZ x 11.0' breadth Riprap Spillway</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64
#3	Primary	13.00'	<b>2.0" Vert. Standpipe Outlet</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.02 cfs @ 12.16 hrs HW=15.26' (Free Discharge)

↑1=Exfiltration ( Controls 0.02 cfs)

**Primary OutFlow** Max=3.44 cfs @ 12.16 hrs HW=15.26' (Free Discharge)

↑2=Riprap Spillway (Weir Controls 3.28 cfs @ 1.28 fps)

↑3=Standpipe Outlet (Orifice Controls 0.16 cfs @ 7.11 fps)

## **Attachment 3**

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Site Owner's Manual



# Site Owner's Manual

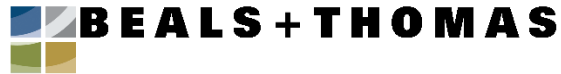
## OUTDOOR ENTERTAINMENT VENUE

**Suffolk Downs  
Boston, Massachusetts**



*Prepared for:*  
**The McClellan Highway Department Company, LLC  
c/o the HYM Investment Group, LLC  
One Congress Street  
Boston, Massachusetts, 02114**

*Prepared by:*



**January 19, 2022**

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REFER TO THE APPROVED PLANS

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APPENDIX A: OPERATION AND MAINTENANCE LOG

APPENDIX B: LIST OF EMERGENCY CONTACTS

## 1.0 INTRODUCTION

The Site Owner's Manual complies with the Long-Term Pollution Prevention Plan (Standard 4) and the Long-Term Operation and Maintenance Plan (Standard 9) requirements of the 2008 Massachusetts Department of Environmental Protection (DEP) Stormwater Handbook. The Manual outlines source control and pollution prevention measures and maintenance requirements of stormwater best management practices (BMPs) associated with the proposed development.

## 2.0 **SITE OWNER'S AGREEMENT**

### 2.1 **Operation and Maintenance Compliance Statement**

Site Owner:                   The McClellan Highway Development Company, LLC  
                                      c/o The HYM Investment Group, LLC  
                                      One Congress Street  
                                      Boston, Massachusetts, 02114

Responsible Party:       The HYM Investment Group, LLC

The McClellan Highway Development Company, LLC or their successors shall maintain ownership of the on-site stormwater management system as well as the responsibility for operation and maintenance during the post-development stages of the Project. The site has been inspected for erosion and appropriate measures have been taken to permanently stabilize any eroded areas. All aspects of stormwater best management practices (BMPs) have been inspected for damage, wear and malfunction, and appropriate steps have been taken to repair or replace the system or portions of the system so that the stormwater at the site may be managed in accordance with the Stormwater Management Standards. Future responsible parties shall be notified of their continuing legal responsibility to operate and maintain the BMPs. The operation and maintenance plan for the stormwater BMPs is being implemented.

\_\_\_\_\_  
Responsible Party Signature

\_\_\_\_\_  
Date

### 2.2 **Stormwater Maintenance Easements**

There are no off-site areas utilized for stormwater control, therefore no stormwater management easements are required. The Site Owner will have access to all stormwater practices for inspection and maintenance, including direct maintenance access by heavy equipment to structures requiring regular maintenance.

### 2.3 **Record Keeping**

The Site Owner shall maintain a rolling log in which all inspections and maintenance activities for the past three years shall be recorded. The Operation and Maintenance Log includes information pertaining to inspections, repairs, and disposal relevant to the Project's stormwater management system. The Log is located in Appendix A.

The Operation and Maintenance Log shall be made available to the Conservation Commission and the DEP upon request. The Conservation Commission and the DEP shall be allowed to enter and inspect the premises to evaluate and ensure that the responsible party complies with the maintenance requirements for each BMP.

## 2.4 Training

Employees involved in grounds maintenance and emergency response will be educated on the general concepts of stormwater management and groundwater protection. The Site Owner's Manual will be reviewed with the maintenance staff. The staff will be trained on the proper course of action for specific events expected to be incurred during routine maintenance or emergency situations.

### **3.0 LONG-TERM POLLUTION PREVENTION PLAN**

In compliance with Standard 4 of the 2008 DEP Stormwater Management Handbook, this section outlines source control and pollution prevention measures to be employed on-site after construction.

#### **3.1 Storage of Materials and Waste**

The site shall be kept clear of trash and debris at all times. Certain materials and waste products shall be stored inside or outside upon an impervious surface and covered, as required by local and state regulations.

#### **3.2 Vehicle Washing**

No commercial vehicle washing shall take place on site.

#### **3.3 Routine Inspections and Maintenance of Stormwater BMPs**

See Section 4.0 Long-Term Operation and Maintenance Plan, for routine inspection and maintenance requirements for all proposed stormwater BMPs.

#### **3.4 Spill Prevention and Response**

A contingency plan shall be implemented to address the spill or release of petroleum products and hazardous materials and will include the following measures:

1. Equipment necessary to quickly attend to inadvertent spills or leaks shall be stored on-site in a secure but accessible location. Such equipment shall include but not be limited to the following: safety goggles, chemically resistant gloves and overshoe boots, water and chemical fire extinguishers, sand and shovels, suitable absorbent materials, storage containers and first aid equipment (i.e. Indian Valley Industries, Inc. 55-gallon Spill Containment kit or approved equivalent).
2. Spills or leaks shall be treated properly according to material type, volume of spillage and location of spill. Mitigation shall include preventing further spillage, containing the spilled material in the smallest practical area, removing spilled material in a safe and environmentally-friendly manner, and remediation of any damage to the environment.
3. For large spills, Massachusetts DEP Hazardous Waste Incident Response Group shall be notified immediately at 888-304-1133 and an emergency response contractor shall be consulted.

### **3.5 Maintenance of Lawns, Gardens, and other Landscaped Areas**

Lawns, gardens, and other landscaped areas shall be maintained regularly by the site owner. Vegetated and landscaped BMPs will be maintained as outlined in Section 4.0.

### **3.6 Storage and Use of Fertilizers, Herbicides, and Pesticides**

All fertilizers, herbicides, and pesticides shall be stored in accordance with local, state, and federal regulations. The application rate and use of fertilizers, herbicides, and pesticides on the site shall at no time exceed local, state, or federal specifications.

### **3.7 Pet Waste Management**

Pet owners shall be required to pick up after their animals and dispose of waste in the trash.

### **3.8 Nutrient Management Plan**

A nutrient management plan is required if a Total Maximum Daily Load (TMDL) has been developed that indicates that use of fertilizers containing nutrients or other specific pollutants must be reduced. The proposed Project is located within the Boston Harbor watershed, which has a final TMDL issued for pathogen indicators (i.e. fecal coliform, E. coli, and enterococcus bacteria). Urban runoff, combined sewer overflows, sewer overflows and heavy industrial activity have impaired Boston Harbor. Through implementing stormwater treatment BMPs and pollution prevention measures outlined in this manual, the Project will not have any further impact on Boston Harbor.

## 4.0 LONG-TERM OPERATION AND MAINTENANCE PLAN

This section outlines the stormwater best management practices (BMPs) associated with the proposed stormwater management system and identifies the long-term inspection and maintenance requirements for each BMP.

### 4.1 Stormwater Management System Components

The following table outlines the type and quantity of the BMPs and their general location. Please reference the site plan(s) provided in the Figures section for exact location. The BMPs are all accessible for maintenance from the development driveway.

BMP Type	Quantity	Location
Sediment Forebay	1	Adjacent to the paved stage access driveway.
Sediment Forebay Standpipe Outlet	1	Within the proposed sediment forebay.
Riprap Spillway	1	At the top of the proposed sediment forebay.

## 4.2 Inspection and Maintenance Schedules

### 4.2.1 General Maintenance for Mosquito Control

If necessary to minimize mosquito breeding, a licensed pesticide applicator shall apply larvicides, such as *Bacillus sphaericus* (Bs) to the sediment forebay. Larvicides shall be applied in compliance with all pesticide label requirements, and will be applied during or immediately after wet weather, unless the product used can withstand extended dry periods. Ensure all manhole covers, and inspection ports are secure to reduce the likelihood of mosquitoes laying eggs in standing water.

### 4.2.2 Sediment Forebays

Sediment forebays shall be inspected monthly and cleaned out at least four times per year or when sediment depth is between 3-6 feet, whichever is more frequent. Other inspection and maintenance requirements include:

- Vegetation shall be maintained at a height between 3 and 6 inches.
- Any erosion observed shall be repaired as needed.
- After maintenance, the forebay floor and sidewalls shall be stabilized to prevent the discharge of sediment.
- Damaged vegetation shall be replaced by either reseeding or resodding.
  - If reseeding, hydroseeding with a tackifier or blanket (or similar practice) shall be employed to prevent scour within the forebay.



### 4.2.3 Standpipe Outlet

Standpipe outlets shall be inspected and/or cleaned at least once per year.

### 4.2.4 Stormwater Outfalls

Riprap spillways shall be inspected at least once per year and after major storm events (rainfall totals greater than 2.5 inches in 24 hours) to ensure that the stability of the outlet area is maintained. The outfall area shall be kept clear of debris such as trash, branches, and sediment. Repairs shall be made immediately if riprap displacement or downstream channel scour is observed.

## 4.3 Estimated Operation and Maintenance Budget

An operations and maintenance budget was prepared to approximate the annual cost of the inspections required in compliance with the DEP Stormwater Management Policy. The table below estimates the annual cost to inspect and maintain each proposed BMP, based on the requirements in Section 4.2.

BMP Type	# of BMPS	Annual O&M Cost (per BMP) <sup>1</sup>	Total Cost
Mosquito Control	1	\$50-\$100	\$50-\$100
Standpipe Outlet	1	\$50-\$100	\$50-\$100
Sediment Forebay	1	\$300-\$500	\$300-\$500
Riprap Spillway	1	\$50-\$100	\$50-\$100
<b>Total</b>			<b>\$450-800</b>

<sup>1</sup> Annual maintenance cost is based on estimate of the cost to complete all inspection and maintenance measures outlined in Section 4.2. For BMPs that require sediment removal at regular intervals (i.e. every 5 or 10 years), the annual cost includes the annual percentage of that cost.

## Figures

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Refer to the Approved Plans

## Appendices

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## Appendix A

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### Operation and Maintenance Log

**OPERATION AND MAINTENANCE LOG**

This template is intended to comply with the operation and maintenance log requirements of the 2008 DEP Stormwater Management Handbook. Copies of this log should be made for all inspections and kept on file for three years from the inspection date.

<b>Name/Company of Inspector:</b>
<b>Date/Time of Inspection:</b>
<b>Weather Conditions:</b> (Note current weather and any recent precipitation events)

<b>Stormwater BMP</b>	<b>Inspection Observations</b>	<b>Actions Required</b>

## Appendix B

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### List of Emergency Contacts

## **List of Emergency Contacts**

- Massachusetts DEP Hazardous Waste Incident Response Group  
1-888-304-1133
  
- The McClellan Highway Development Company, LLC  
c/o The HYM Investment Group, LLC  
One Congress Street  
Boston, Massachusetts, 02114  
(617) 248-8905
  
- City of Revere Fire Department Engine 1, Ladder 1  
360 Revere Beach Parkway  
Revere, Ma 02151  
(781) 286-0014
  
- City of Revere Police Department  
400 Revere Beach Parkway  
Revere, MA 02151  
(781) 284-1212
  
- City of Revere Water and Sewer Department  
Revere City Hall  
281 Broadway Street  
Revere, MA 02151  
(781) 286-8145

# Stormwater Pollution Prevention Plan

## OUTDOOR ENTERTAINMENT VENUE

**Suffolk Downs  
Boston, Massachusetts**

*Prepared for:*

**The McClellan Highway Development Company, LLC  
c/o The HYM Investment Group, LLC  
One Congress Street  
Boston, Massachusetts, 02114**

*Prepared by:*



**January 21, 2022**



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**1.0 CONTACT INFORMATION/RESPONSIBLE PARTIES**

**1.1 OPERATOR(S)/ SUBCONTRACTORS**

**Operator(s)**

Company:	The McClellan Highway Development Company, LLC c/o HYM Investment Group, LLC				
Name:	Thomas O’Brien				
Address:	One Congress Street				
City:	Boston	State:	MA	ZIP Code:	02114
Telephone:	(617) 248-8905	Email:	tobrien@hyminvestments.com		

Company:	Contractor TBD				
Name:	TBD				
Address:					
City:		State:		ZIP Code:	
Telephone:		Email:			

**Subcontractor(s)**

Company:	TBD				
Name:					
Address:					
City:		State:		ZIP Code:	
Telephone:		Email:			
Area of Control:	Site Work Contractor				

**24-Hour Emergency Contact**

Company:	TBD				
Name:					
Telephone:					

## 1.2 STORMWATER TEAM

### SWPPP Preparer

Company:	Beals and Thomas, Inc.				
Name:	Robert Kennedy, EIT				
Address:	144 Turnpike Road				
City:	Southborough	State:	MA	ZIP Code:	01772
Telephone:	508-366-0560	Email:	rkennedy@bealsandthomas.com		

### Personnel Responsible for Installation & Maintenance of Stormwater BMPs

Company:	TBD				
Name:					
Address:					
City:		State:		ZIP Code:	
Telephone:		Email:			

### Inspection Personnel

Company:	TBD				
Name:					
Address:					
City:		State:		ZIP Code:	
Telephone:		Email:			

**Personnel Responsible for Taking Corrective Actions**

Company:	TBD				
Name:					
Address:					
City:		State:		ZIP Code:	
Telephone:		Email:			

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**2.0 SITE EVALUATION, ASSESSMENT AND PLANNING**

**2.1 PROJECT/SITE INFORMATION**

Project/Site Name:	Outdoor Entertainment Venue				
Project Street/Location:	Suffolk Downs				
City:	Boston	State:	MA	ZIP Code:	02128
County or Similar Subdivision:	Suffolk				

Latitude:	42°23'38"N	Longitude:	71°00'13"W
Method for Determining Latitude/Longitude:			
<input type="checkbox"/> USGS Topographic Map (specify scale: _____) <input type="checkbox"/> EPA Website <input type="checkbox"/> GPS <input checked="" type="checkbox"/> Other (please specify): <u>Google Earth</u>			
Horizontal Reference Datum:			
<input type="checkbox"/> NAD 27 <input type="checkbox"/> WGS 84 <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> Unknown			

Is the project located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe?                       Yes                       No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property:

\_\_\_\_\_

Is this project considered a federal facility?                       Yes                       No

Are you applying for permit coverage as a “federal operator” as defined in Appendix A of the 2017 CGP?                       Yes                       No

NPDES project or permit tracking number: TBD

### 2.1.1 Emergency-Related Projects

Is this project in response to a public emergency?  Yes  No

If yes, document the cause of the public emergency (*e.g., natural disaster, extreme flooding conditions*), information substantiating its occurrence (*e.g., state disaster declaration*), and a description of the construction necessary to reestablish effective public services:

## 2.2 NATURE AND SEQUENCE OF CONSTRUCTION ACTIVITY

### 2.2.1 Function of the Construction Activity

The proposed project (the “Project”) entails site improvements and infrastructure to support the creation of an interim outdoor entertainment venue to be located in a portion of the existing infield area. The venue will serve as an interim site use prior to the construction of the final condition of this area proposed in the Master Plan, which is anticipated to commence no sooner than late 2025. The improvements associated with the venue are generally temporary in nature and will be removed upon commencement of future work.

Construction of the proposed venue will result in an increase of impervious area. Specifically, various surface treatments, consisting of bituminous concrete, gravel, and stone dust will be placed as indicated on the enclosed plans to accommodate various temporary structures, as well as pedestrian and vehicular access to the venue. Jersey barriers will also be placed along the southern property boundary, including in the 100-foot buffer zone to the H-series intermittent stream, as an additional security measure. These temporary barriers are not anticipated to alter flood flow paths or velocity.

Upon completion of grading, all other areas within the Project Site will be loamed and seeded with a native grass mix or sod. During the design phase of the site layout, consideration was given to conserving environmentally sensitive features and minimizing impact on the existing hydrology. To mitigate increased stormwater flow rates associated with the proposed impervious area, a sediment forebay has been proposed. The sediment forebay is intended to capture runoff from the proposed vehicular access drive adjacent to the stage area and drain into an existing trench drain, consistent with the existing hydrology of the Site.

In the future phase(s) of the development, a new stormwater management system will be constructed to provide treatment and peak runoff rate attenuation for later development phases that include the finalization of the roadways and building



construction. A subsequent Notice of Intent(s) will be filed for these phase(s) and will detail the proposed stormwater management system.

Function of the construction activity:

- |  |  |
|--|--|
| <input type="checkbox"/> Single-Family Residential | <input checked="" type="checkbox"/> Commercial         |
| <input type="checkbox"/> Multi-Family Residential  | <input type="checkbox"/> Industrial                    |
| <input type="checkbox"/> Institutional             | <input type="checkbox"/> Highway or Road Construction  |
| <input type="checkbox"/> Utility                   | <input type="checkbox"/> Other (please specify): _____ |

### 2.2.2 Building Demolition

Will there be demolition of any structure built or renovated before January 1, 1980?  Yes  No

If yes, do any of the structures being demolished have at least 10,000 square feet of floor space?  Yes  No

### 2.2.3 Agricultural Land

Was the pre-development land use used for agriculture?  Yes  No

### 2.2.4 Estimated Project Dates

Estimated Project Start Date: 04/01/2022

Estimated Project Completion Date: TBD

Estimated Timeline of Activity	Construction Activity and BMP Descriptions
4/1/2022 – TBD	<p><b><i>Before any site grading activities begin</i></b></p> <ol style="list-style-type: none"> <li>1. Stake Limit of Construction. Workers shall be informed that no construction activity is to occur beyond this limit at any time.</li> <li>2. Delineate the limit of the natural buffer to be maintained with flags, tape or other similar device.</li> <li>3. Clear vegetation as necessary within the limits of construction.</li> <li>4. Grub the areas where silt fence is required, removing stumps and roots as necessary. The existing ground surface shall be disturbed as little as possible prior to the start of construction.</li> <li>5. Install sediment control barriers as shown on the plans. An adequate stockpile of sediment control materials shall be on site at all times for emergency or routine replacement and shall include materials to repair silt fences, compost filter socks, or any other devices planned for use during construction.</li> <li>6. Construct stabilized construction exits.</li> <li>7. Construct staging and materials storage area.</li> <li>8. Install temporary sanitary facilities and dumpsters.</li> </ol>
TBD – TBD	<p><b><i>Site grading</i></b></p> <ol style="list-style-type: none"> <li>1. Begin site clearing and grubbing operations.</li> <li>2. Commence excavation of stormwater management basins to act as temporary sedimentation basins during construction.</li> <li>3. Begin overall site grading and topsoil stripping.</li> <li>4. Establish topsoil stockpile.</li> <li>5. Install silt fences around stockpile and cover stockpiles.</li> <li>6. Disturbed areas where construction will cease for more than 7 days shall be stabilized with sediment controls.</li> </ol>

TBD – TBD	<p><b>Infrastructure (utilities, surface treatments, etc.)</b></p> <ol style="list-style-type: none"> <li>1. Install water services, electrical services, and other related utilities.</li> <li>2. Prepare pavement and surface treatment subgrades.</li> </ol>
TBD – TBD	<p><b>Structure Installation</b></p> <ol style="list-style-type: none"> <li>1. Service drives paved; surface treatments installed.</li> <li>2. Begin installation of event structures, trailers, tents, and other accessories.</li> </ol>
TBD – TBD	<p><b>Final stabilization and landscaping</b></p> <ol style="list-style-type: none"> <li>1. Finalize pavement activities.</li> <li>2. Convert temporary sediment basin to a permanent sediment forebay.</li> <li>3. Remove all temporary control BMPs and stabilize any areas disturbed by their removal with erosion controls.</li> <li>4. Prepare final seeding and landscaping.</li> <li>5. Monitor stabilized areas until final stabilization is reached.</li> </ol>

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## 2.3 SOILS, SLOPES, VEGETATION, AND CURRENT DRAINAGE PATTERNS

Soil type(s): According to NRCS Web Soil Survey, the soils within the stable area are listed as Urban land with web substratum. These soils consist of developed areas with Udorthents, wet substratum. No hydrologic soil class is assigned to these soil types, but permeability is typically low.

The soils at the southern tip of the Site are listed as Ipswich mucky peat, which is a very poorly drained, frequently flooded, and nearly level soil in tidal marshes. The hydrologic soil class is listed as A/D.

Test pits performed on the overall Property in 2012 by Haley and Aldrich, Inc., indicated consistent material generally throughout the Site, consisting of fill. The top 24-inches of soil are classified as either poorly graded sand or silty sand. Below 24-inches the soil is mostly unclassified fill, poorly graded sand, silty sand, or clayey sand. Groundwater was found on average 2 to 7-feet below existing grade.

Slopes: The topography of the Site is generally flat, ranges from elevations 13 feet to 19 feet Boston City Base (BCB), and slopes gradually to the northeast, east, and southeast.

Drainage Patterns: The racetrack, infield, main building, and some parking areas drain to the portion of Sales Creek within and northwest of the racetrack. Sales Creek flows southeasterly through the Property passing through twin 96-inch culverts under the racetrack to an open channel traversing the infield where it flows under the back straight via twin 96-inch drains and discharges to an open channel between the track and Bennington Street immediately east of the Property. Sales Creek ultimately discharges to Belle Isle Inlet, which drains to the Atlantic Ocean.

The areas to the south and east of the track drain to an intermittent stream located along the eastern perimeter of the Property, which discharges into the open channel (Sales Creek) between the racetrack and Bennington Street.

Vegetation: The existing vegetation on the Site consists of grass and overgrown brush.

## 2.4 CONSTRUCTION SITE ESTIMATES

Total property area:	161.3± acres
Total construction site area to be disturbed:	16.3 acres
Maximum area to be disturbed at one time:	16.3 acres

Percentage impervious area before construction: 12 %

Runoff coefficient before construction: 78

Percentage impervious area after construction: 14 %

Runoff coefficient after construction: 81

## 2.5 DISCHARGE INFORMATION

### 2.5.1 Description of Receiving Storm Sewer Systems

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)?  Yes  No

### 2.5.2 Receiving Waters

The stormwater runoff ultimately flows to Sales Creek which ultimately discharges to Boston Harbor.

### 2.5.3 Impaired Waters/ TMDLs

Has the surface water been listed as “impaired?”  Yes  No

If yes, list the pollutant(s) causing the impairment: Pathogens, Fecal Coliform, PCBs in Fish Tissue<sup>1</sup>, Dissolved oxygen

Describe the method(s) used to determine whether or not your project site discharges to an impaired water: EPA’s Stormwater Discharge Mapping Tools, accessed on January 20, 2022

Has a TMDL been completed?  Yes  No

If yes, list the title of the TMDL document: Final Pathogen TMDL for the Boston Harbor, Weymouth-Weir, and Mystic Watershed (excluding the Neponset River sub-basin)

List the pollutant(s) for which there is a TMDL: Pathogens, Fecal Coliform, PCBs in Fish Tissue

### 2.5.4 Tier 2, 2.5, or 3 Waters

Is this surface water designated as a Tier 2, 2.5 or 3 water?  Yes  No

If yes specify which Tier the surface water is designated as:

Tier 2       Tier 2.5       Tier 3

## 2.6 UNIQUE SITE FEATURES AND SENSITIVE AREAS

Sales Creek flows southeasterly through the overall Property passing through twin 96-inch culverts under one side of the racetrack to an open channel traversing the racetrack infield where it flows under the back stretch of the racetrack via twin 96-inch drains and after passing through other stormwater infrastructure offsite it ultimately discharges to Belle Isle Inlet.

The Massachusetts Surface Water Quality Standards (314 CMR 4.00) list Sales Creek as a Class SA Outstanding Resource Water (ORW). These waters are designated as an excellent habitat for fish, other aquatic life, and wildlife and shall have an excellent aesthetic value.

Belle Isle Inlet is hydrologically connected to Belle Isle Marsh, which consists of approximately 241-acres and is part of the larger Rumney Marsh Area of Critical Environmental Concern (ACEC). Belle Isle Marsh is designated as a shellfish growing area by the Division of Marine Fisheries but is currently listed as an area where shellfish growing is prohibited.

## 2.7 POTENTIAL SOURCES OF POLLUTION

### 2.7.1 Potential Sources of Sediment

- Clearing and grubbing operations
- Grading and site excavation operations
- Vehicle tracking
- Topsoil stripping and stockpiling
- Landscaping operations

### 2.7.2 Potential Sources of Non-Sediment Pollutants

- Combined Staging Area — small fueling activities, minor equipment maintenance, sanitary facilities, and hazardous waste storage.
- Materials Storage Area — general building materials, solvents, adhesives, paving materials, paints, aggregates, trash, and so on.
- Construction Activity — paving, curb/gutter installation, concrete pouring/mortar/stucco, and building construction

▪ Concrete Washout Area

<b>Material/ Chemical</b>	<b>Physical Description</b>	<b>Stormwater Pollutants</b>	<b>Location<sup>[1]</sup></b>
Pesticides/ Herbicides	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic	Pesticides used in outdoor locations to control insects. Herbicides used for noxious weed control
<sup>[2]</sup> Fertilizer	Liquid or solid grains	Nitrogen, phosphorous	Newly seeded areas
Cleaning solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	No equipment cleaning allowed in project limits
Asphalt	Black solid	Oil, petroleum distillates	Streets, parking areas, and roofing
Glue/ adhesives	White or yellow liquid	Polymers, epoxies	Building construction
Paints	Various colored liquids	Metal oxides, stoddard solvent, talc, calcium carbonate, arsenic	Building construction
Curing compounds	Creamy white liquid	Naphtha	Curb and gutter, walkways
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium	Timber pads and building construction
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil	Leaks or broken hoses from equipment
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	Secondary containment/staging area
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes	Secondary containment/staging area
Kerosene	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates	Secondary containment/staging area
Antifreeze/ coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment

Sanitary toilets	Various colored liquid	Bacteria, parasites, and viruses	Staging area
---------------------	------------------------	-------------------------------------	--------------

- [1] Area where material/chemical is used on-site.  
 [2] Use of fertilizers containing nitrogen and/ or phosphorus in ratios greater than recommended by the manufacture must be documented.

## 2.8 SITE PLANS

The Topographic Plan shows the undeveloped site and its current features. The Site Plans show the developed site, or the major phases of development.

These Site Plans include:

- Delineation of construction phasing, if applicable
- Areas of soil disturbance and areas that will not be disturbed
- Direction(s) of stormwater flow and approximate slopes before and after major grading activities
- Natural features to be preserved
- Locations of major structural and non-structural BMPs identified in the SWPPP
- Location(s) of sediment, soil or other construction materials will be stockpiled
- Locations **[and timing]** of stabilization measures
- Locations of off-site material, waste, borrow, or equipment storage areas
- Location of all waters of the U.S., including wetlands on or near the site. Indicate if water bodies are listed as impaired, or are identified as Tier 2, 2.5 or 3 waters.
- Boundary lines of any natural buffers,
- Locations of stormwater discharges and/ or authorized non-stormwater will be discharged to surface water(s)
- Locations of storm drain inlets and stormwater control measures on the site and in the immediate vicinity of the site
- Locations of all pollutant-generating activities
- Locations where polymers, flocculants, or other treatment chemicals will be used and stored
- Areas of federally listed critical habitat for endangered or threatened species

See Appendix B: Site Plans



### 3.0 COMPLIANCE WITH APPLICABLE FEDERAL & STATE REQUIREMENTS

#### 3.1 ENDANGERED SPECIES CERTIFICATION

Are endangered or threatened species and critical habitats on or near the project area?

Yes       No

Describe how this determination was made:

According to the Information for Planning and Conservation tool published by the U.S. Fish & Wildlife Service (USFWS), there are no federally-jurisdictional endangered species expected to occur on the Subject Property.

According to Massachusetts Bureau of Geographic Information (MassGIS) information accessed on October 31, 2017, the Site is not located within Natural Heritage and Endangered Species Program (NHESP)-designated Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife. There are no mapped potential or certified vernal pools on the Site.

The USFWS listed the Northern Long-eared Bat (*Myotis septentrionalis*) as a Threatened species under the Endangered Species Act (ESA, 50 CFR 17.11) on April 2, 2015 and mapped the full state of Massachusetts as habitat. The Northern Long-Eared Bat is also listed as Endangered under the Massachusetts Endangered Species Act (MESA, M.G.L. c. 131 A).

The NHESP Northern Long-eared Bat Locations in Massachusetts map, last updated June 4, 2019 was reviewed. It was determined that the Project does not occur within 0.25 miles of a known winter hibernacula or within a 150-foot radius of a known maternity roost tree. Therefore, no further review of potential impacts to Northern Long-eared Bat is required pursuant to the MESA.

If yes, describe the species and/or critical habitat:

See above.

If yes, describe or refer to documentation that determines the likelihood of an impact on the identified species and/or habitat and the steps taken to address that impact.

### 3.2 HISTORIC PRESERVATION

#### Step 1

Will stormwater controls that require subsurface earth disturbance be installed on the site?

Yes  No

#### Step 2

If you answered yes in Step 1, have prior surveys or evaluations conducted on the site already determined that historic properties do not exist, or that prior disturbances at the site have precluded the existence of historic properties?

Yes, See Appendix M  No

#### Step 3

If you answered no in Step 2, has it been determined that the installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties?

Yes  No

Historic site are/ are not present. See Appendix M: Historic Preservation Documentation

#### Step 4

If you answered no in Step 3, did the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Office (THPO), or other tribal representative (whichever applies) respond within 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties?

Yes  No

If no, no further documentation is required. If yes, describe the nature of their response and include documentation in the Appendix:

Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.

No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.

Other:

### 3.3 SAFE DRINKING WATER ACT UNDERGROUND INJECTION CONTROL REQUIREMENTS

Do you plan to install any of the following controls?

- Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
- Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow
- Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

If yes, attach documentation of contact between you and the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144-147.

### 3.4 APPLICABLE STATE OR LOCAL PROGRAMS

This SWPPP complies with the requirements of Standard 8 of the Massachusetts Department of Environmental Protection Stormwater Handbook, which states:

*A plan to control construction-related impacts, including erosion, sedimentation, and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plans) shall be developed and implemented.*

#### 4.0 EROSION AND SEDIMENT CONTROL BMPS

This SWPPP contains a listing of the erosion and sediment control best management practices (BMPs) that will be implemented to control pollutants in stormwater discharges. The BMPs are categorized under one of the areas of BMP activity as described below:

- Natural Buffers or Equivalent Sediment Controls
- Minimize disturbed area and protect natural features and soil
- Phased construction activity
- Control stormwater flowing onto and through the project
- Stabilize soils
- Protect slopes
- Protect storm drain inlets
- Establish perimeter controls and sediment barriers
- Retain sediment on-site and control dewatering practices
- Establish stabilized construction exits

#### 4.1 NATURAL BUFFERS OR EQUIVALENT SEDIMENT CONTROLS

Are there any surface waters located within 50 feet of your construction disturbances that receive stormwater discharges from the site?  Yes  No

If yes, check the compliance alternative that applies:

- A 50-foot undisturbed natural buffer will be maintained. The 50-foot buffer is shown on the attached site plans and will be clearly marked off with flags, tape, or a similar marking device prior to the commencement of earth disturbing activities.
- An undisturbed natural buffer of xx-feet will be provided along with supplemental erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. The estimated sediment removal calculations are included in the appendixes of this report and have been calculated using the applicable tables included in Appendix G of the 2017 Construction General Permit or site-specific calculations were performed to estimate the sediment removal of a 50-buffer zone and the efficiency of the reduced buffer zone and supplemental erosion control measures.

Description of Controls:

- It is infeasible to provide and maintain an undisturbed natural buffer of any size, therefore erosion and sediment controls will be implemented that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. The estimated sediment removal calculations are included in the appendixes of this report and have been calculated using the applicable tables included in Appendix G of the 2012 Construction General Permit or site-specific calculations were performed to estimate the sediment removal of a 50-buffer zone and the efficiency of the reduced buffer zone and supplemental erosion control measures.

Description:

- The project qualifies for one of the exceptions in Part G.2.2 of Appendix G of the 2017 Construction General Permit. Specifically:
- There is no discharge of stormwater to surface waters through the area between the disturbed portions of the site and any surface waters located within 50 feet of the site. This includes situations where control measures have been implemented such as a berm or other barrier that will prevent such discharges.
  - No natural buffer exists due to preexisting development disturbances, such as impervious surfaces or structures that were constructed prior to the initiation of planning for this project.
  - The project qualifies as “small residential lot” construction, and complies with:
    - Alternative 1: A [select one: 50-foot buffer, a buffer <50 feet and > 30 has been provided with double perimeter controls buffer less than 30-feet has been provided with double perimeter controls with 7-day site stabilization requirements has been provided.] Provide a description on how the controls will comply with the CGP requirements.
    - Alternative 2: A sediment discharge risk evaluation has been prepared and is included in the appendixes of this report.
    - Buffer disturbances are authorized under a CWA Section 404 permit.
    - Buffer disturbances will occur for the construction of a water-dependent structure or water access area (e.g., pier, boat ramp, and trail).

## 4.2 MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL

### 4.2.1 Preserve Existing Vegetation

Description:	The preserved area of existing vegetation shall be as identified on the Site Plans and Sitework Specifications.
Installation Schedule:	The preserved area of existing vegetation shall be surrounded with the orange-colored plastic mesh fence, and trees shall be marked before construction begins at the site.
Maintenance and Inspection:	The area shall be inspected weekly to ensure the temporary fence is intact and the trees are clearly marked. During construction, preserved areas of existing vegetation shall be surrounded by the orange-colored mesh fence and clearly marked at all times.

### 4.2.2 Stockpiling Topsoil

Description:	Topsoil stripped from the immediate construction area shall be stockpiled as identified on the Site Plans and Sitework Specifications or as approved by the SWPPP preparer. Stockpiles shall be located outside of any natural buffers and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated.
Installation Schedule:	Topsoil stockpiles shall be established during grading activities. The silt fence and temporary erosion controls shall be installed immediately after the stockpile has been established. For piles that will be unused for 14 or more days provide cover over the stockpile or temporary stabilization to avoid direct contact with precipitation and wind. Install a sediment barrier along all downgradient perimeter areas of stockpiles.
Maintenance and Inspection:	The area shall be inspected weekly for erosion and immediately after storm events. Areas on or around the stockpile that have eroded shall be stabilized immediately with erosion controls. See following Silt Fence section for Maintenance and inspection procedures.

## 4.3 STABILIZE SOIL

### 4.3.1 Temporary Stabilization

Description:	Initiation of temporary vegetative cover shall occur immediately where construction will cease for more than 7 days. It shall be established using hydroseeding for areas of exposed soil (including stockpiles).
Installation Schedule:	Temporary stabilization measures shall be initiated immediately where construction activities will temporarily cease for more than 14 days. Stabilization will be completed as soon as practicable, but no later than 7 calendar days after stabilization has been initiated.
Maintenance and Inspection:	Stabilized areas shall be inspected weekly and after storm events until a dense cover of vegetation has become established. If failure is noticed at the seeded area, the area shall be reseeded, fertilized, and mulched immediately.

### 4.3.2 Mulching

Description:	Hydromulching shall provide immediate protection to exposed soils during short periods of disturbance. Hydromulch shall also be applied in areas that have been seeded for temporary or permanent stabilization.
Installation Schedule:	Hydromulch shall be applied to soil exposed temporarily for >14 days during construction.
Maintenance and Inspection:	Mulched areas shall be inspected weekly and after storm events to check for movement of mulch or erosion. If washout, breakage, or erosion occurs, the surface shall be repaired, and new mulch shall be applied to the damaged area.

### 4.3.3 Permanent Stabilization

Description:	Initiation of permanent stabilization measures shall occur immediately after the final design grades are achieved and earth moving activities cease. Vegetative cover shall be used to stabilize exposed soils. Permanent stabilization shall be completed in accordance with the procedures outlined in the Final Stabilization section of this report.
Installation Schedule:	Portions of the site where construction activities have permanently ceased shall be stabilized as soon as possible, but no later than 7 calendar days after stabilization has been initiated.
Maintenance and Inspection:	All seeded areas shall be inspected weekly during construction activities and after storm events until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area shall be reseeded, fertilized, and mulched immediately. Care shall be taken to avoid compacting newly placed topsoil. After construction is completed at the site, permanently stabilized areas shall be monitored until final stabilization is reached.

### 4.3.4 Dust Control

Description:	Dust from the site shall be controlled by using a mobile pressure-type distributor truck to apply water to disturbed areas. The mobile unit shall apply water at a rate of 300 gallons per acre and minimized as necessary to prevent runoff and ponding.
Installation Schedule:	Dust control shall be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of water shall be performed no more than three times a day during the months of May–September and once per day during the months of October–April or whenever the dryness of the soil warrants it.
Maintenance and Inspection:	At least one mobile unit shall be available at all times to distribute water to control dust on the project area. Each mobile unit shall be equipped with a positive shutoff valve to prevent over watering of the disturbed area.



#### 4.4 ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS

##### 4.4.1 Sediment Control Barrier

Permanent                       Temporary

Description:	A Sediment Control Barrier, consisting of entrenched straw bales, straw wattles, compost socks and siltation fencing, shall be installed along the downgradient side of the proposed project to decrease the velocity of sheet flows and intercept and detain small amounts of sediment from disturbed areas.
Installation Schedule:	Sediment Control Barrier shall be installed prior to clearing and grubbing.
Maintenance and Inspection:	Sediment Control Barrier shall be inspected weekly, following storms, and daily during rainy periods. Damaged fencing shall be replaced. Concentrated flows shall be intercepted and rerouted. Sediment accumulations shall be removed when reaching a depth of 6-inches, or one-half of the above ground height of the barrier, whichever is less. Deteriorated fencing material shall be replaced. Used fencing shall be properly disposed of.

##### 4.4.2 Silt Fence

Permanent                       Temporary

Description:	Entrenched silt fence shall be installed to decrease the velocity of sheet flows and intercept and detain small amounts of sediment from disturbed areas.
Installation Schedule:	Silt fence shall be installed prior to clearing and grubbing.
Maintenance and Inspection:	Silt fence shall be inspected weekly, following storms, and daily during rainy periods. Damaged fencing shall be replaced. Concentrated flows shall be intercepted and rerouted. Sediment accumulations shall be removed when reaching a depth of 6-inches. Deteriorated fencing material shall be replaced. Used fencing shall be properly disposed of.

## 4.5 RETAIN SEDIMENT ON-SITE

### 4.5.1 Temporary Sediment Basins

Permanent

Temporary

Description:	Temporary sediment basins are located throughout the site between construction and wetland resource areas. These basins provide 3,600 cubic feet of storage per acre drained, as required by the EPA. Refer to the Temporary Sediment Basin Sizing Calculation located in Appendix K. Several temporary sediment basins will be utilized as sediment forebays following construction.
Installation Schedule:	Temporary Sediment Basins shall be installed during grading activities.
Maintenance and Inspection:	Temporary Sediment Basins shall be inspected weekly and following storms. Sediment shall be removed when it reaches a depth of one foot, or half the design capacity whichever is less. Damage to basin embankments and slopes shall be repaired.

#### 4.6 ESTABLISH STABILIZED CONSTRUCTION ENTRANCE/EXIT

<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary
Description:	Temporary gravel or crushed stone construction entrances/exits or other means shall be used to minimize off-site movement of soil with vehicles. Construction access points shall be maintained to minimize tracking of soil onto public roads and existing parking lots to remain. If the rock entrance is not working to keep streets clean, then install wheel wash, sweep streets, or wash streets if wash water can be collected.
Installation Schedule:	Stabilized construction entrance shall be installed prior to clearing and grubbing.
Maintenance and Inspection:	Stabilized construction entrances shall be inspected daily. Gravel or crushed stone shall be added if the pad is no longer in accordance with the specifications. If the construction entrance/ exit is not working to keep streets clean, then install wheel wash, sweep streets, or wash streets if wash water can be collected. When sediment has been tracked off of the site, it shall be removed by the end of the same working day, or by the end of the next working day if track-out occurs on a non-work day. Remove sediment by sweeping, shoveling or vacuuming roadways were sediment has been tracked-out.

#### 5.0 GOOD HOUSEKEEPING BMPS

This SWPPP contains a listing of the good housekeeping best management practices (BMPs) that shall be implemented to control pollutants in stormwater discharges during construction-related work. The BMPs are categorized below:

- Material Handling and Waste Management
- Establish Proper Building Material Staging Areas
- Designate Washout Areas
- Establish Proper Equipment/Vehicle Fueling and Maintenance Practices
- Allowable Non-Stormwater Discharges and Control Equipment/Vehicle Washing
- Spill Prevention and Control Plan

## 5.1 MATERIAL HANDLING AND WASTE MANAGEMENT

Several management procedures and practices are proposed to prevent and/or reduce the discharge of pollutants to stormwater from solid or liquid wastes that will be generated at the site. These measures are grouped into the following categories: (1) solid or construction waste disposal, (2) recycling, (3) sanitary and septic waste, and (4) hazardous materials.

### 5.1.1 Solid or Construction Waste Disposal

Description:	All waste materials shall be collected and disposed of into metal trash dumpsters or enclosed trash containers in the materials storage area. Dumpsters shall have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site shall be deposited in the dumpster. No construction materials shall be buried on-site unless authorized by a program for recycling/beneficial use. All personnel shall be instructed regarding the correct disposal of trash and construction debris. Notices that state these practices shall be posted in the office trailer and the individual who manages day-to-day site operations shall be responsible for seeing that these practices are followed.
Installation Schedule:	Trash dumpsters shall be installed once the materials storage area has been established.
Maintenance and Inspection:	The dumpsters shall be inspected weekly and immediately after storm events. The dumpsters shall be emptied weekly and taken to an approved landfill or recycling facility. If trash and construction debris are exceeding the dumpsters' capacity, the dumpsters shall be emptied more frequently. Waste container lids shall be closed when not in use and at the end of the business day. For waste containers that do not have lids, provide cover or a similarly effective means to minimize the discharge of pollutants.

### 5.1.2 Recycling

Description:	Wood pallets, cardboard boxes, and other recyclable construction scraps shall be disposed of in a designated dumpster for recycling. The dumpster shall have a secure watertight lid, be placed away from stormwater conveyances and
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	drains and meet all local and state solid-waste management regulations. Only solid recyclable construction scraps from the site shall be deposited in the dumpster. All personnel shall be instructed regarding the correct procedure for disposal of recyclable construction scraps. Notices that state these procedures shall be posted in the office trailer, and the individual who manages day-to-day site operations shall be responsible for seeing that these procedures are followed.
Installation Schedule:	Designated recycling dumpsters shall be installed once the area has been established.
Maintenance and Inspection:	The recycling dumpster shall be inspected weekly and immediately after storm events. The recycling dumpster shall be emptied weekly and taken to an approved recycling center. If recyclable construction wastes are exceeding the dumpsters' capacity, the dumpsters shall be emptied more frequently.

### 5.1.3 Sanitary and Septic Waste

Description:	Temporary sanitary facilities (portable toilets) shall be provided at the site throughout the construction phase. The portable toilets shall be located in the staging area, away from concentrated flow paths and traffic flow.
Installation Schedule:	The portable toilets shall be brought to the site once the staging area has been established.
Maintenance and Inspection:	All sanitary waste shall be collected from the portable facilities on a regular basis. The portable toilets shall be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks shall be removed from the site and replaced with new portable toilets.

### 5.1.4 Hazardous Materials and Waste

Description:	All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids shall be stored in structurally sound and sealed shipping containers, within the hazardous materials storage area. Hazardous waste materials shall be stored in appropriate and clearly marked containers and segregated from other non-waste materials. Secondary containment shall be provided for all waste materials in the hazardous materials storage area and shall consist of commercially available spill pallets. Additionally, all hazardous waste materials shall be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials shall not be disposed of into the on-site dumpsters. All personnel shall be instructed regarding proper procedures for hazardous waste disposal. Notices that state these procedures shall be posted in the office trailer and the individual who manages day-to-day site operations shall be responsible for seeing that these procedures are followed.
Installation Schedule:	Shipping containers used to store hazardous waste materials shall be installed once the site materials storage area has been installed.
Maintenance and Inspection:	The hazardous waste material storage areas shall be inspected weekly and after storm events. The storage areas shall be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers shall be maintained in the office trailer.

## 5.2 ESTABLISH PROPER BUILDING MATERIAL STAGING AREAS

Description:	<p>Construction equipment and maintenance materials shall be stored at the combined staging area and materials storage areas. A watertight shipping container shall be used to store hand tools, small parts, and other construction materials. Nonhazardous building materials such as packaging material (wood, plastic, and glass), and construction scrap material (brick, wood, steel, metal scraps, and pipe cuttings) shall be stored in a separate covered storage facility adjacent to the shipping container.</p> <p>All hazardous-waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids shall be stored in structurally sound and sealed containers under cover within the storage area.</p>
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	<p>All fertilizers, herbicides, insecticides and pesticides shall be stored in accordance with local, state, and federal regulations. At a minimum these materials shall be covered with plastic sheeting or a temporary roof to prevent contact with rainwater.</p> <p>Very large items, such as framing materials and stockpiled lumber, shall be stored in the open in the materials storage area. Such materials shall be elevated on wood blocks to minimize contact with runoff.</p>
Installation Schedule:	The materials storage area shall be installed after grading and before any infrastructure is constructed at the site.
Maintenance and Inspection:	The storage area shall be inspected weekly and after storm events. The storage area shall be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function.

### 5.3 DESIGNATE WASHOUT AREAS

#### 5.3.1 Concrete Washout

Description:	<p>A designated temporary, above-grade concrete washout area shall be constructed. The temporary concrete washout area shall be constructed with a recommended minimum length and minimum width of 10 feet, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The washout area shall be lined with plastic sheeting at least 10 mils thick and free of any holes or tears. Signs shall be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility.</p> <p>Concrete pours shall not be conducted during or before an anticipated storm event. Concrete mixer trucks and chutes shall be washed in the designated area or concrete wastes shall be properly disposed of off-site. When the temporary washout area is no longer needed for the construction project, the hardened concrete and materials used to construct the area shall be removed and disposed of according to the maintenance section below, and the area shall be stabilized.</p>
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Installation Schedule:	The washout area shall be constructed before concrete pours occur at the site.
Maintenance and Inspection:	The washout areas shall be inspected daily to ensure that all concrete washing is being discharged into the washout area, no leaks or tears are present, and to identify when concrete wastes need to be removed. The washout areas shall be cleaned out once the area is filled to 75 percent of the holding capacity. Once the area’s holding capacity has been reached, the concrete wastes shall be allowed to harden; the concrete shall be broken up, removed, and taken to an approved landfill for disposal or recycled on-site or off-site in accordance with applicable laws. The plastic sheeting shall be replaced if tears occur during removal of concrete wastes from the washout area.

**Design Specifications:**

1. Temporary concrete washout type Above Grade shall be constructed as shown above, with a recommended minimum length and minimum width of 10 feet.
2. The washout shall be a minimum of 50 feet from storm drain inlets.
3. Plastic lining shall be free of holes, tears, or other defects that compromise the impermeability of the material.

**5.3.2 Applicators, Containers and Paint Washout**

Description:	A designated temporary, above-grade washout area shall be constructed as needed for the washout and cleanout of stucco, paint, or other non-hazardous construction materials. The temporary washout area shall be a leak-proof container with sufficient volume to contain all liquid and waste generated by washout operations. The temporary washout shall be sited outside of all buffer zones.
Installation Schedule:	The washout area shall be constructed as needed.
Maintenance and Inspection:	The washout areas shall be inspected daily to ensure that all washing is being discharged into the washout area, no leaks or tears are present, and to identify when wastes need to be removed. The washout areas shall be cleaned out once the area is filled to 75 percent of the holding capacity. Liquid wastes shall be disposed of in accordance with applicable Federal and State requirements and shall not be discharged into drainage systems.



#### 5.4 ESTABLISH PROPER EQUIPMENT/VEHICLE FUELING AND MAINTENANCE PRACTICES

Description:	Several types of vehicles and equipment will likely be used on-site throughout the project, including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes, and forklifts. All major equipment/vehicle fueling and maintenance shall be performed outside of wetland buffer zones. When vehicle fueling must occur on-site, the fueling activity shall occur in the staging area. Only minor equipment maintenance shall occur on-site. All equipment fluids generated from maintenance activities shall be disposed of into designated drums stored on spill pallets in accordance with the Material Handling and Waste Management Section. Absorbent, spill-cleanup materials and spill kits shall be available at the combined staging and materials storage area. Drip pans shall be placed under all equipment receiving maintenance and vehicles and equipment parked overnight.
Installation Schedule:	BMPs implemented for equipment and vehicle maintenance and fueling activities shall begin at the start of the project.
Maintenance and Inspection:	Inspect equipment/vehicle storage areas weekly and after storm events. Vehicles and equipment shall be inspected on each day of use. Leaks shall be repaired immediately, using dry cleanup measures where possible and eliminating the source of the discharge. Problem vehicle(s) or equipment shall be removed from the project site. Keep ample supply of spill-cleanup materials on-site and immediately clean up spills and dispose of materials properly. Do not clean surfaces by hosing-down the area

#### 5.5 ALLOWABLE NON-STORMWATER DISCHARGES AND CONTROL EQUIPMENT / VEHICLE WASHING

Description:	All equipment and vehicle washing shall be performed off-site, except as required for wheel washes and concrete washout areas.
Installation Schedule:	N/A
Maintenance and Inspection:	N/A

#### 5.6 SPILL PREVENTION AND CONTROL PROCEDURES

Description:	<ul style="list-style-type: none"> <li>i. Employee Training: All employees shall be trained as detailed in the Inspection and Maintenance section of this report.</li> <li>ii. Vehicle Maintenance: Vehicles and equipment shall be maintained off-site. All vehicles and equipment including subcontractor vehicles shall be checked for leaking oil and fluids. Vehicles leaking fluids shall not be allowed on-site.</li> <li>iii. Hazardous Material Storage: Hazardous materials shall be stored in accordance with this report and federal and municipal regulations.</li> <li>iv. Spill Kits: Spill kits shall be kept within the materials storage area. Spills: All spills shall be cleaned up immediately upon discovery. Spent absorbent materials and rags shall be hauled off-site immediately after the spill is cleaned up for disposal at an approved landfill. Spills large enough to discharge to surface water shall be reported to the National Response Center at 1-800-424-8802 and MA DEP at 888-304-1133.</li> <li>v. Material safety data sheets: A material inventory and emergency contact information shall be maintained at the on-site project trailer.</li> </ul>
Installation Schedule:	The spill prevention and control procedures shall be implemented once construction begins on-site.
Maintenance and Inspection:	All personnel shall be instructed on the correct procedures for spill prevention and control. Notices that state these practices shall be posted in the office trailer, and the individual who manages day-to-day site operations shall be responsible for seeing that these procedures are followed.

## 5.7 FERTILIZER DISCHARGE RESTRICTIONS

Description:	Discharges from fertilizers containing nitrogen and phosphorus shall be minimized. Fertilizers shall be applied at rates and amounts consistent with the manufacture’s specification, and shall at no time exceed local, state, or federal specifications. See project landscape specifications for acceptable fertilizers that can be used for the project.
Installation Schedule:	Fertilizers shall be applied at an appropriate time of year, timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Avoid applying fertilizers before heavy rains. Do not apply fertilizers to frozen ground or stormwater conveyance channels flowing with water.

Maintenance N/A and Inspection:
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## 5.8 ALLOWABLE NON-STORMWATER DISCHARGE MANAGEMENT

Any changes in construction activities that produce other allowable non-stormwater discharges shall be identified, and the SWPPP shall be amended and the appropriate erosion and sediment control shall be implemented.

The following is a list of allowable non-stormwater discharges:

- Water Used to Control Dust
- Uncontaminated Excavation Dewatering
- Landscape Irrigation
- Fire Hydrant Flushing
- Firefighting
- Potable Water including uncontaminated waterline flushing
- Building Wash-Down provided soaps, solvents and detergents are not used and the external surface does not contain hazardous substances (i.e. paint or caulk containing PCBs)
- Pavement Wash-Down provided spills or leaks of toxic substances have not occurred and where soaps, solvents and detergents are not used.
- Non-Detergent Laden Vehicle Wash Water
- Foundation or Footing Drains
- Uncontaminated air conditioning or compressor condensate

Except for water used to control dust and irrigation water, the above discharges shall not be routed to areas of exposed soil.

## 6.0 POST-CONSTRUCTION BMPS

### 6.1 **SEDIMENT FOREBAYS**

Description:	During the final stabilization phase of construction, temporary sediment basins shall be converted to permanent sediment forebays. Riprap spillways and outlet structures shall be constructed as detailed on the site plans.
Design Specifications:	Install according to sitework specifications and details.
Installation Schedule:	Temporary sediment basins shall be converted to permanent sediment forebays during the final stabilization phase of construction.
Maintenance and Inspection:	The forebays shall be inspected weekly and after storm events greater than 0.5 inches during construction. The area shall be checked for signs of erosion, seepage, and structural damage. Erosion, seepage, and structural damage shall be repaired immediately. The temporary sediment riser shall be checked for any damage or obstructions and any damage found shall be repaired and obstructions removed. Immediately after the completion of construction, the plant material shall be watered for 14 consecutive days unless there is sufficient natural rainfall. The area shall be monitored until final stabilization is reached. Following completion of site construction and final stabilization, maintenance and inspection responsibilities shall be taken over by the Owner in accordance with the Long-Term Pollution Prevention Plan and Long-Term Operation & Maintenance Plan.

## 7.0 FINAL STABILIZATION

In compliance with the Construction General Permit, soil stabilization measures must be implemented immediately whenever earth-disturbing activities are temporarily or permanently ceased on any portion of the site. Earth-disturbing activities are temporarily ceased when clearing, grading, and excavation within any area of a site that will not include a permanent structure will not resume for a period of 7 or more calendar days, but such activities will resume in the future.

In the context of this provision, “immediately” means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. The following activities constitute the initiation of stabilization:

- Preparing the soil for vegetative or non-vegetative stabilization;
- applying mulch or other non-vegetative product to the exposed area;
- seeding or planting the exposed area;
- starting any of the activities in listed above on a portion of the area to be stabilized, but not on the entire area; and
- finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

As soon as practicable, but no later than 7 calendar days after the initiation of soil stabilization measures the following activities are required to be completed:

- For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
- For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

The following sections detail the management practices proposed to achieve final stabilization of the site.

## 7.1 PERMANENT SEEDING

Description:	Permanent seeding shall be applied immediately after the final design grades are achieved on portions of the site but no later than 7 days after construction activities have permanently ceased. After the entire site is stabilized, any sediment that has accumulated shall be removed and hauled off-site for disposal at an approved landfill. Construction debris, trash and temporary BMPs (including silt fences, material
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	storage areas, sanitary toilets, and inlet protection) shall also be removed and any areas disturbed during removal shall be seeded immediately. Seeding shall be performed in accordance to the Site Plans and Landscape Specifications for the project.
Installation Schedule:	Seeding shall occur at portions of the site where construction activities have permanently ceased shall be stabilized, as soon as possible but no later than 7 days after construction ceases.
Maintenance and Inspection:	All seeded areas shall be inspected weekly during construction activities for failure and after storm events until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area shall be reseeded, fertilized, and mulched immediately. After construction is completed at the site, permanently stabilized areas shall be monitored until final stabilization is reached.

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## 8.0 INSPECTIONS AND MAINTENANCE

### 8.1 INSPECTIONS

#### 8.1.1 Inspection Schedule and Procedures

Inspections of the site will be performed once every 7 days and within 24 hours of the end of a storm event of 0.25-inch or greater unless otherwise specified. The inspections will verify that all BMPs required are implemented, maintained, and effectively minimizing erosion and preventing stormwater contamination from construction materials.

To determine if a storm event of 0.25 inches or greater has occurred on the site, either a properly maintained rain gauge will be kept on the site or the storm event information will be obtained from a weather station that is representative of the location. If an inspection is conducted because of rainfall measuring 0.25 inches or greater, the applicable rain gauge or weather station readings that triggered the inspection will be noted in the inspection report.

Inspections shall include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors shall look for evidence of, or the potential for, pollutants entering the storm water conveyance system. Sedimentation and erosion control measures identified in the SWPPP shall be observed to ensure proper operation. Discharge locations shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream location shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

For detailed inspection procedures, see Sections 4 and 5.

All inspections shall be coordinated with a representative from Owner. An Owner representative shall accompany the inspector, when possible, during inspections.

Inspection reports are required to be completed within 24-hours of an inspection. If corrective actions are identified by the Inspector during the inspection, he/she shall notify and submit a copy of the inspection report to the Operator(s). For corrective actions identified, the project managers shall be

responsible for initiating the corrective action within 24 hours of the report and completing maintenance as soon as possible or before the next storm event. For any corrective actions requiring a SWPPP amendment or change to a stormwater conveyance or control design, the project manager shall notify Owner, as soon as possible, before initiating the corrective action.

The business days for the project are **9:00 am to 5:00 pm, Monday through Friday.**

For a copy of the inspection report template, see Appendix E.

## 8.2 REDUCTIONS IN INSPECTION FREQUENCY

Once an area is stabilized, inspections may be reduced to twice per month for the first month, no more than 14 calendar days apart, then once per month. If construction resumes at the stabilized area the inspection frequency shall increase as outlined in section 8.1.

If earth-disturbing activities are suspended due to frozen conditions inspections can be temporarily suspended until a thaw occurs.

## 8.3 CORRECTIVE ACTION LOG

The corrective action log describes repairs, replacements, and maintenance of BMPs undertaken as a result of the inspections and maintenance procedures. Additionally, remedies of permit violations and clean and proper disposal of spills, releases other deposits should be recorded.

If it is determined the stormwater controls have not been installed as required, or that they are not functioning adequately corrective action is required within 7 calendar days.

The operator will document the completion of the corrective action within 24 hours.

See Appendix F – Corrective Action Log.



## 9.0 **RECORDKEEPING AND TRAINING**

### 9.1 **RECORDKEEPING**

A copy of the SWPPP, along with all inspection reports and corrective action logs are required to be stored at an accessible location at the site, and shall be made available upon request of the EPA, or state or local agency approving stormwater management plans. If an on-site location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of your construction site.

The following records shall be kept at the project site (or posted location) and shall be available for inspectors to review. These records shall be retained for a minimum period of at least 3 years after the permit is terminated.

**Date(s) when major grading activities occur:**

See Appendix I – Grading and Stabilization Activities Log

**Date(s) when construction activities temporarily or permanently cease on a portion of the site:**

See Appendix I – Grading and Stabilization Activities Log

**Date(s) when an area is either temporarily or permanently stabilized:**

See Appendix I – Grading and Stabilization Activities Log

### 9.2 **LOG OF CHANGES TO THE SWPPP**

The log of changes to the SWPPP is maintained in Appendix G and includes additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures and update to site plans.

### 9.3 **TRAINING**

Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, training on the pollution prevention measures outlined in this SWPPP shall be provided to staff and subcontractors.

#### 9.3.1 **Individual(s) Responsible for Training**

Company/Organization: TBD

Name: TBD

### 9.3.2 Description of Training Conducted

Informal training shall be conducted for all staff, including subcontractors, on the site. The training shall be conducted primarily via tailgate sessions and shall focus on avoiding damage to stormwater BMPs and preventing illicit discharges. The tailgate sessions shall be conducted biweekly and shall address the following topics: Erosion Control BMPs, Sediment Control BMPs, Non-Stormwater BMPs, Waste Management and Materials Storage BMPs, and Emergency Procedures specific to the construction site. (See Appendix J – Training Log)

Formal training shall be provided to all staff and subcontractors with specific stormwater responsibilities, such as installing and maintaining BMPs. The formal training shall cover all design and construction specifications for installing the BMPs and proper procedures for maintaining each BMP. Training shall also cover inspection schedules and procedures for personnel whose job duties are related to inspections. Formal training shall occur before any BMPs are installed on the site. (See Appendix J – Training Log)

## 10.0 CERTIFICATION AND NOTIFICATION

### 10.1 SIGNATURE, PLAN REVIEW, AND MAKING PLANS AVAILABLE

A copy of the SWPPP (including a copy of the Construction General Permit, NOI, and acknowledgement letter from EPA shall be retained at the construction site (or other location easily accessible during normal business hours to EPA, a state, tribal or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; the operator of a municipal separate storm sewer receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service) from the date of commencement of construction activities to the date of final stabilization. A copy of the SWPPP shall be available at a central location on-site for the use of all those identified as having responsibilities under the SWPPP. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location shall be posted near the main entrance at the construction site.

### 10.2 NOTICE OF PERMIT COVERAGE

A sign must be posted at a safe, publicly accessible location in close proximity to the construction site detailing the permit coverage. The notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way. At a minimum, the notice must include:

- The NPDES Permit Tracking Number,
- A contact name and phone number for obtaining additional construction site information,
- The Uniform Resource Locator (URL) for the SWPPP (if available), or the following statement: "If you would like to obtain a copy of the Stormwater Pollution Prevention Plan (SWPPP) for this site, contact the EPA Regional 1 Office at (617) 918-1038,
- The following statement "If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, contact the EPA through the following website: <https://www.epa.gov/enforcement/report-environmental-violations>."

### 10.3 OWNER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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## 10.4 OPERATOR CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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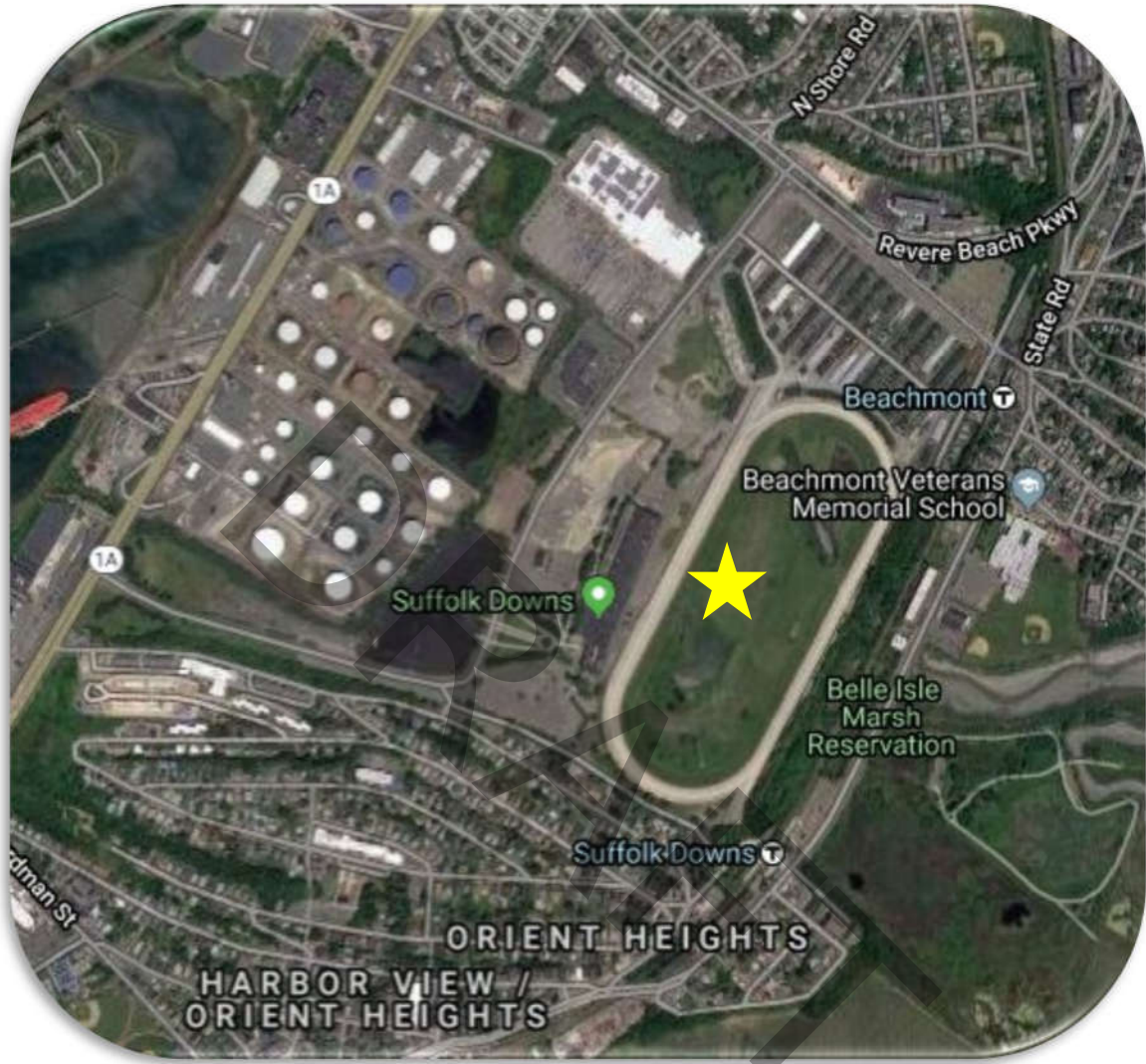
**APPENDICES**

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**Appendix A**

General Location Map



Locus Map.  
Project Location Denoted by Star.



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**Appendix B**

Site Plans

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**Appendix C**

Construction General Permit

[https://www.epa.gov/sites/production/files/2019-06/documents/final\\_2017\\_cgp\\_current\\_as\\_of\\_6-6-2019.pdf](https://www.epa.gov/sites/production/files/2019-06/documents/final_2017_cgp_current_as_of_6-6-2019.pdf)

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**Appendix D**

NOI and Acknowledgement Letter from EPA

## Appendix E

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### Inspection Reports

Inspections under this SWPPP shall be conducted in accordance with each installed BMPs recommended maintenance requirements. This inspection frequency may be reduced to at least once every month if: a) the entire site is temporarily stabilized, b) runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or the ground is frozen), or c) construction is occurring during seasonal arid periods in arid areas and semi-arid areas. If an inspection report is filed according to this modified schedule it shall be noted at the end of the report under the “NOTES” section.

The following pages should be copied and completed for each inspection. All inspection forms should be compiled in a binder to prove compliance with this SWPPP.

## Stormwater Pollution Prevention Plan: Inspection Checklist

General Information			
<b>Project Name</b>			
<b>NPDES Tracking No.</b>		<b>Location</b>	
<b>Date of Inspection</b>		<b>Start/End Time</b>	
<b>Inspector's Name(s)</b>			
<b>Inspector's Title(s)</b>			
<b>Inspector's Contact Information</b>			
<b>Describe present phase of construction</b>			
<b>Inspection Frequency:</b> <input type="checkbox"/> Every 7 days <input type="checkbox"/> Every 14 days <i>and</i> within 24 hours of a 0.25" rain <input type="checkbox"/> Other: <input type="checkbox"/> Every 7 days <i>and</i> within 24 hours of a 0.25" rain			
<b>Type of Inspection:</b> <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event			
Weather Information			
<b>Has there been a storm event since the last inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If yes, provide:</b> Storm Start Date & Time Storm: _____ Duration (hrs.): _____  Approx. Amount of Precipitation (in): _____			
<b>Weather at time of this inspection?</b> <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: _____    Temperature: °F _____			
<b>Have any discharges occurred since the last inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If yes, describe:</b> _____			
<b>Are there any discharges at the time of inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If yes, describe:</b> _____			

**Site-specific BMPs**

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Overall Site Issues**

*Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.*

BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
Are all slopes and disturbed areas not actively being worked properly stabilized? *Note: Soil stockpiles not in use for a period of 14 days or more must be temporarily stabilized.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are discharge points and receiving waters free of any sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the construction exit preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are outfalls free of debris?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Non-Compliance**

Describe any incidents of non-compliance not described above:

**CERTIFICATION STATEMENT**


“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

**Print name and title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



 <b>BEALS+THOMAS</b>		<b>SWPPP PHOTOGRAPHIC LOG</b>	
<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 1</b>	<b>Date:</b>		
<b>Description:</b>			
<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 2</b>	<b>Date:</b>		
<b>Description:</b>			

<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 3</b>	<b>Date:</b>		
<b>Description:</b>			
<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 4</b>	<b>Date:</b>		
<b>Description:</b>			

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<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 5</b>	<b>Date:</b>		
<b>Description:</b>			
<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 6</b>	<b>Date:</b>		
<b>Description:</b>			

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<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 7</b>	<b>Date:</b>		
<b>Description:</b>			
<b>Client Name:</b>		<b>Photo Location:</b>	<b>Project No:</b>
<b>Photo No: 8</b>	<b>Date:</b>		
<b>Description:</b>			

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**Appendix F**

Corrective Action Log



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## Appendix G

### SWPPP Amendment Log

The SWPPP, including the site plans, shall be amended whenever there is a change in design, construction, operation, or maintenance at the construction site that has or could have a significant effect on the discharge of pollutants to the waters of the United States that has not been previously addressed in the SWPPP.

The SWPPP shall be amended if during inspections or investigations by site staff, or by local, state, tribal or federal officials, it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutants in storm water discharges from the construction site.

Based on the results of an inspection, the SWPPP shall be modified as necessary to include additional or modified BMPs designed to correct problems identified. Revisions to the SWPPP shall be completed within seven (7) calendar days following the inspection. Implementation of these additional or modified BMPs shall be accomplished as described in Subpart 3.6B of the Construction General Permit (located in Appendix C).





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**Appendix H**

Subcontractor Certifications/Agreements

**Sample Subcontractor Certifications/Agreements**

**SUBCONTRACTOR CERTIFICATION  
STORMWATER POLLUTION PREVENTION PLAN**

Project Number: \_\_\_\_\_

Project Title: \_\_\_\_\_

Operator(s): \_\_\_\_\_

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

**I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.**

This certification is hereby signed in reference to the above named project:

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Type of construction service to be provided: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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**Appendix I**

Grading and Stabilization Activities Log

Site Plans in Appendix B should be annotated to indicate areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.



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**Appendix J**

Training Log



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**Appendix K**

Delegation of Authority

**Sample Delegation of Authority Form**

Delegation of Authority

I, \_\_\_\_\_ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the \_\_\_\_\_ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (name of person or position)  
\_\_\_\_\_ (company)  
\_\_\_\_\_ (address)  
\_\_\_\_\_ (city, state, zip)  
\_\_\_\_\_ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix I of EPA’s Construction General Permit (CGP), and that the designee above meets the definition of a “duly authorized representative” as set forth in Appendix I.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Name:** \_\_\_\_\_

**Company:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



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**Appendix L**

Endangered Species Documentation

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**Appendix M**

Historic Preservation Documentation

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**Appendix N**

Temporary Sediment Basin Sizing Calculations

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**Appendix O**

Natural Buffer Equivalency Calculations

## **Section 5.0 Plans**

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Figure 1 Locus Map  
Figure 2 Aerial Map

FEMA Flood Panels

Suffolk Downs Redevelopment: Outdoor Entertainment Venue (REDUCED SIZE)

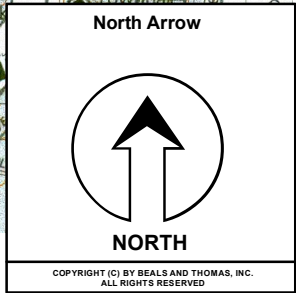
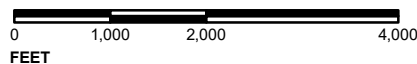
Prepared by Beals and Thomas, Inc.

In 19 Sheets

Dated January 19, 2022



Digital USGS Maps of Boston North and Lynn, MA, dated 1985, provided by the Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs.



**PROJECT:**  
**Suffolk Downs Redevelopment**  
**Outdoor Entertainment Venue**  
 Boston, Massachusetts

**PREPARED FOR:**  
**The McClellan Highway**  
**Development Company, LLC**  
 One Congress Street  
 Boston, MA 02114

**Locus Map**  
 Figure 1

Scale: 1" = 2,000'      Date: 1/18/2022

Source File 285428P441A.mxd  
 B+T Project No. 2854.18



Digital orthophotograph, dated 2019, provided by the Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs.

0 295 590 1,180  
FEET

North Arrow

NORTH

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ALL RIGHTS RESERVED.

**PROJECT:**  
**Suffolk Downs Redevelopment**  
**Outdoor Entertainment Venue**  
 Boston, Massachusetts

**PREPARED FOR:**  
**The McClellan Highway**  
**Development Company, LLC**  
 One Congress Street  
 Boston, MA 02114

**Aerial Map**  
 Figure 2

Scale: 1" = 600'

Date: 1/18/2022

Source File 285428P442A.mxd

B+T Project No. 2854.18

# National Flood Hazard Layer FIRMMette



71°0'43"W 42°23'51"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	
	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD	
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes. Zone X
	Area with Flood Risk due to Levee Zone D

OTHER AREAS	
	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES	
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall

OTHER FEATURES	
	20.2 Cross Sections with 1% Annual Chance
	17.5 Water Surface Elevation
	8 Coastal Transect
	5.13 Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature

MAP PANELS	
	Digital Data Available
	No Digital Data Available
	Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **7/15/2021 at 1:35 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



# National Flood Hazard Layer FIRMMette



71°0'17"W 42°23'51"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER AREAS		Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer	
		Levee, Dike, or Floodwall	
	OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
			Coastal Transect
			Base Flood Elevation Line (BFE)
		Limit of Study	
		Jurisdiction Boundary	
		Coastal Transect Baseline	
		Profile Baseline	
		Hydrographic Feature	

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **7/15/2021 at 1:37 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

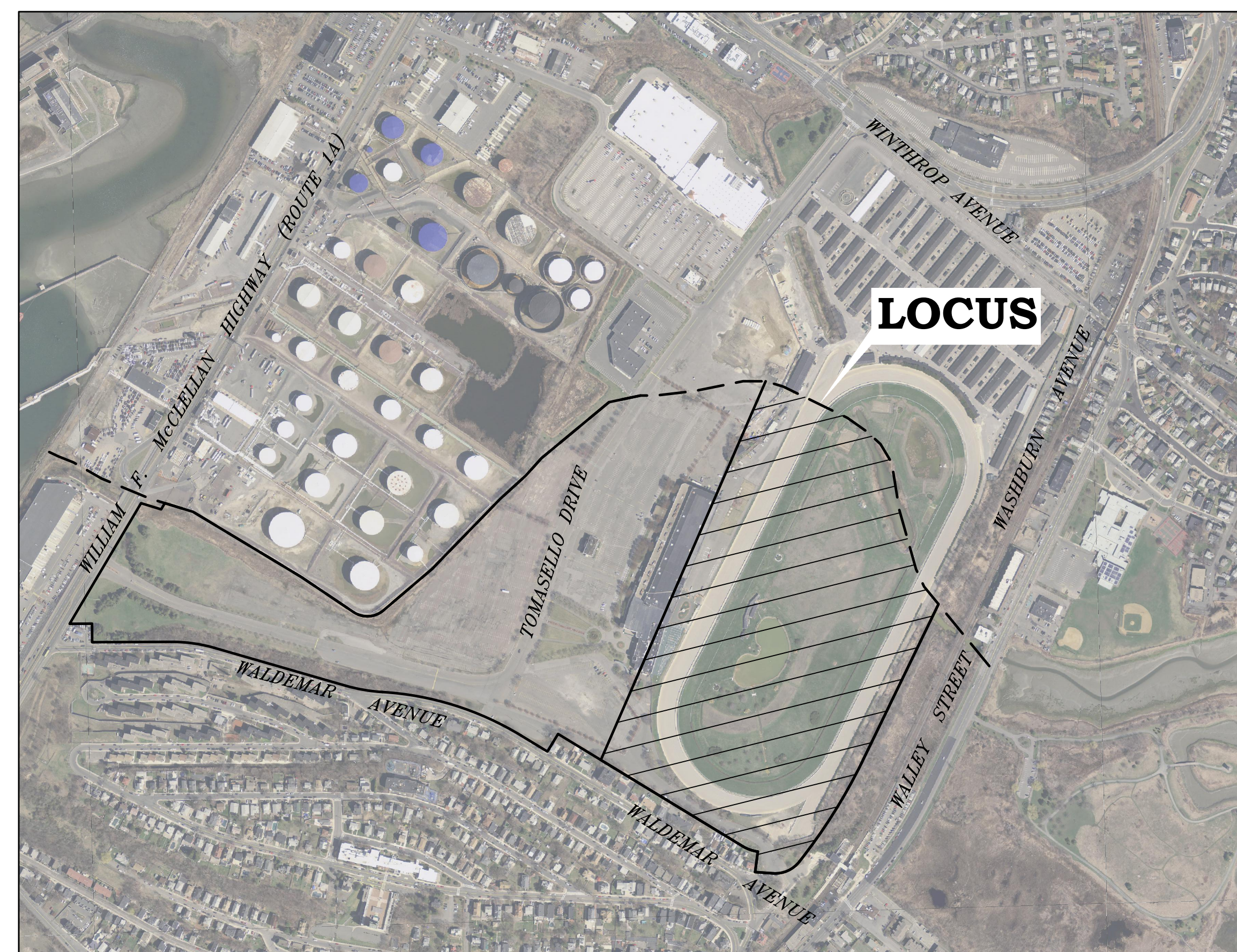
# SUFFOLK DOWNS REDEVELOPMENT, OUTDOOR ENTERTAINMENT VENUE NOTICE OF INTENT IN BOSTON, MASSACHUSETTS (Suffolk County)

## OWNER/APPLICANT

The McClellan Highway Development Company, LLC  
c/o The HYM Investment Group, LLC  
One Congress Street  
Boston, Massachusetts 02114

## CIVIL ENGINEER/SURVEYOR AND WETLAND SCIENTIST

Beals and Thomas, Inc.  
144 Turnpike Road  
Southborough, Massachusetts 01772

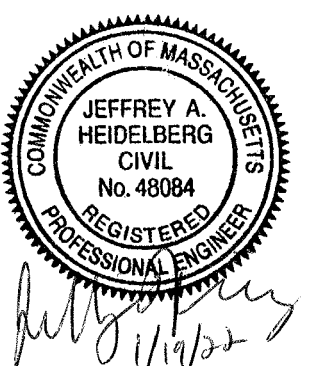


**Locus Map**  
Scale: 1" = 500'



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**FOR PERMITTING - JANUARY 19, 2022**

NOT ISSUED FOR  
CONSTRUCTION

Job No.: 2854.18  
Plan No.: 285418P437A-001  
Sheet 1 of 19

**GENERAL NOTES**

- THE CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND OBTAIN NECESSARY CONSTRUCTION PERMITS. THE CONTRACTOR SHALL PAY FEES AND POST BONDS ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE ENGINEER AND ARCHITECT AS REQUIRED.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND CONSTRUCTION MEANS AND METHODS.
- LIMIT OF WORK SHALL BE SEDIMENT CONTROL BARRIERS, LIMIT OF GRADING, SITE PROPERTY LINES, AND/OR AS INDICATED ON DRAWINGS.
- PORTIONS OF THE DESIGNATED AREAS TO REMAIN THAT ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION PRIOR TO DISTURBANCE. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
- CONTRACTOR SHALL VERIFY UTILITY STUB LOCATIONS AND ELEVATIONS IN THE FIELD PRIOR TO COMMENCING WORK.
- ANY ALTERATION TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE CONTRACTOR ON RECORD DOCUMENTS.
- EXISTING TREES AND SHRUBS OUTSIDE THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON PRIOR APPROVAL OF THE OWNER.
- CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN A TRENCH PERMIT PRIOR TO ANY TRENCHING ON SITE IN ACCORDANCE WITH 520 CMR 14.00.
- FOR DRAWING LEGIBILITY, ALL EXISTING TOPOGRAPHIC FEATURES, EXISTING UTILITIES, PROPERTY BOUNDARIES, EASEMENTS, ETC. MAY NOT BE SHOWN ON ALL DRAWINGS. REFER TO ALL REFERENCED DRAWINGS AND OTHER DRAWINGS IN THIS SET FOR ADDITIONAL INFORMATION.
- ALL ELEVATIONS REFER TO THE BOSTON CITY BASE.
- CONTRACTOR SHALL REPORT SIGNIFICANT CONFLICTS TO THE OWNER AND THE ENGINEER FOR RESOLUTION.
- CONTRACTOR SHALL PROTECT EXISTING PROPERTY MONUMENTS AND ADJUTING PROPERTIES DURING CONSTRUCTION.
- EXISTING CONDITIONS AND TOPOGRAPHY DERIVED FROM "SUFFOLK DOWNS REDEVELOPMENT TOPOGRAPHIC PLANS" PREPARED BY BEALS AND THOMAS, DATED NOVEMBER 19, 2020.

**EROSION CONTROL AND SEDIMENTATION NOTES**

- A SEDIMENT CONTROL BARRIER SHALL BE INSTALLED BETWEEN THE PROPOSED DEVELOPMENT AND RESOURCE AREAS AS INDICATED IN THE PLAN PRIOR TO THE COMMENCEMENT OF WORK.
- CONTRACTOR SHALL CLEAN AND MAINTAIN ALL SEDIMENT AND EROSION CONTROL MEASURES FOR THE DURATION OF CONSTRUCTION TO ENSURE THEIR CONTINUED FUNCTIONALITY.
- ADDITIONAL EROSION CONTROL MEASURES AND/OR SEDIMENT CONTROL BARRIERS SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS DURING CONSTRUCTION TO ENSURE THAT CHANNELS, DITCHES, AND PIPES REMAIN CLEAR OF DEBRIS AND THAT THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE INTACT.
- ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC WAYS. ANY SEDIMENT TRACKED ONTO PUBLIC WAYS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY.
- ALL STOCKPILE AREAS SHALL BE LOCATED WITHIN LIMIT OF WORK LINE AND STABILIZED TO PREVENT EROSION. STOCKPILING SHALL NOT OCCUR WITHIN THE RIVERFRONT AREA.
- ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFF SITE.
- CONTRACTOR SHALL PROVIDE CRIBBING AS NECESSARY TO PROTECT EXISTING UTILITY LINES DURING CONSTRUCTION.
- SITE ELEMENTS TO REMAIN SHALL BE PROTECTED FOR THE DURATION OF CONSTRUCTION.
- ALL TOPSOIL ENCOUNTERED WITHIN THE LIMIT OF WORK SHALL BE STRIPPED TO ITS FULL DEPTH AND STOCKPILED FOR REUSE. EXCESS TOPSOIL SHALL BE DISPOSED OF ON SITE AS DIRECTED BY OWNER. TOPSOIL STOCKPILES SHALL REMAIN SEGREGATED FROM OTHER EXCAVATED SOIL MATERIALS.
- IN SITUATIONS WHERE SOIL STOCKPILES OR OTHER UNVEGETATED AREAS WILL BE UNUSED FOR 7 DAYS OR LONGER, COVER OR TEMPORARY STABILIZATION SHALL BE PROVIDED.
- CONTRACTOR SHALL PROVIDE DUST CONTROL BY SPRINKLING OR OTHER APPROVED METHODS NECESSARY AND/OR AS DIRECTED BY THE OWNER OR THEIR REPRESENTATIVE.
- FILTER BAGS SHALL BE INSTALLED IN ALL EXISTING CATCH BASINS PRIOR TO COMMENCEMENT OF CONSTRUCTION. FILTER BAGS SHALL ALSO BE INSTALLED IN ALL NEWLY INSTALLED CATCH BASIN PRIOR TO PERMANENT PAVEMENT INSTALLATION TO CONTROL SILTATION.
- RIPRAP SHALL BE PROVIDED AT ALL DRAIN/CULVERT OUTLETS.
- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE WETLANDS.
- VEHICLE WASHOUT AREA(S) TO BE LOCATED OUTSIDE OF 100-FOOT BUFFER ZONE.
- INSTALLATION OF STABILIZATION MEASURES WILL BE COMPLETED AS SOON AS PRACTICABLE BUT NO LATER THAN SEVEN (7) CALENDAR DAYS AFTER STABILIZATION HAS BEEN INITIATED.

**LAYOUT AND MATERIALS NOTES**

- ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER AND OWNER'S REPRESENTATIVE FOR RESOLUTION.
- ALL EVENT STRUCTURES AND ACCESSORIES, INCLUDING STAGES, CONCESSIONS BOOTHS, CROWD CONTROL BARRIERS, PORTOLETS, WASH STATIONS, TENTS, AND TRAILERS, ARE NOT IN CONTRACT, AND SHALL BE PROVIDED BY OTHERS.
- GRAVEL MAY BE PLACED UNDER TEMPORARY STRUCTURES SUCH AS TRAILERS AND STORAGE TRAILERS, UNLESS OTHERWISE NOTED.
- ACCESSIBLE RAMPS SHALL BE CONSTRUCTED PER MASSACHUSETTS STATE CODE AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES (WHICHEVER IS MORE STRINGENT).
- CONTRACTOR SHALL PROTECT EXISTING PROPERTY MONUMENTS AND ADJUTING PROPERTIES DURING CONSTRUCTION.

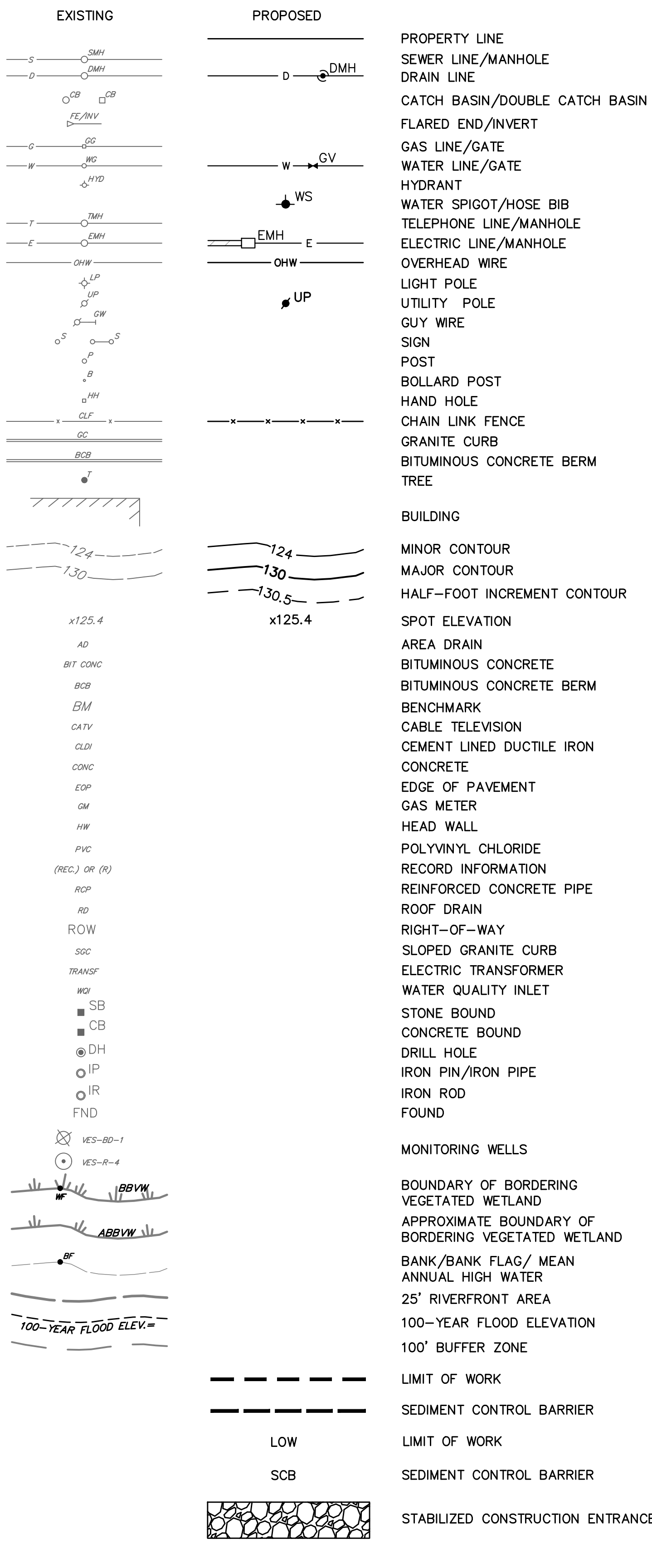
**GRADING, DRAINAGE AND UTILITY NOTES**

- UNDERGROUND UTILITIES WERE COMPILED FROM AVAILABLE RECORD PLANS OF UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE AND ASSUMED. BEFORE COMMENCING SITE WORK CONTACT "DIG SAFE" AT 1-888-344-7233 TO LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO EXCAVATION SHALL BE PERFORMED UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED.
- SITE WORK SHALL MEET OR EXCEED THE SITE WORK SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK WHICH COULD BE AFFECTED.
- WORK PERFORMED AND MATERIALS FURNISHED SHALL CONFORM WITH THE LINES, GRADES AND OTHER SPECIFIC REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF BOSTON.
- AT LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT, CURBS AND EARTHWORK SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS. FITCH EVENLY BETWEEN SPOT GRADES. GRADE ALL AREAS TO DRAIN.
- CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
- GRADES SHALL FITCH EVENLY BETWEEN SPOT ELEVATIONS. PAVED AREAS MUST FITCH TO DRAIN AT A MINIMUM OF 1/8" PER FOOT UNLESS SPECIFIED OTHERWISE. ANY DISCREPANCIES NOT ALLOWING THIS MINIMUM FITCH SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
- THE CONTRACTOR SHALL SCHEDULE WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PUDDING OR PONDING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF THE FINISH GRADE AND/OR SURFACE FINISHING. CONTRACTOR SHALL PROVIDE TEMPORARY POSITIVE DRAINAGE AS REQUIRED.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE RESPECTIVE UTILITY COMPANIES FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES, AS REQUIRED.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER AND ENGINEER FOR RESOLUTION.
- UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE PAVEMENT FINISH GRADE UNLESS OTHERWISE NOTED. RIM ELEVATIONS OF DRAINAGE STRUCTURES AND SANITARY SEWER MANHOLES ARE APPROXIMATE.
- CONTRACTOR SHALL INSTALL UTILITIES PER UTILITY COMPANY AND DPW STANDARDS.
- DRAINAGE PIPE SHALL BE SMOOTH WALLED CORRUGATED POLYETHYLENE PIPE (ADS N-12 OR APPROVED EQUAL) EXCEPT WHERE NOTED OTHERWISE.
- RIPRAP APRONS SHALL BE PROVIDED AT DRAIN/CULVERT OUTLETS.
- WATER PIPE SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON. WATER SERVICES SHALL BE COPPER TYPE K OR PE AS REQUIRED BY THE WATER DEPARTMENT.
- WATER UTILITY IMPROVEMENTS SHALL COMPLY WITH THE AMERICAN WATERWORKS ASSOCIATION STANDARDS AND THE BOSTON WATER AND SEWER COMMISSION (BWSC) SPECIFICATIONS.
- WATER LINES SHALL HAVE MINIMUM 24 INCHES OF COVER AND ARE REQUIRED TO BE WINTERIZED EVERY YEAR BY OCTOBER 31.
- CONTRACTOR SHALL PROTECT UNDERGROUND UTILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THE UTILITIES RESULTING FROM CONSTRUCTION LOADS SHALL BE RESTORED TO ORIGINAL CONDITION.
- GAS, ELECTRIC, TELEPHONE AND FIRE ALARM CONNECTION LOCATIONS AND ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY APPROPRIATE UTILITY COMPANIES AND FIRE DEPARTMENT. CONTRACTOR SHALL COORDINATE CONNECTION TO MUNICIPAL FIRE ALARM.
- EXCAVATION WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE PERFORMED BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
- UNLESS OTHERWISE INDICATED, EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED AND ABANDONED IN PLACE UNLESS THEY CONFLICT WITH PROPOSED IMPROVEMENTS. CAP REMAINING PORTIONS WHERE PARTIALLY REMOVED.
- ABANDON EXISTING UTILITY SERVICES IN ACCORDANCE WITH UTILITY COMPANY AND CITY/TOWN REQUIREMENTS.
- CONTRACTOR SHALL REMOVE ALL EROSION AND SEDIMENT CONTROL BARRIERS AFTER RE-VEGETATION AND STABILIZATION OF DISTURBED AREAS, FOLLOWING APPROVAL OF THE CONSERVATION COMMISSION AND WETLAND SPECIALIST.
- WETLANDS SHALL REMAIN UNDISTURBED; NO ENCRoACHMENT PERMITTED.
- GRADING SHOWN WITHIN THE LIMIT OF WORK ON TP-1 AND TP-2 MAY BE ADJUSTED PRIOR TO THE START OF THE OUTDOOR ENTERTAINMENT VENUE PROJECT TO REDUCE THE OVERALL GRADING ACTIVITIES AND REDUCE THE NEED TO HANDLE MATERIALS MULTIPLE TIMES.
- A DESIGN BUILD IRRIGATION SYSTEM MAY BE INSTALLED WITHIN THE LIMIT OF WORK TO SUPPORT THE GROWTH OF LONG-TERM VEGETATION.

**PLANTING NOTES**

- LOAM AND SEED DISTURBED AREAS UNLESS OTHERWISE INDICATED.
- REGRADE STOCKPILE AREA AFTER REMOVAL OF SURPLUS MATERIALS (SEE SITE WORK SPECIFICATIONS). LOAM AND SEED THE DISTURBED AREA.
- TOPSOIL STRIPPED FROM THE SITE AND PROPERLY STOCKPILED MAY, UPON APPROVAL OF THE ENGINEER, BE USED FOR PREPARATION OF LAWNS AND PLANTING BEDS. IT SHALL BE FREE OF LARGE (ONE (1) INCH OR GREATER) COBBLES, ROOTS, OLD SOD, TRASH, WOOD OR OTHER CONTAMINANTS AND BE OF A FRIABLE CONSISTENCY AND SUITABLE FOR PLANT GROWTH.
- LANDSCAPE CONTRACTOR SHALL FURNISH TOPSOIL AS NEEDED. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL AND PRODUCTIVE TOPSOIL OF GOOD CLAY-LOAM TYPE. IT SHALL BE FREE OF WEED SEEDS. TOPSOIL SHALL BE WITHOUT ADMIXTURE OF SUBSOIL AND SHALL BE REASONABLY FREE OF STONES, LUMPS, ROOTS, STICKS AND OTHER FOREIGN MATTER. TOPSOIL SHALL NOT BE WORKED OR APPLIED IN A MUDDY OR WET CONDITION.
- TOPSOIL SHALL BE SPREAD TO A MINIMUM DEPTH OF FOUR (4) INCHES ON ALL STRIPPED PLANTED AREAS INCLUDING SLOPE STABILIZATION, LAWN AREAS, AND PLANTING BEDS AFTER EARTH FILLS HAVE PROPERLY SETTLED AND SUBGRADE HAS BEEN APPROVED BY THE OWNER. THE SETTLED TOPSOIL SHALL BE UP TO THE FINISHED GRADE AS REQUIRED ON THE DRAWINGS. SCARIFY SUBGRADE TO A DEPTH OF TWO (2) INCHES BEFORE PLACING TOPSOIL.
- REMOVE ALL ROCKS AND DEBRIS FROM SOIL SURFACE AND GRADE TO AN EVENING SURFACE.
- PLANTING SEED SHALL BE SOWN IN SEASONAL CONDITIONS AS APPROPRIATE FOR GOOD SEED SURVIVAL, OR AT SUCH TIMES AS APPROVED BY THE OWNER. PROVIDE SUFFICIENT HOSE AND SPRINKLER HEADS FOR ADEQUATE WATERING TO MAINTAIN A MOIST SEED BED AT ALL TIMES.
- AFTER SEEDING, THE SURFACE OF THE SOIL SHALL BE EVENLY RAKED WITH A FINE-TOOTHED RAKE AND THEN ROLLED WITH A HAND ROLLER WEIGHING NOT LESS THAN ONE HUNDRED (100) POUNDS PER FOOT OF WIDTH.
- WATER THE MULCH AND SEED BEDS THOROUGHLY AND IMMEDIATELY AFTER COMPLETION OF MULCHING AND SEEDING OPERATIONS. SOIL SHALL BE MOISTENED TO A DEPTH OF FOUR (4) INCHES. CONTRACTOR SHALL INSTRUCT OWNERS REPRESENTATIVE ON APPROPRIATE WATERING PROCEDURES DURING INITIAL ESTABLISHMENT.
- IF CERTAIN AREAS OF THE LAWN DO NOT SHOW A PROMPT "CATCH", THESE AREAS SHALL BE RESEEDED AT THE SAME RATE AND IN THE SAME MANNER IN TEN (10) DAY INTERVALS. THIS SEEDING PROCESS SHALL CONTINUE UNTIL A GROWTH OF GRASS IS ESTABLISHED OVER THE ENTIRE AREA.
- PROTECT NEWLY TOPSOILED, GRADED AND/OR SEEDED AREAS FROM TRAFFIC AND EROSION. KEEP AREAS FREE OF TRASH AND DEBRIS RESULTING FROM LANDSCAPE CONTRACTOR OPERATIONS.
- PLACE WARNING SIGNS IN SEEDED AREAS AND ERECT BARRICADES TO PREVENT DAMAGE BY PERSONS OR MACHINES; MAINTAIN THESE PROTECTIONS FOR AT LEAST THIRTY (30) DAYS.
- REPAIR AND RE-ESTABLISH GRADES IN SETTLED, ERODED, AND RUTTED AREAS TO THE SPECIFIED GRADE AND TOLERANCES.
- THE LANDSCAPE CONTRACTOR SHALL CLEAN UP AND REMOVE ANY DEBRIS FROM THE SITE CAUSED BY THE LANDSCAPE CONTRACTOR OR THEIR SUBCONTRACTORS.
- PLANT MATERIAL SHALL BE MAINTAINED BY THE LANDSCAPE CONTRACTOR FOR THE DURATION OF THE PROJECT.

**LEGEND AND ABBREVIATIONS**

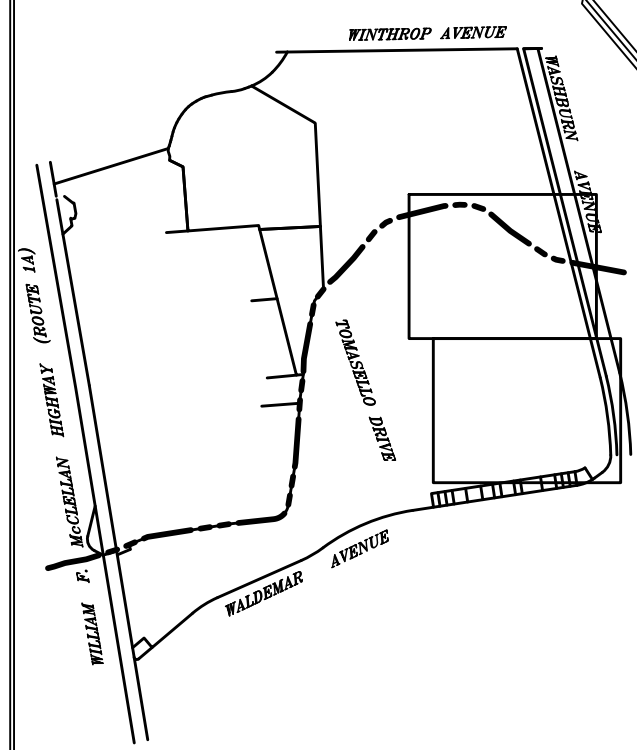


PREPARED FOR:

**The McClellan Highway Department Company, LLC**  
**c/o the HYM Investment Group, LLC**  
 ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP

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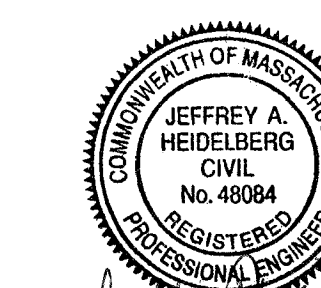
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**PROJECT:**  
**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: AS SHOWN DATE: JANUARY 19, 2021

**NOTES, REFERENCES AND LEGEND**

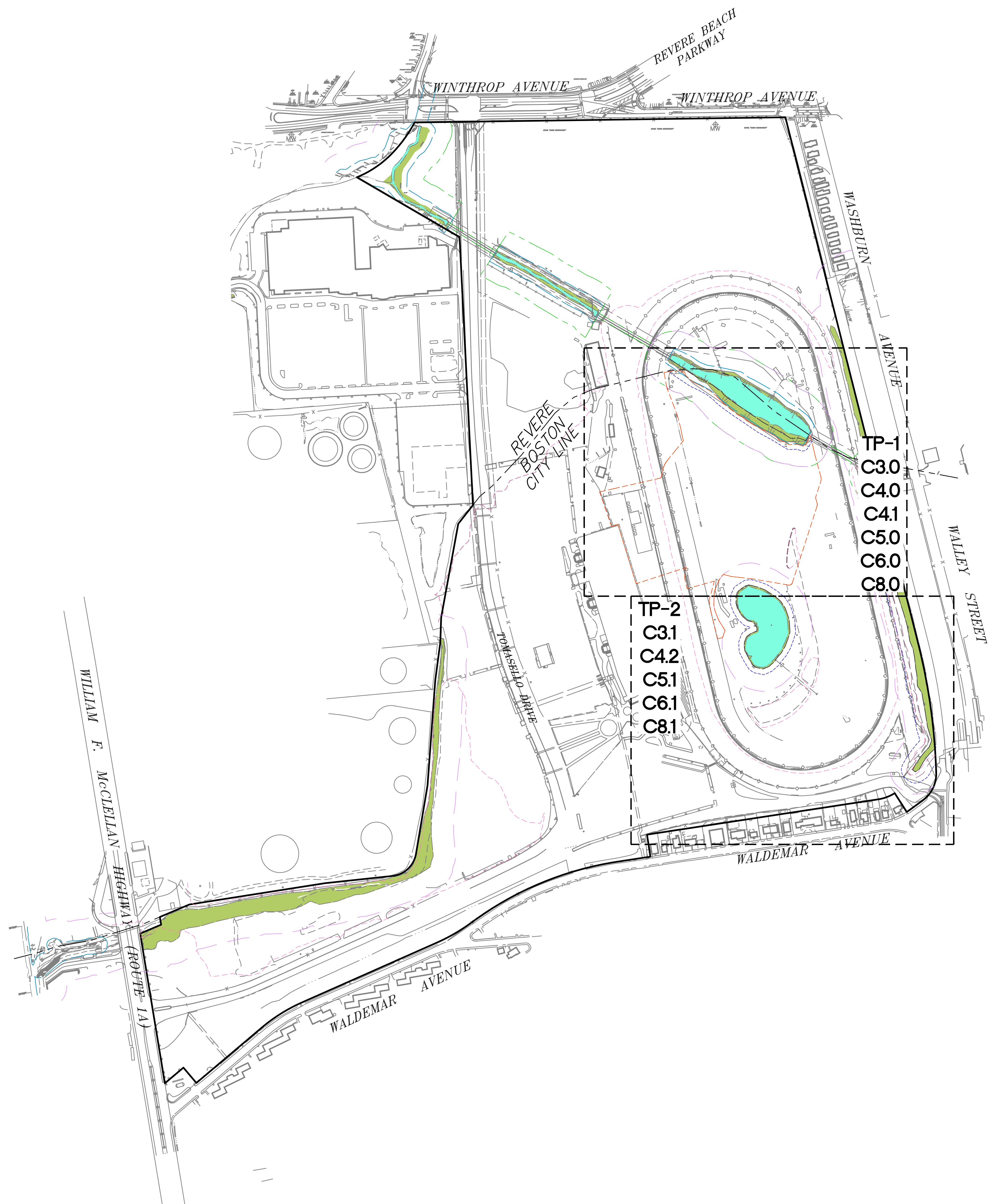
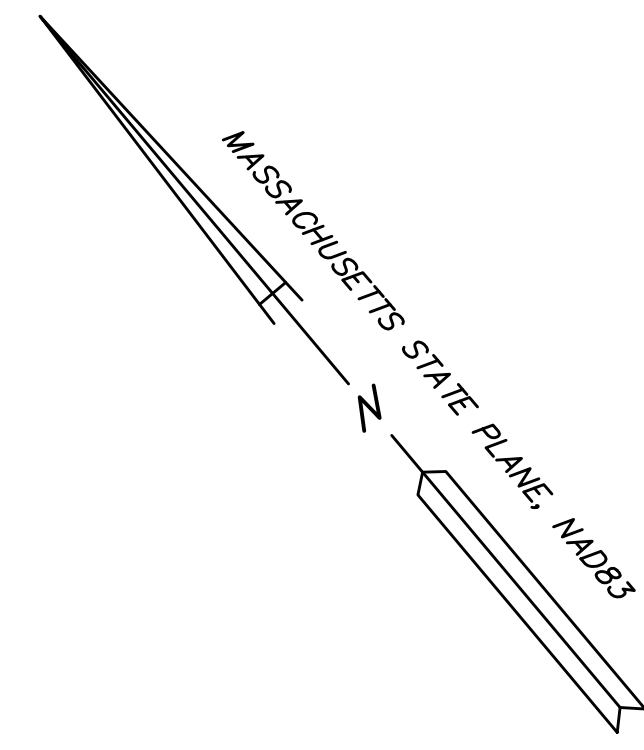
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B+T PLAN NO. 285418P437A-002	

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**NOTES:**

- CERTAIN CONSTRUCTION ACTIVITIES WITHIN THE PROJECT SITE ARE NOT SHOWN. THESE ACTIVITIES MAY INCLUDE SITE PREPARATIONS FOR FUTURE PHASES, MODIFICATIONS TO BUILDINGS OR GROUNDS FOR INTERIM SITE ACTIVATION, SITE MODIFICATIONS TO ADDRESS RESILIENCY EFFORTS, CONSTRUCTION ALTERATIONS TO THE SITE TO MANAGE DRAINAGE, OR OTHER SIMILAR CONSTRUCTION ACTIVITIES.
- IMPROVEMENTS FOR THE MANAGEMENT OF CONSTRUCTION WORK, SUCH AS CONSTRUCTION VEHICLE OR EMPLOYEE PARKING AREAS, TEMPORARY ROADWAYS, TEMPORARY SECURITY FENCING, ETC. ARE NOT FULLY DETAILED ON THESE PLANS.



### INDEX LEGEND

	LIMIT OF WORK
	BANK/MAHW
	TOP OF BANK/MEAN ANNUAL HIGH WATER
	APPROX. BANK/MAHW
	APPROXIMATE TOP OF BANK/MEAN ANNUAL HIGH WATER
	BOUNDARY OF BORDERING VEGETATED WETLAND
	APPROXIMATE BOUNDARY OF BORDERING VEGETATED WETLAND
	BANK/BORDERING VEGETATED WETLAND
	100' BUFFER ZONE/AREA OF CRITICAL ENVIRONMENTAL CONCERN
	100' BUFFER ZONE
	LOCAL 25' WATERFRONT AREA
	STATE-JURISDICTIONAL 25' RIVERFRONT AREA
	LOCAL 25' RIVERFRONT AREA
	WATER BODIES
	100-YEAR FLOODPLAIN (LAND SUBJECT TO COASTAL STORM FLOWAGE)
	PROPERTY LINE

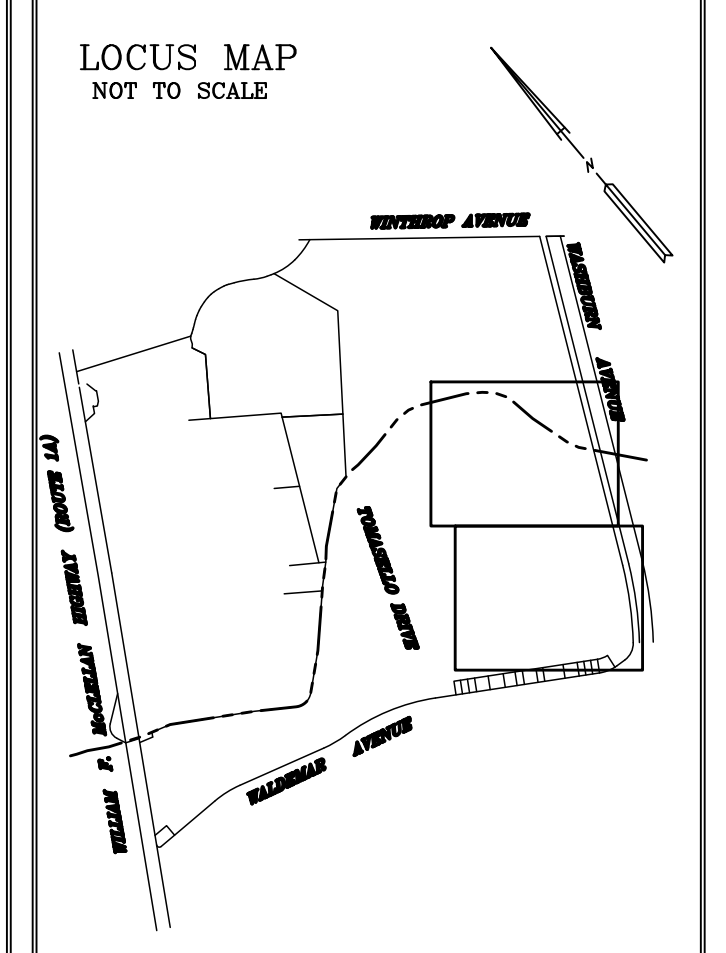
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 c/o the HYM Investment Group, LLC  
 ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS



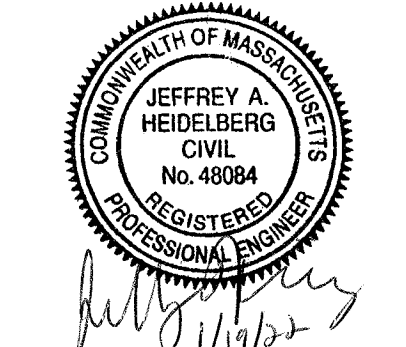
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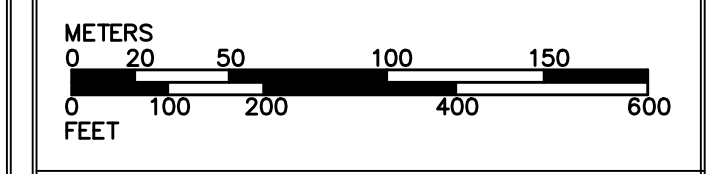
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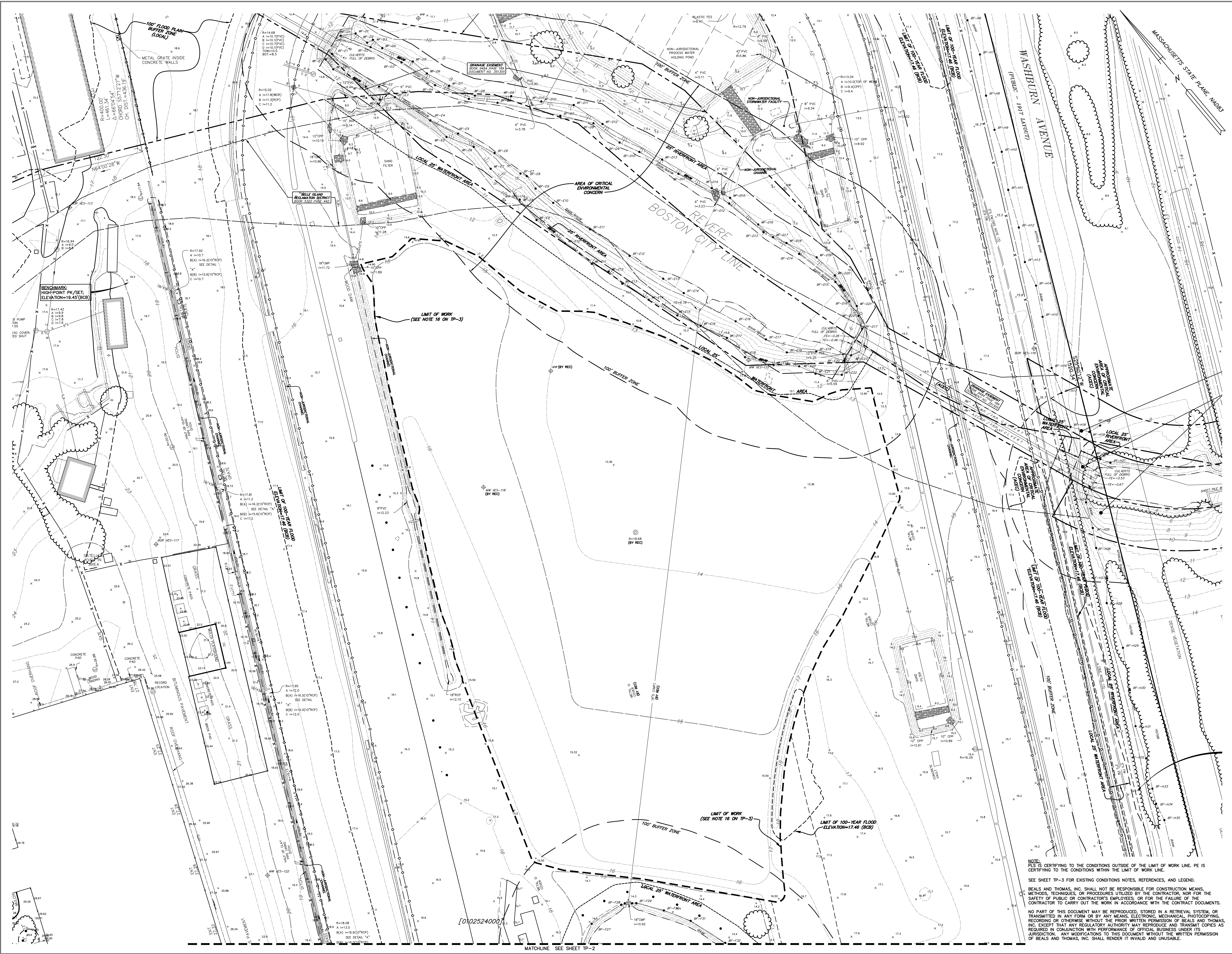
PROJECT:  
**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: 1" = 200' DATE: JANUARY 19, 2021



**INDEX SHEET**

B+T JOB NO. 2854.18	<b>C2.0</b>
B+T PLAN NO. 285418P438A-001	



PREPARED FOR:

**The McClellan Highway Department Company, LLC**  
 c/o the HYM Investment Group, LLC

ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP  
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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

**TOPOGRAPHIC PLAN**

B+T JOB NO. 2854.18

B+T PLAN NO. 285418P438A-002

**TP-1**

NOTE:  
 PLS. IS CERTIFYING TO THE CONDITIONS OUTSIDE OF THE LIMIT OF WORK LINE. PE IS CERTIFYING TO THE CONDITIONS WITHIN THE LIMIT OF WORK LINE.

SEE SHEET TP-3 FOR EXISTING CONDITIONS NOTES, REFERENCES, AND LEGEND.

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[0102524000]

MATCHLINE SEE SHEET TP-2



PREPARED FOR:

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 c/o the HYM Investment Group, LLC

ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP  
 NOT TO SCALE

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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

**TOPOGRAPHIC PLAN**

B+T JOB NO. 2854.18  
 B+T PLAN NO. 285418P438A-003 **TP-2**

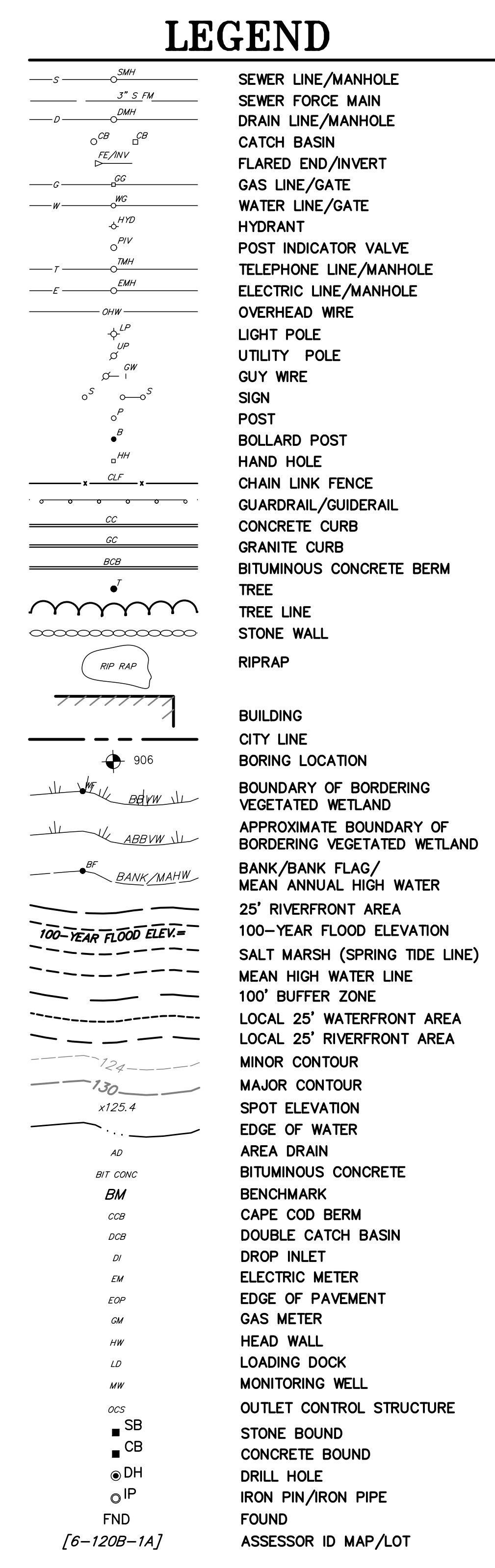
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LEGEND (SEE NOTE 3A)

⊗	CATCH BASIN
⊙	CABLE TELEVISION MANHOLE
⊖	DRAIN MANHOLE
⊕	ELECTRIC MANHOLE
⊗	MISCELLANEOUS MANHOLE
⊙	SEWER MANHOLE
⊖	TELEPHONE MANHOLE
⊕	WATER MANHOLE
GSO	GAS SHUT-OFF
WSD	WATER SHUT-OFF
GS	GAS GATE
WG	WATER GATE
⊕	FIRE HYDRANT
BWW	BOSTON WATER WORKS
⊕	UTILITY POLE
⊕	LIGHT POLE
FACB	FIRE ALARM CALL BOX
MP	METAL POST
CP	CONCRETE POST
PM	PARKING METER
S	SIGN POST
1445	HANDICAP PARKING
1446	SPOT ELEVATION
CLF	CHAIN LINK FENCE
E-11	WETLAND FLAG
SGC	SLOPED GRANITE CURB
VCC	VERTICAL GRANITE CURB
VOC	VERTICAL CONCRETE CURB
WCR	WHEELCHAIR RAMP
LST	LANDSCAPE TIMBER
R=	RIM ELEVATION EQUALS
I=	INVERT ELEVATION EQUALS
TH=	TOP OF HOOD ELEVATION EQUALS
CNO	CAN NOT OPEN
NPV	NO PIPES VISIBLE
TOPW	TOP OF WATER
BOT=	BOTTOM OF CHAMBER ELEVATION EQUALS
N/A	NOT ACCESSIBLE
TW	TOP OF WALL ELEVATION
CATV	UNDERGROUND CABLE TELEVISION LINE
—D—	UNDERGROUND DRAIN LINE
—E—	UNDERGROUND ELECTRIC LINE
—G—	UNDERGROUND GAS LINE
—S—	UNDERGROUND SEWER LINE
—T—	UNDERGROUND TELEPHONE LINE
—W—	UNDERGROUND WATER LINE
—OHW—	OVERHEAD WIRES



NOTES

- UNDERGROUND UTILITIES ARE TAKEN IN PART FROM ELECTRONIC FILE 9180.1\_TOP01.dwg (SEE NOTE 3), RECORD PLANS OF MUNICIPAL AND PUBLIC UTILITY PROVIDERS AND SURFACE EVIDENCE, BEFORE CONSTRUCTION CALL "DIG SAFE" 1-888-344-7233.
- ALL ELEVATIONS REFER TO BOSTON CITY BASE.
- THIS PLAN IS BASED IN PART FROM:
  - AN ELECTRONIC FILE ENTITLED 9180.1\_TOP01.DWG AND DATED FEBRUARY 3, 2014 AND PREPARED BY NITSCH ENGINEERING, INC.
  - AN ON THE GROUND SURVEY PERFORMED BY BEALS AND THOMAS, INC. USING TOTAL STATION METHODS ON OR BETWEEN JANUARY 18, 2017 AND JULY 14, 2020.
- APPROXIMATE WETLAND RESOURCE AREAS TAKEN FROM A PLAN PREPARED BY ELKUS MANFREDI ARCHITECTS AND NITSCH ENGINEERING, INC. ENTITLED "TOPOGRAPHIC PLAN OF LAND", SCALE: 1"=40', DATED: JULY 31, 2014.
- WETLAND RESOURCE AREAS DELINEATED BY BEALS AND THOMAS, INC. ON OR BETWEEN JUNE 29, 2017 AND JULY 11, 2019.
- WETLAND RESOURCE AREA FLAGS LOCATED BY TOTAL STATION METHODS BY BEALS AND THOMAS, INC. ON OR BETWEEN JULY 11, 2017 AND SEPTEMBER 17, 2019.
- A PORTION OF THE PREMISES IS LOCATED IN ZONE AE (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD; BASE FLOOD ELEVATIONS DETERMINED), AS SHOWN ON "FLOOD INSURANCE RATE MAP, SUFFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS) PANELS 19 AND 38 OF 176", MAP NUMBERS 25025C0038J AND 25025C0019J, EFFECTIVE DATE MARCH 16, 2016.
- WETLAND RESOURCE AREAS IN BOSTON CONFIRMED BY ORDER OF RESOURCE AREA DELINEATION MASSDEP FILE NO. 006-1546 ISSUED BY THE CONSERVATION COMMISSION ON SEPTEMBER 20, 2017 AND ORDER OF CONDITIONS MASSDEP FILE NO. 006-1568 ISSUED BY THE BOSTON CONSERVATION COMMISSION ON FEBRUARY 22, 2018.
- WETLAND RESOURCE AREAS IN REVERE CONFIRMED BY ORDER OF RESOURCE AREA DELINEATION MASSDEP FILE NO. 061-0705 ISSUED BY THE REVERE CONSERVATION COMMISSION ON OCTOBER 4, 2017; ORDER OF CONDITIONS MASSDEP FILE NO. 061-0724 ISSUED BY THE REVERE CONSERVATION COMMISSION ON FEBRUARY 6, 2019; AND ORDER OF CONDITIONS MASSDEP FILE NO. 061-0736 ISSUED BY THE REVERE CONSERVATION COMMISSION ON NOVEMBER 8, 2019.
- THE PROPERTY BOUNDARY ALONG SALES CREEK IS SUBJECT TO CHANGE DUE TO NATURAL CAUSES AND IT MAY OR MAY NOT REPRESENT THE ACTUAL LOCATION OF THE LIMIT OF TITLE.
- THE CITY LINE BETWEEN BOSTON AND REVERE IS THE FORMER CENTERLINE OF BELLE ISLE INLET. THE DIVISION LINE SHOWN IS TAKEN FROM PLAN ENTITLED "CITY OF BOSTON BOUNDARY LINE BETWEEN BOSTON AND REVERE" DATED JANUARY 6, 1936 AND IS ON FILE WITH THE CITY OF BOSTON ENGINEERING DEPARTMENT AS PLAN L-7388.
- A PORTION OF THE PREMISES IS LOCATED IN THE RUMNEY MARSHES AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). THE EXTENT OF THE ACEC IS DEPICTED IN ACCORDANCE WITH THE DOCUMENT: "DESIGNATION OF PORTIONS OF THE CITIES OF BOSTON, LYNN, AND REVERE, AND THE TOWNS OF SAUGUS AND WINTHROP AS THE RUMNEY MARSHES AREA OF CRITICAL ENVIRONMENTAL CONCERN WITH SUPPORTING FINDINGS" ISSUED BY THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON AUGUST 22, 1988.
- THE CITY OF REVERE WETLANDS PROTECTION ORDINANCE ESTABLISHES A 100-FOOT BUFFER ZONE TO LAND SUBJECT TO COASTAL STORM FLOWAGE (100-YEAR FLOODPLAIN).
- PADDOCK DRAIN LINES BASED ON MULTIPLE SOURCES, CONFLICTING INFORMATION LABELED AS (BY RECORD).
- SEWER FORCE MAIN INFORMATION TAKEN FROM PLAN ENTITLED "BOSTON WATER AND SEWER COMMISSION AS-BUILT PROCESSED WATER SURVEY AT SUFFOLK DOWNS FOR STERLING RACECOURSE LLC DATED MAY 11, 2012" PREPARED BY J.F. WHITE CONTRACTING CO. (FORMER NOTE 13)
- LIMIT OF WORK BASED ON TOPOGRAPHIC INFORMATION SHOWN ON PLAN ENTITLED "SUFFOLK DOWNS REDEVELOPMENT, INFIELD PROJECT - INTERIM PHASE" PREPARED BY COPLEY WOLFF DESIGN GROUP, AND TAKEN FROM ELECTRONIC FILE XR\_INFELD\_SITE.DWG RECEIVED JANUARY 13, 2022.
- DOG PARK BASED ON PLAN ENTITLED "SUFFOLK DOWNS DOG PARK", DATED DECEMBER 2021, PREPARED BY BEALS AND THOMAS, INC. AND TAKEN FROM ELECTRONIC FILE 285402D038A.DWG.
- PEDESTRIAN SITE ACCESS BASED ON PLAN ENTITLED "SUFFOLK DOWNS SITE ACCESS", DATED APRIL 30, 2021, PREPARED BY BEALS AND THOMAS, INC. AND TAKEN FROM ELECTRONIC FILE 285418D060B.DWG.

PREPARED FOR:

**The McClellan Highway Department Company, LLC**  
 c/o the HYM Investment Group, LLC  
 ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP  
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PROJECT:

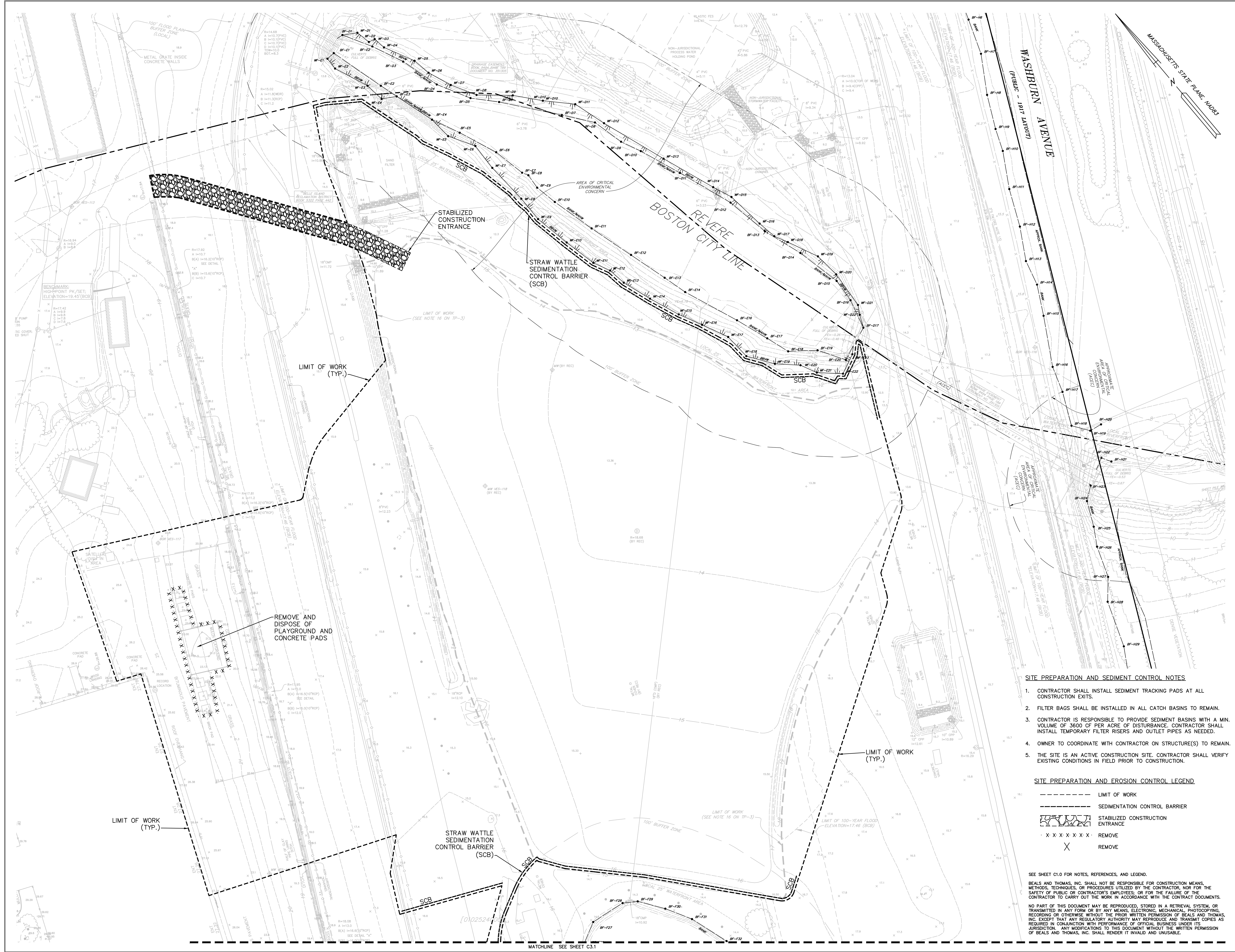
**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

TOPOGRAPHIC PLAN

B+T JOB NO. 2854.18	<b>TP-3</b>
B+T PLAN NO. 285418P438A-004	

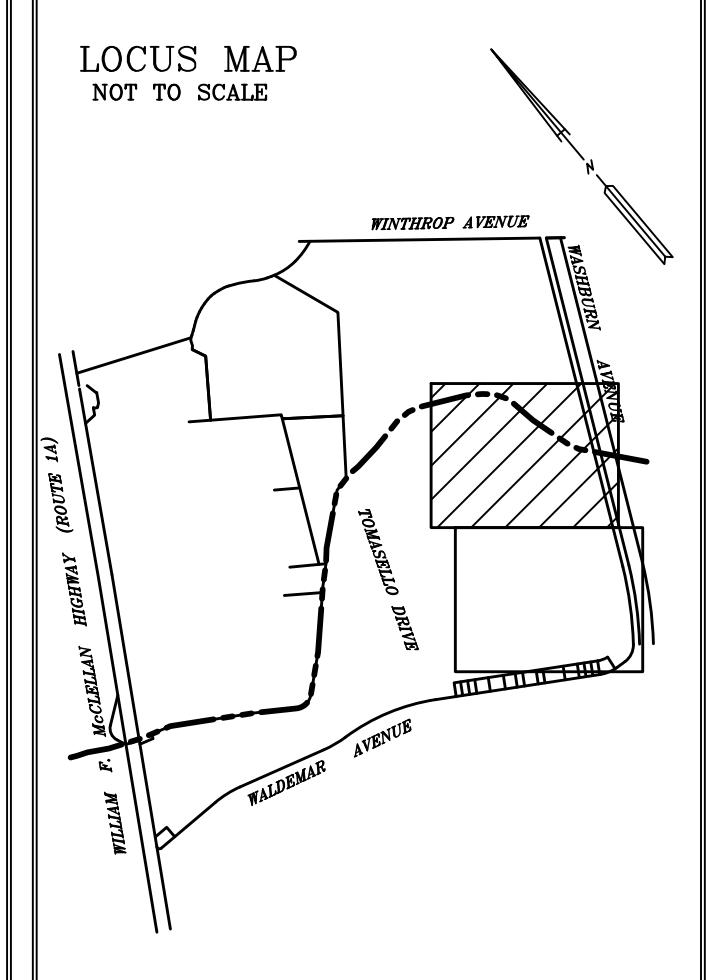
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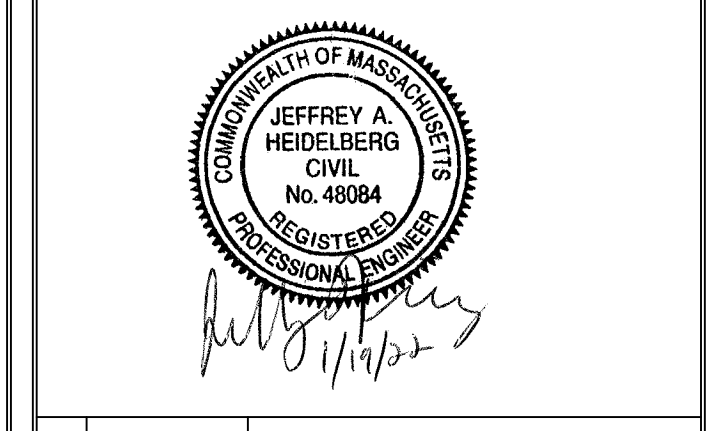
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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**

BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

**SITE PREPARATION AND SEDIMENT CONTROL PLAN**

B+T JOB NO. 2854.18

B+T PLAN NO. 285418P439A-001

**C3.0**

- SITE PREPARATION AND SEDIMENT CONTROL NOTES**
- CONTRACTOR SHALL INSTALL SEDIMENT TRACKING PADS AT ALL CONSTRUCTION EXITS.
  - FILTER BAGS SHALL BE INSTALLED IN ALL CATCH BASINS TO REMAIN.
  - CONTRACTOR IS RESPONSIBLE TO PROVIDE SEDIMENT BASINS WITH A MIN. VOLUME OF 3600 OF PER ACRE OF DISTURBANCE. CONTRACTOR SHALL INSTALL TEMPORARY FILTER RISERS AND OUTLET PIPES AS NEEDED.
  - OWNER TO COORDINATE WITH CONTRACTOR ON STRUCTURE(S) TO REMAIN.
  - THE SITE IS AN ACTIVE CONSTRUCTION SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO CONSTRUCTION.

- SITE PREPARATION AND EROSION CONTROL LEGEND**
- LIMIT OF WORK
  - - - - - SEDIMENTATION CONTROL BARRIER
  - ▨ STABILIZED CONSTRUCTION ENTRANCE
  - · · · · REMOVE
  - X REMOVE

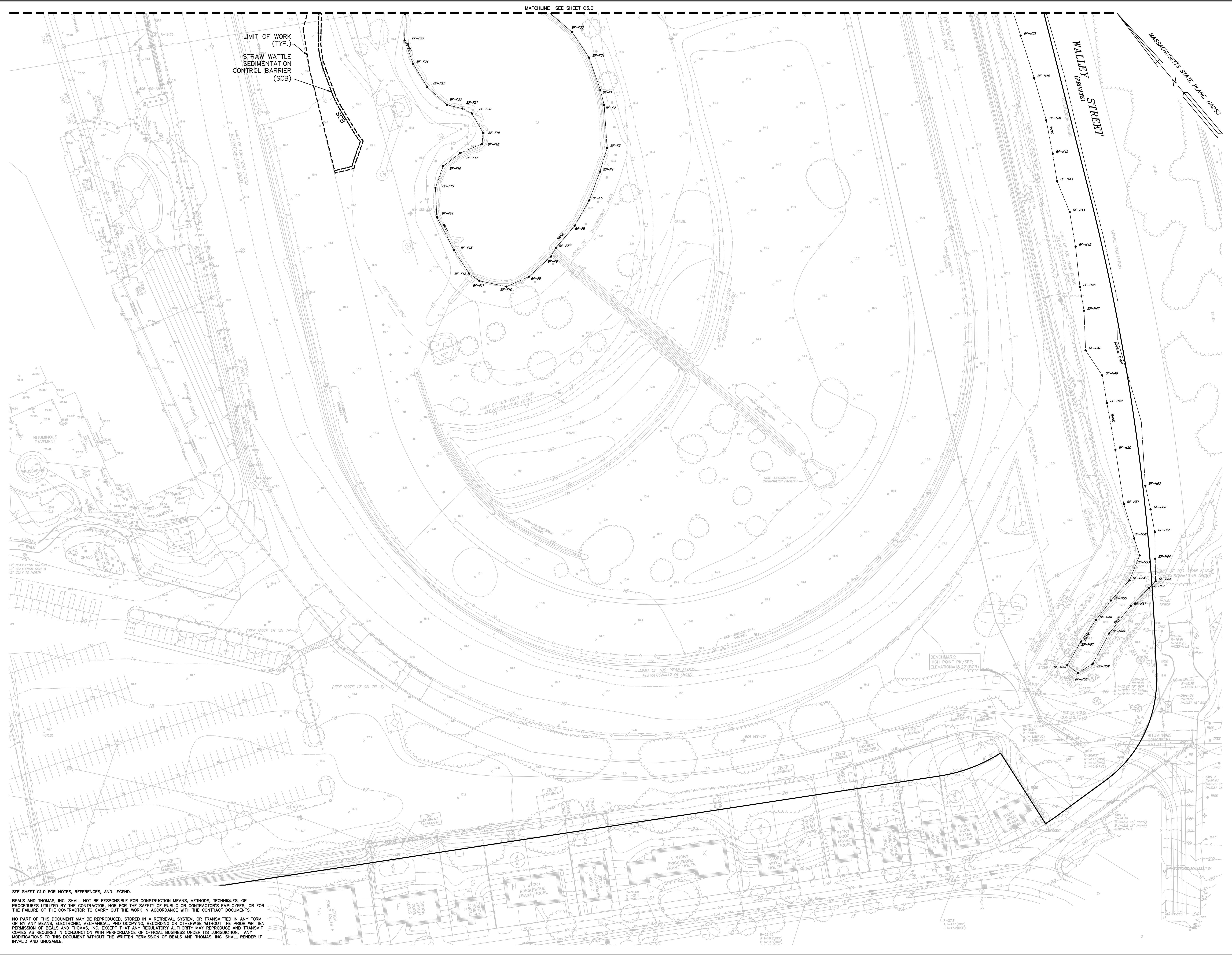
SEE SHEET C1.0 FOR NOTES, REFERENCES, AND LEGEND.

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MATCHLINE SEE SHEET C3.1





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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**

BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

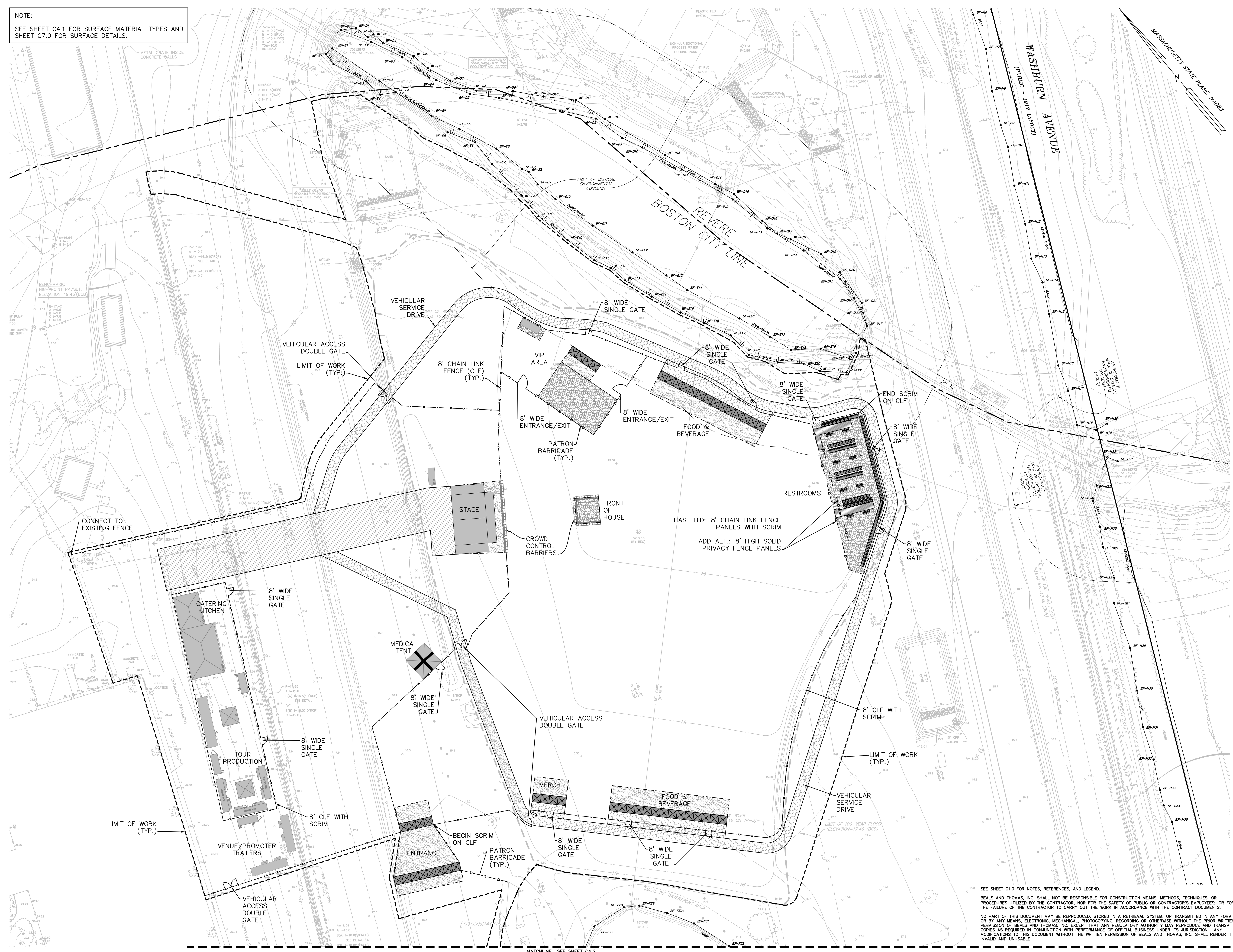
**SITE PREPARATION AND SEDIMENT CONTROL PLAN**

B+T JOB NO. 2854.18

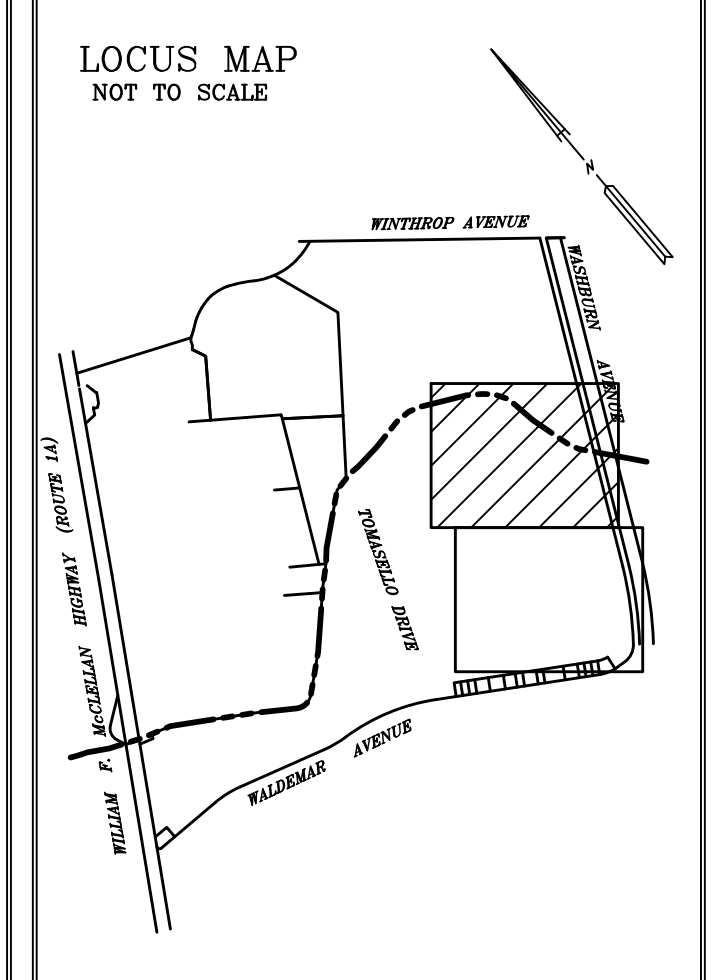
B+T PLAN NO. 285418P439A-002

**C3.1**

NOTE:  
SEE SHEET C4.1 FOR SURFACE MATERIAL TYPES AND SHEET C7.0 FOR SURFACE DETAILS.



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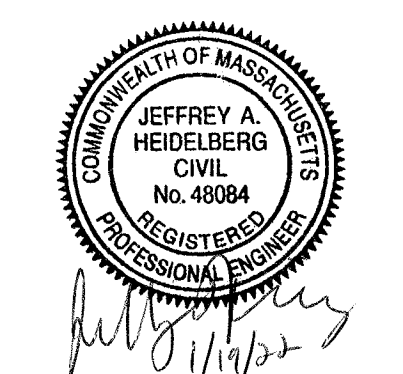


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PROJECT:  
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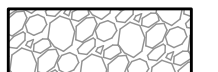

**LAYOUT AND MATERIALS PLAN**

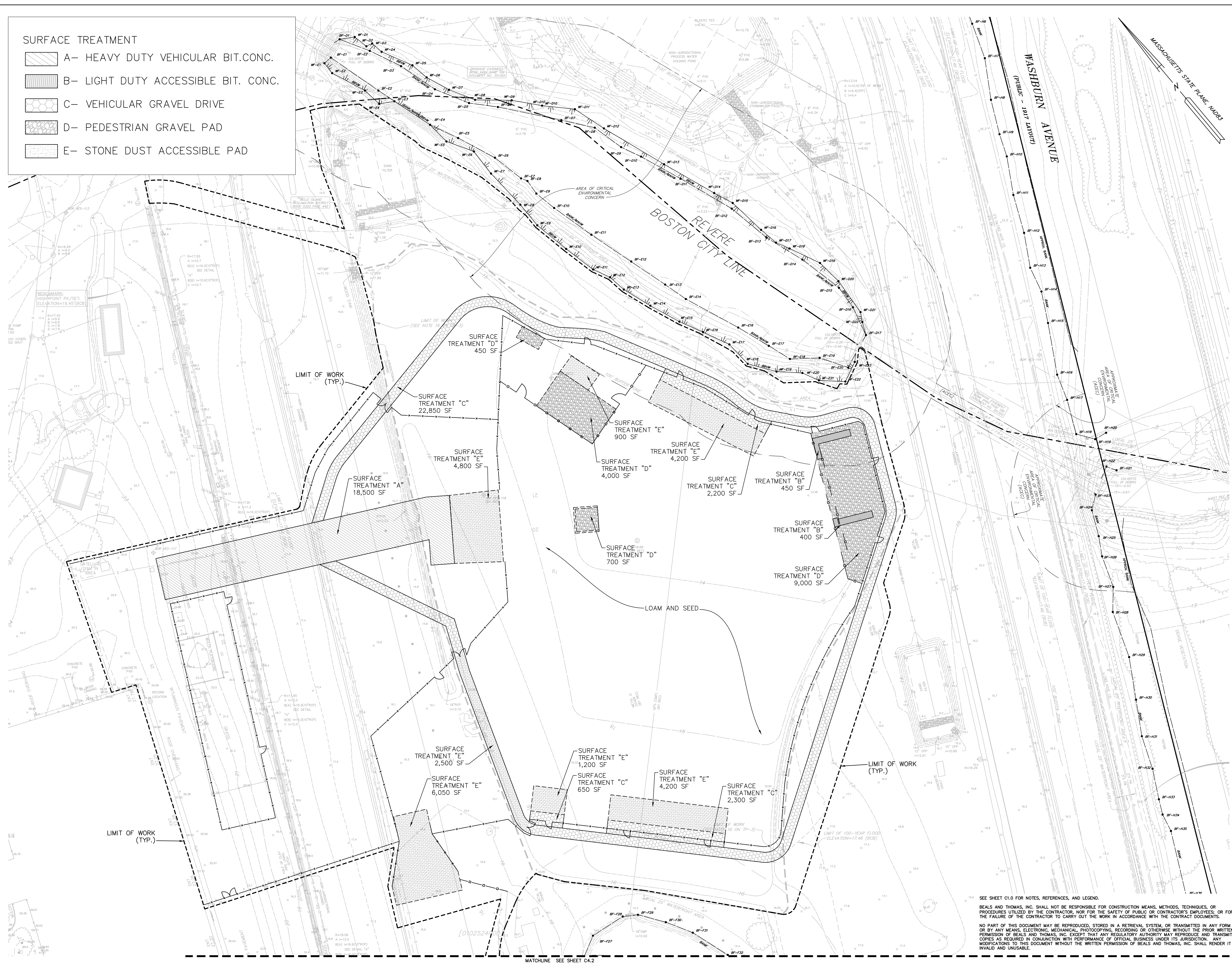
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B+T PLAN NO. 285418P439A-003 **C4.0**

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MATCHLINE SEE SHEET C4.2

**SURFACE TREATMENT**

-  A- HEAVY DUTY VEHICULAR BIT.CONC.
-  B- LIGHT DUTY ACCESSIBLE BIT. CONC.
-  C- VEHICULAR GRAVEL DRIVE
-  D- PEDESTRIAN GRAVEL PAD
-  E- STONE DUST ACCESSIBLE PAD

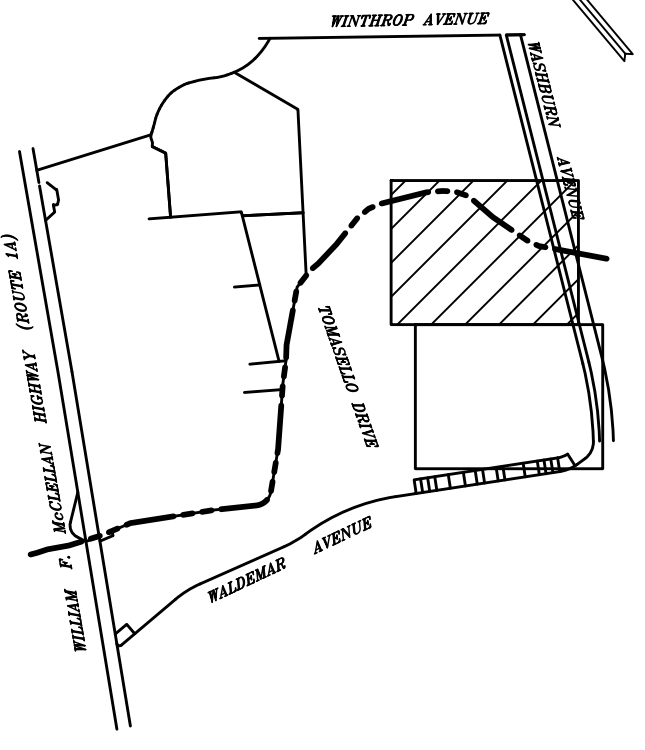


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ONE CONGRESS STREET  
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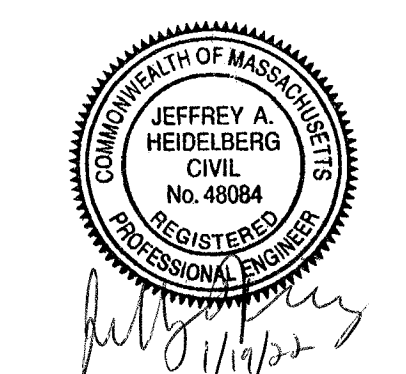
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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**

BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021



**LAYOUT AND MATERIALS PLAN**

B+T JOB NO. 2854.18

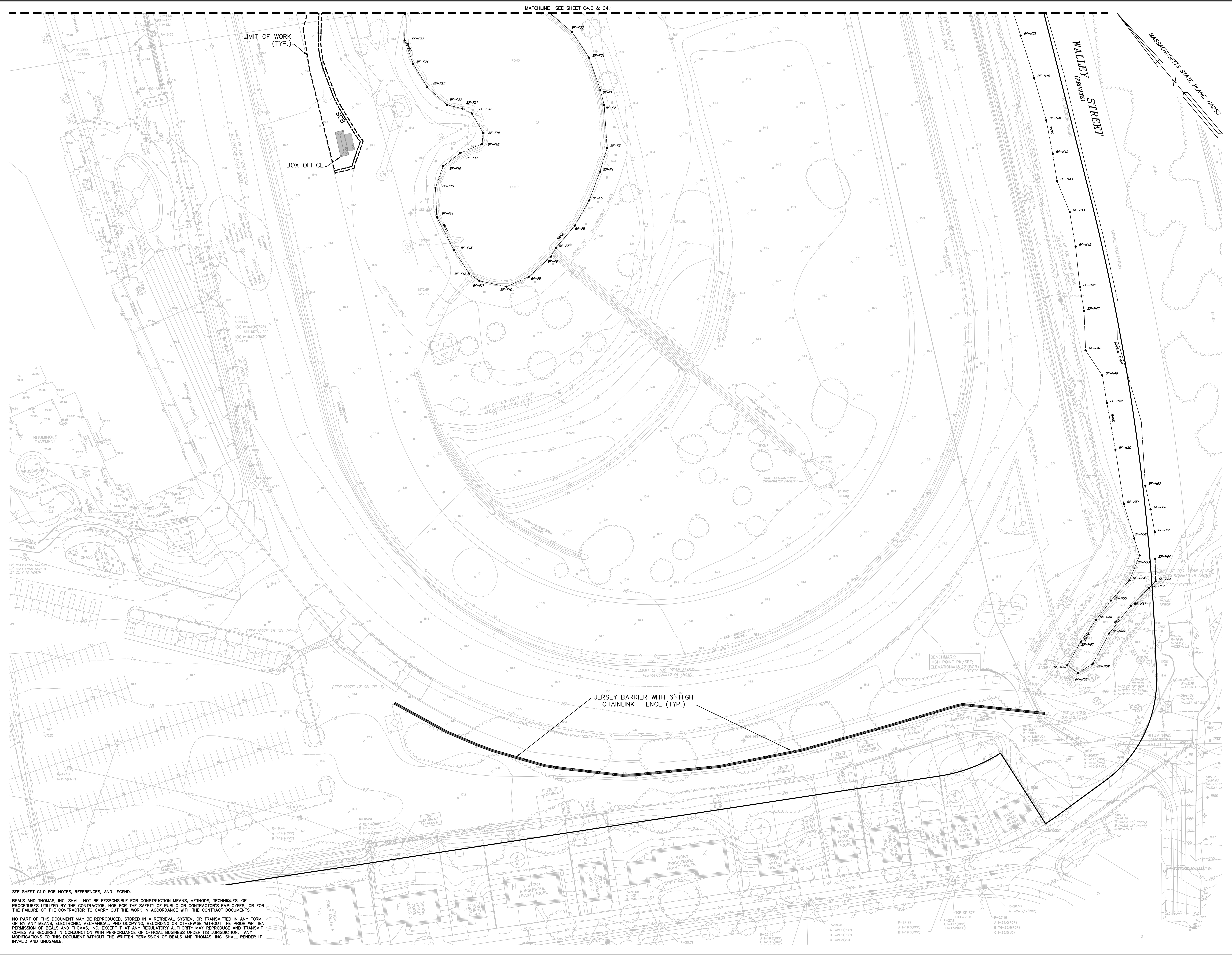
B+T PLAN NO. 285418P439A-003

**C4.1**

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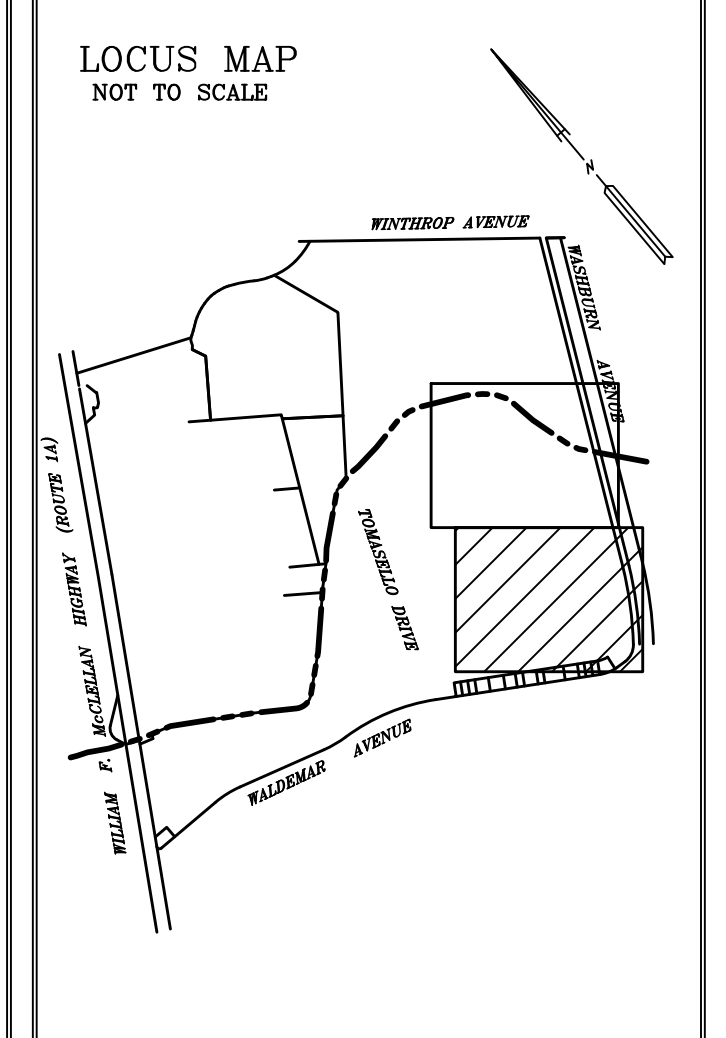
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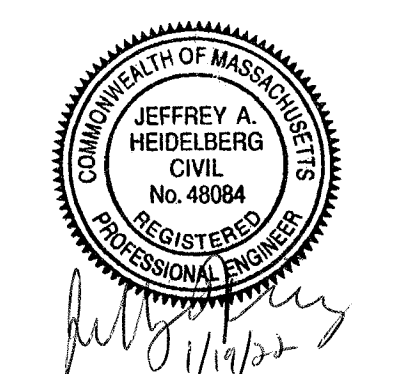
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BOSTON, MASSACHUSETTS

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**LAYOUT AND MATERIALS PLAN**

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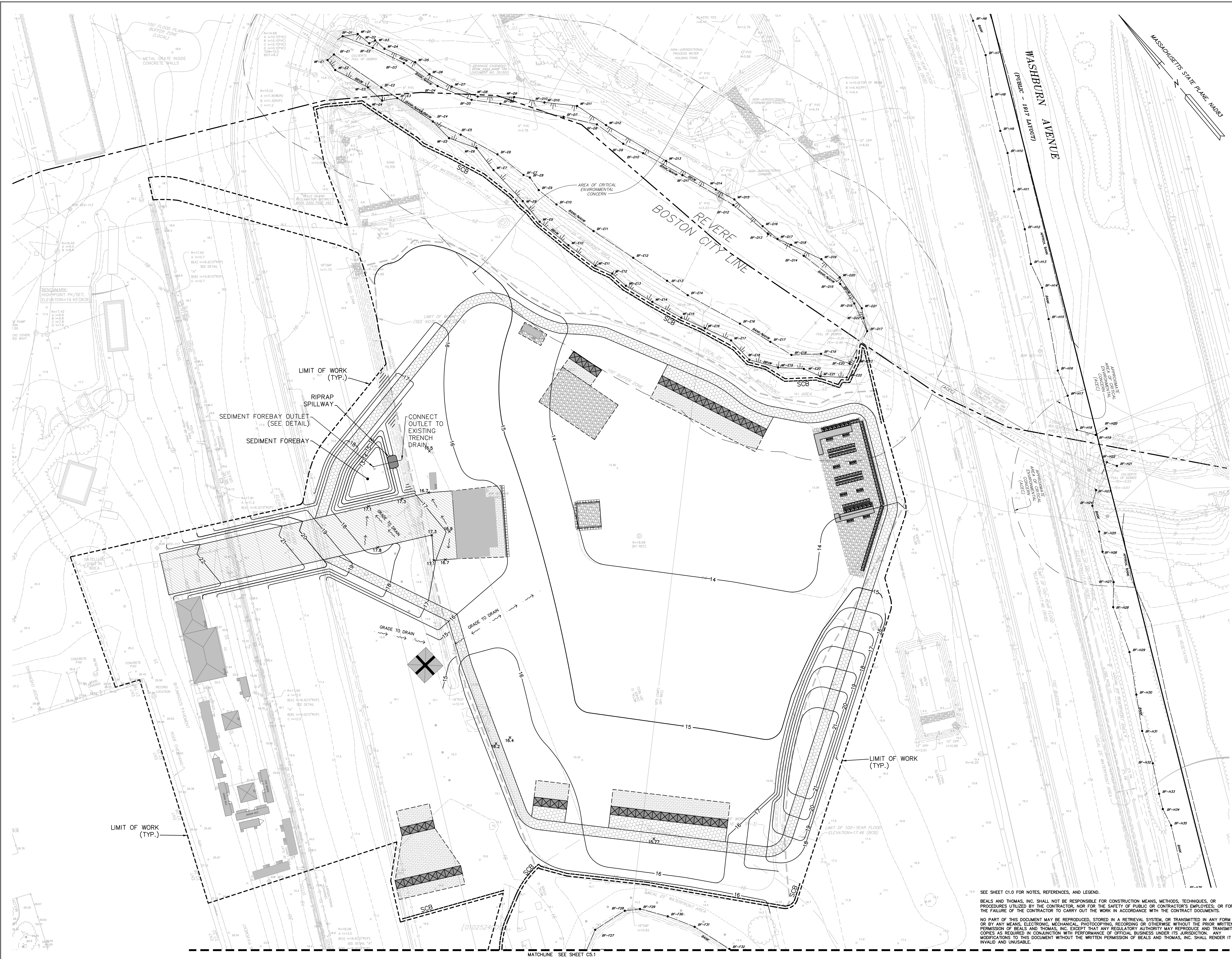
B+T PLAN NO. 285418P439A-005

**C4.2**

SEE SHEET C1.0 FOR NOTES, REFERENCES, AND LEGEND.

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PREPARED FOR:

**The McClellan Highway Department Company, LLC**  
 c/o the HYM Investment Group, LLC

ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP  
 NOT TO SCALE

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ISSUE DATE: 01/19/2022 FOR PERMITTING

ISSUE DATE	DESCRIPTION
RFK	RFK JAH/FDW JAH
DES	DWN CHK'D APP'D

PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

**GRADING AND DRAINAGE PLAN**

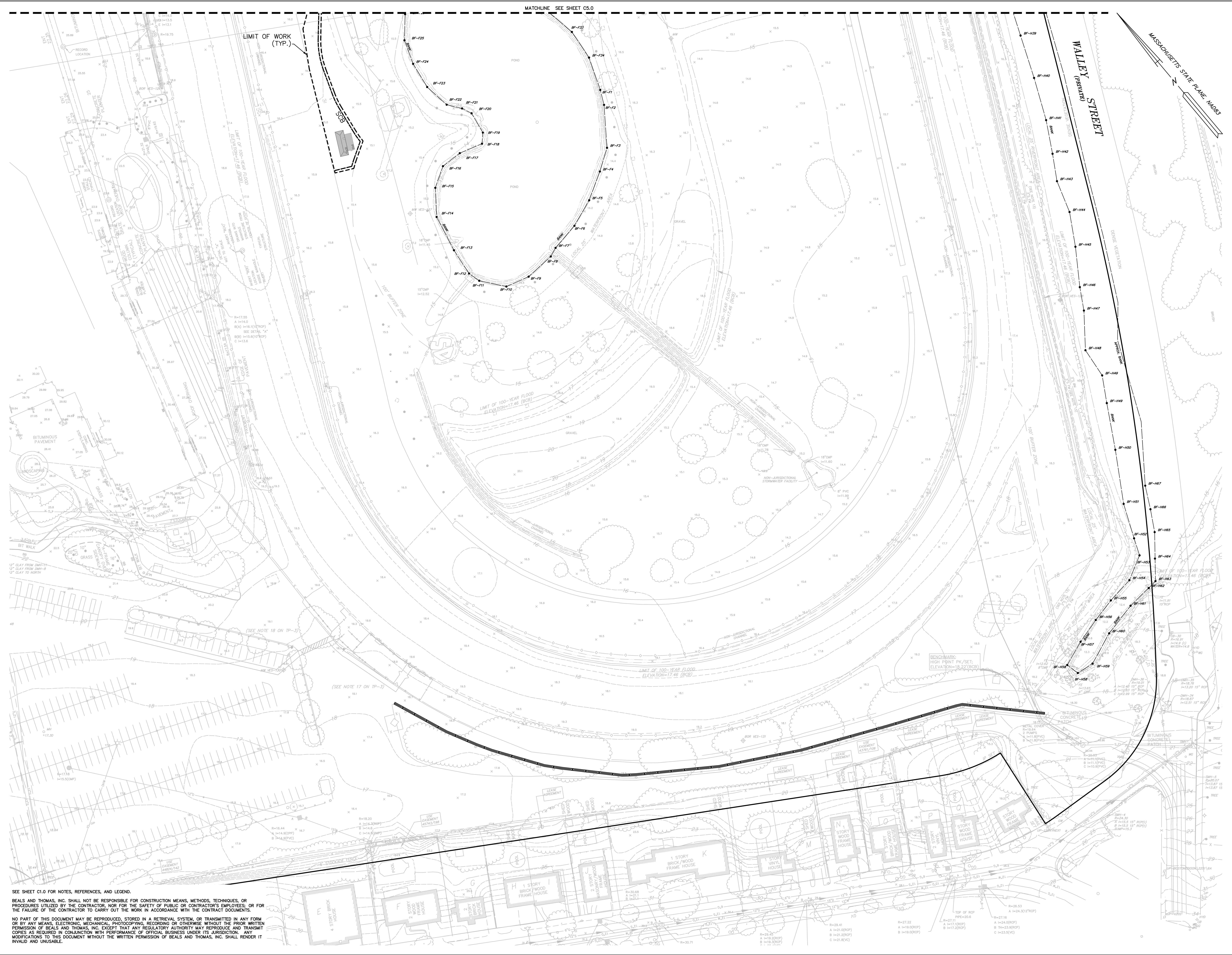
B+T JOB NO. 2854.18	<b>C5.0</b>
B+T PLAN NO. 285418P439A-006	

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MATCHLINE SEE SHEET C5.1



SEE SHEET C1.0 FOR NOTES, REFERENCES, AND LEGEND.

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 c/o the HYM Investment Group, LLC

ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP  
 NOT TO SCALE

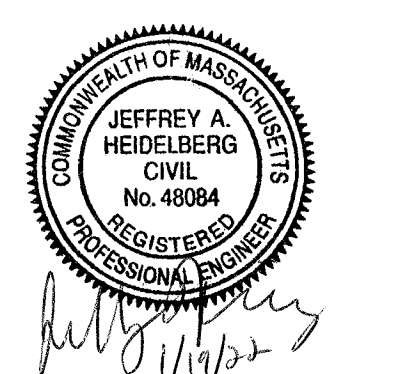
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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**

BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

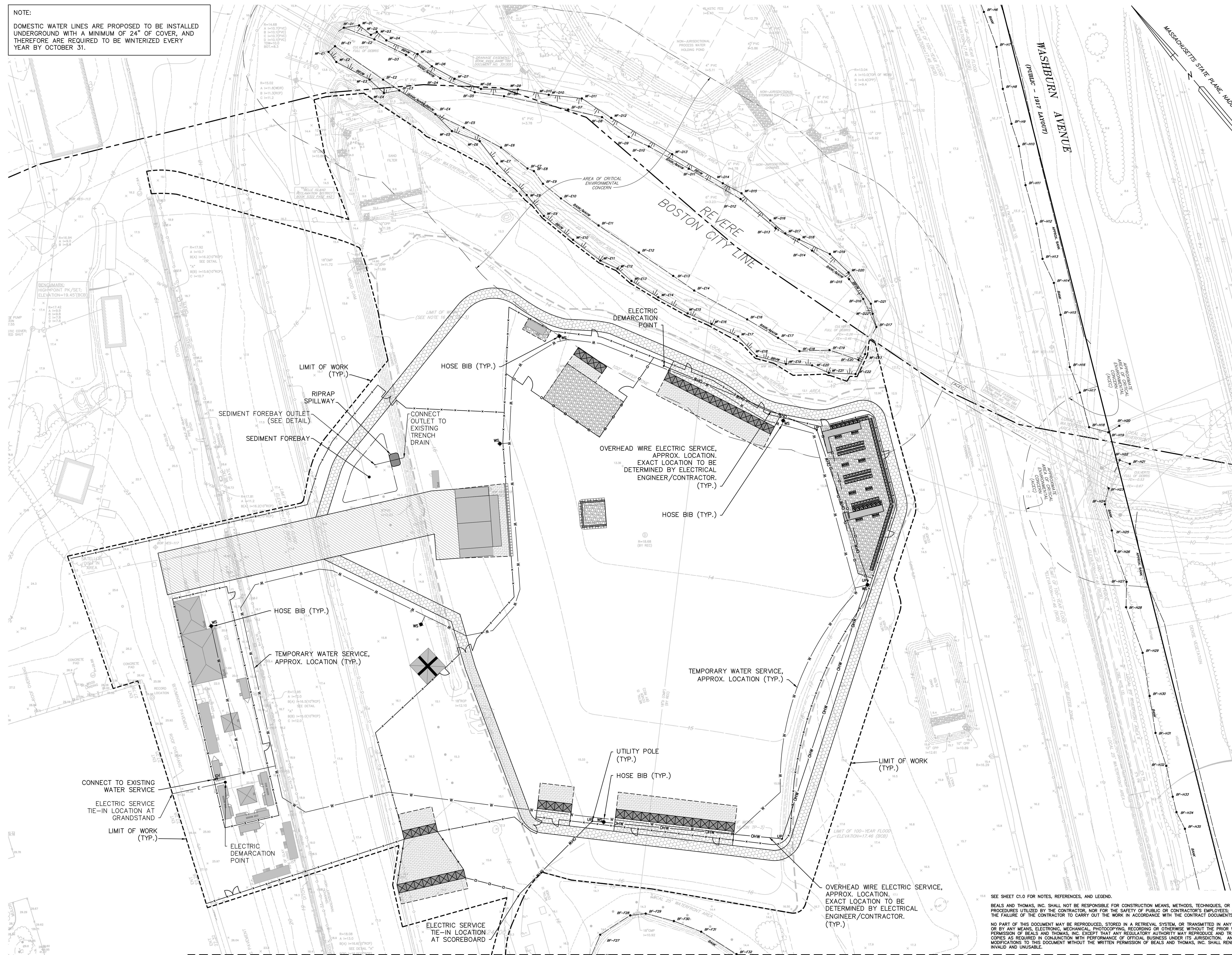
**GRADING AND DRAINAGE PLAN**

B+T JOB NO. 2854.18

B+T PLAN NO. 285418P439A-007

**C5.1**

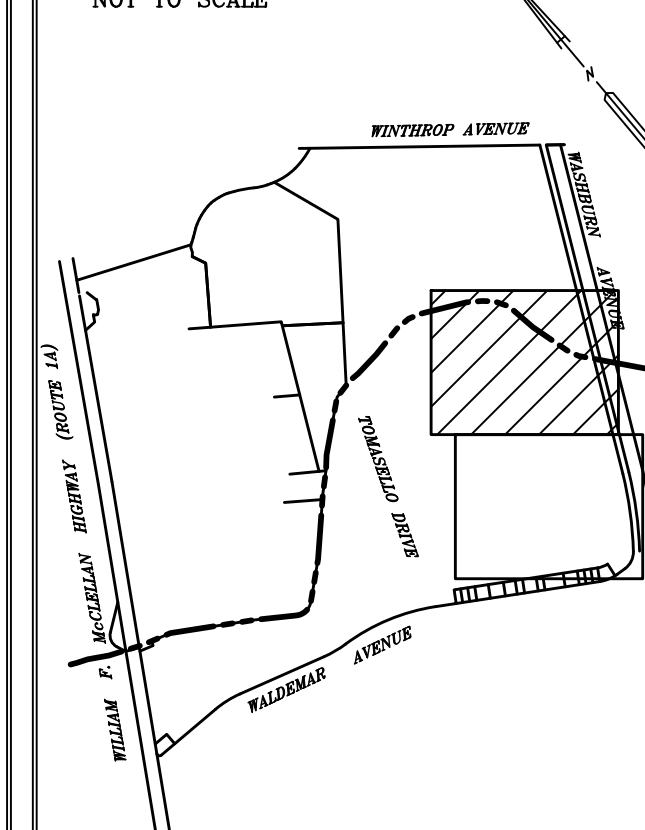
NOTE:  
DOMESTIC WATER LINES ARE PROPOSED TO BE INSTALLED UNDERGROUND WITH A MINIMUM OF 24" OF COVER, AND THEREFORE ARE REQUIRED TO BE WINTERIZED EVERY YEAR BY OCTOBER 31.



PREPARED FOR:

**The McClellan Highway Department Company, LLC**  
c/o the HYM Investment Group, LLC  
ONE CONGRESS STREET  
BOSTON, MASSACHUSETTS

LOCUS MAP  
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ISSUE DATE	DESCRIPTION
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DES	DWN CHK'D APP'D

PROJECT:  
**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

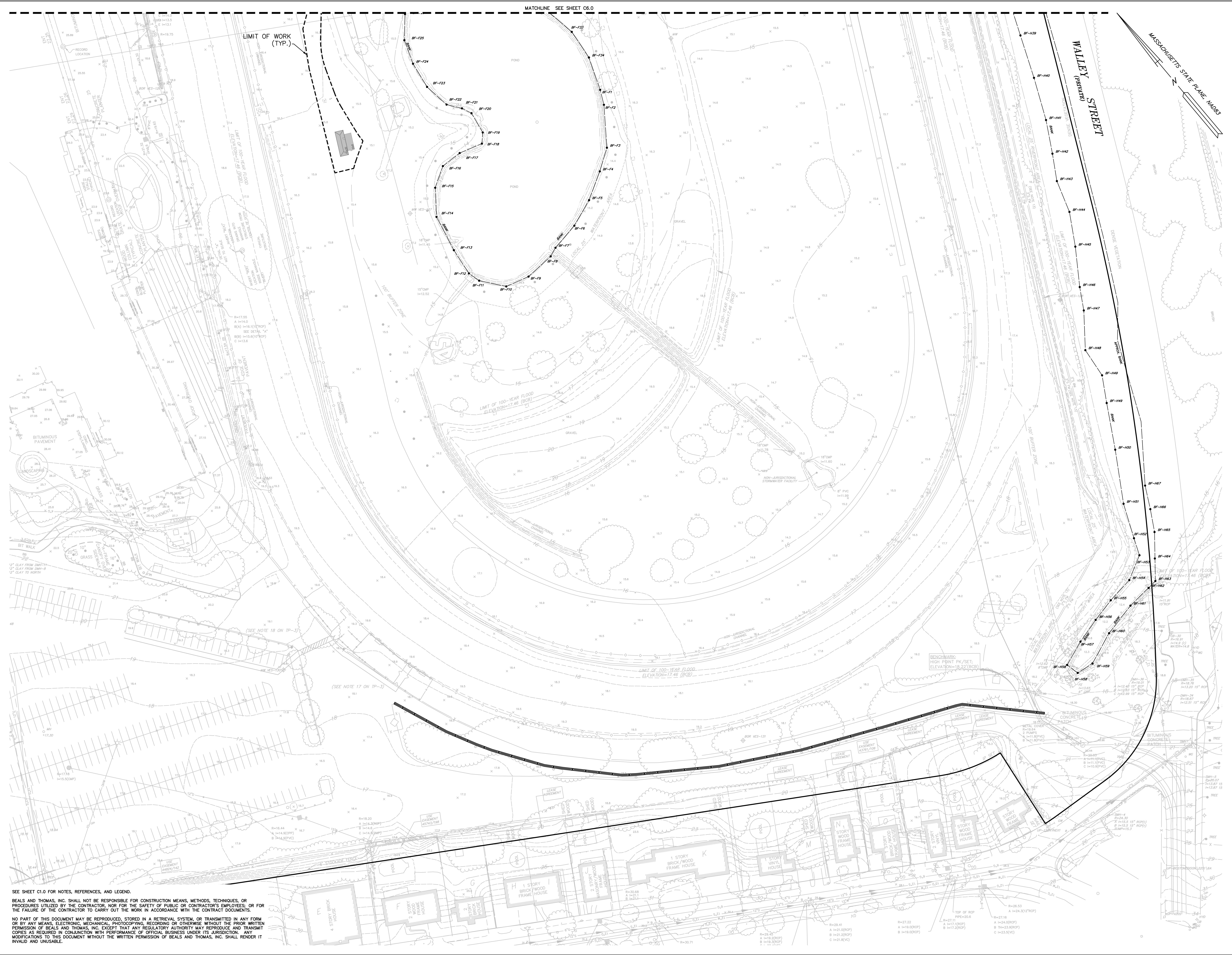


**UTILITY PLAN**

B+T JOB NO. 2854.18  
B+T PLAN NO. 285418P439A-008 **C6.0**

SEE SHEET C1.0 FOR NOTES, REFERENCES, AND LEGEND.  
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MATCHLINE SEE SHEET C6.1



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**The McClellan Highway Department Company, LLC**  
 c/o the HYM Investment Group, LLC

ONE CONGRESS STREET  
 BOSTON, MASSACHUSETTS

LOCUS MAP  
 NOT TO SCALE

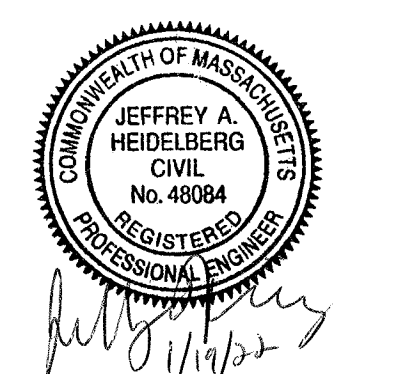
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ISSUE DATE	DESCRIPTION
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DES	DWN CHK'D APP'D

PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**

BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

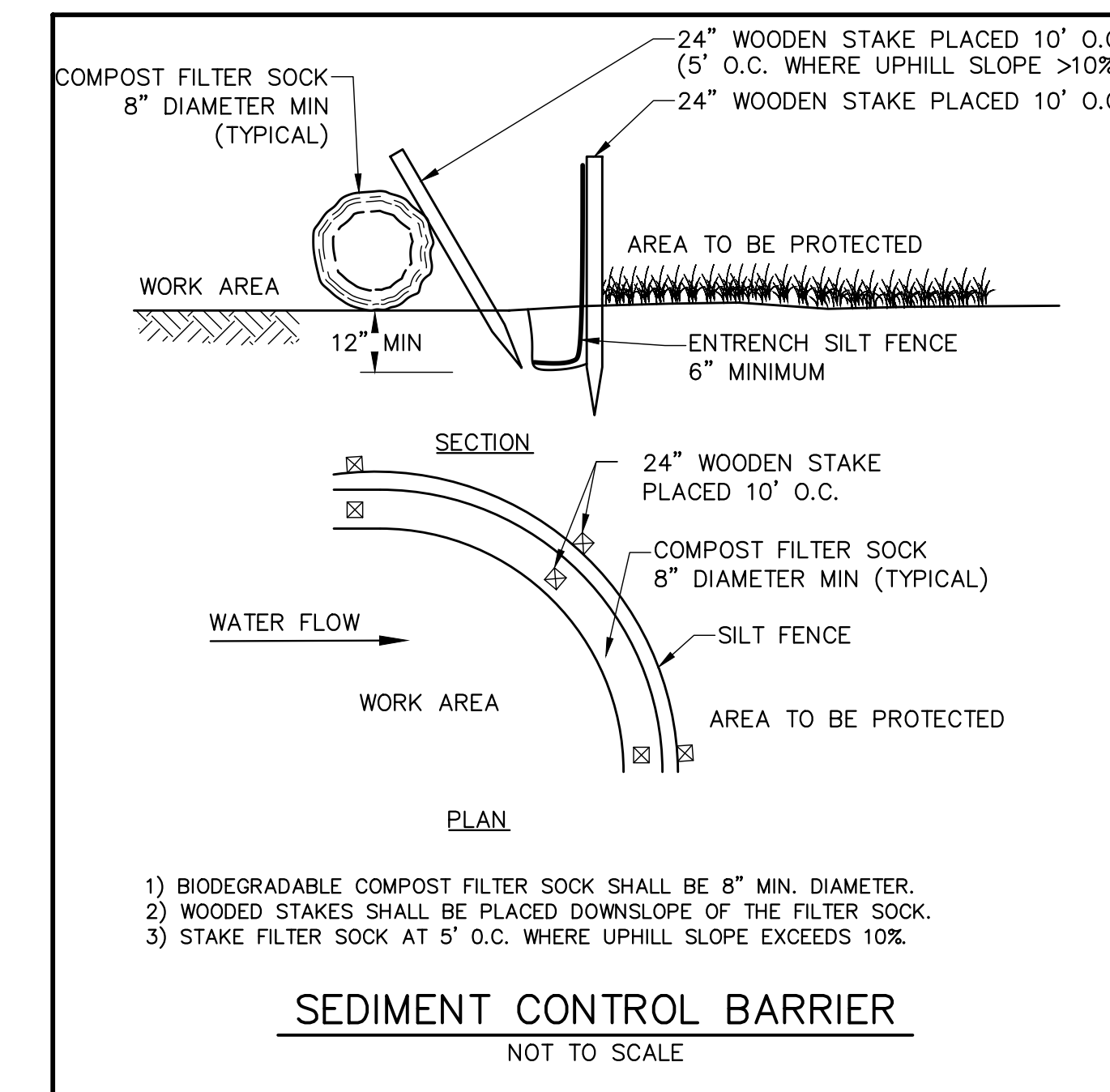
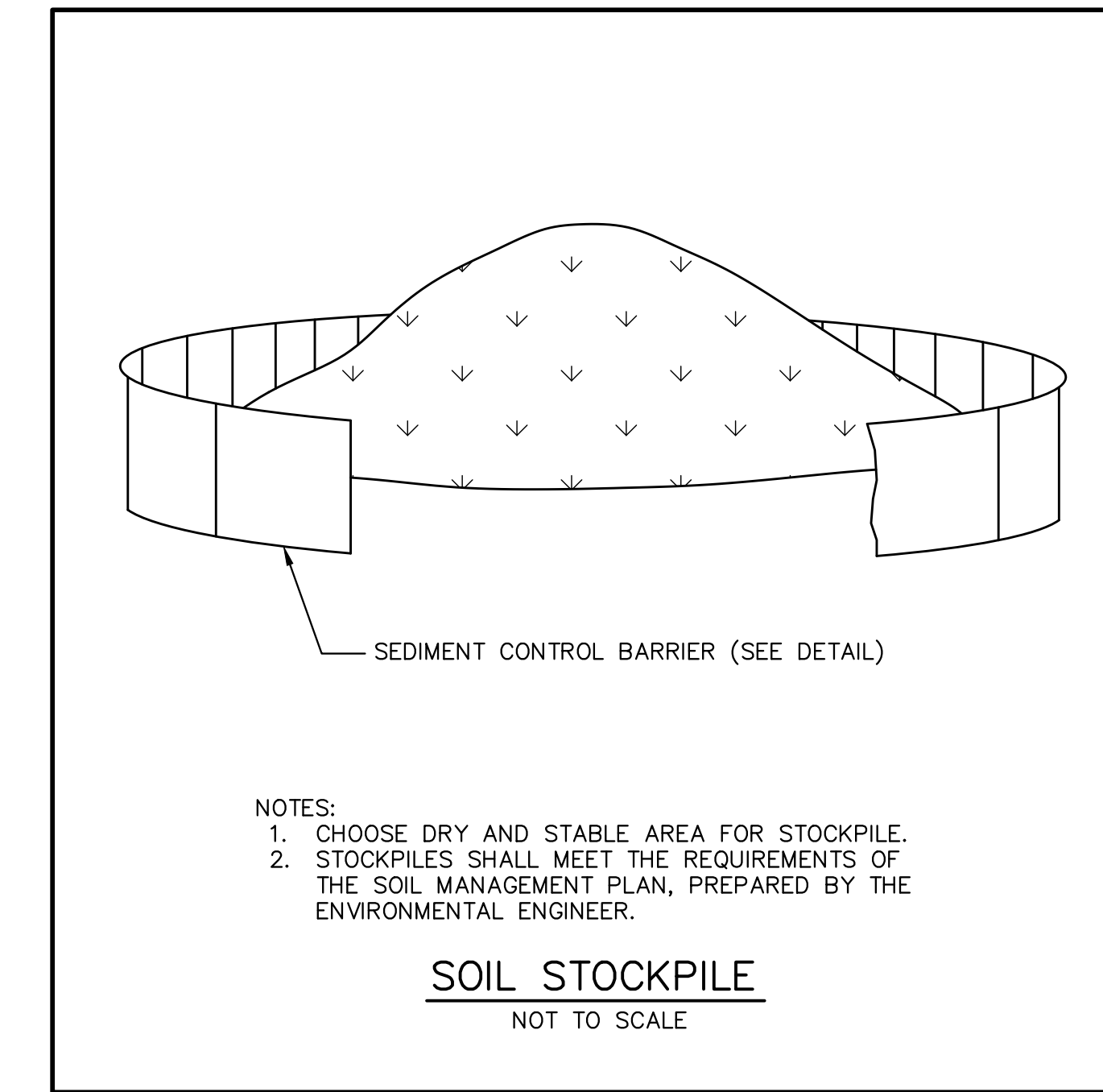
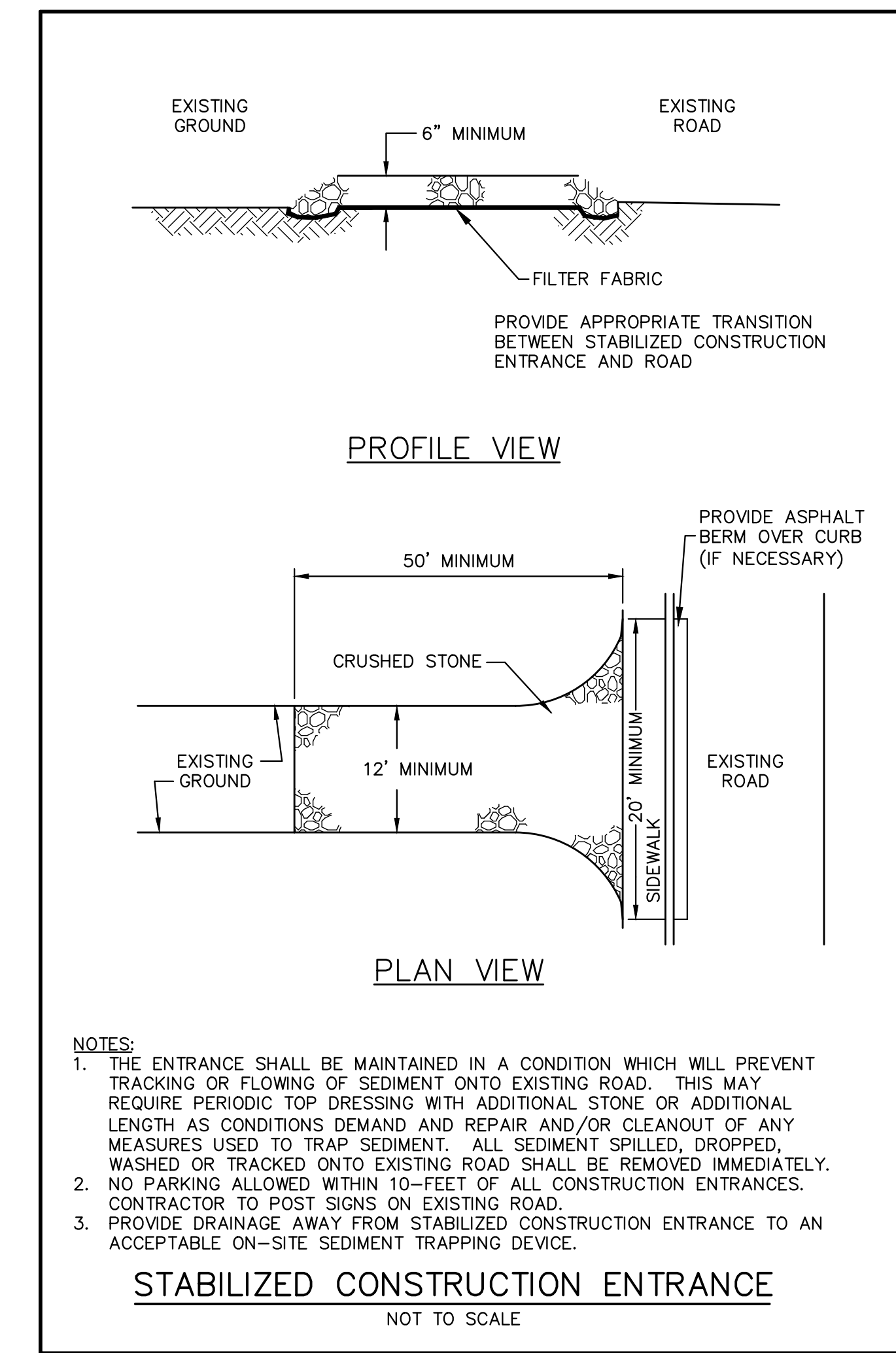
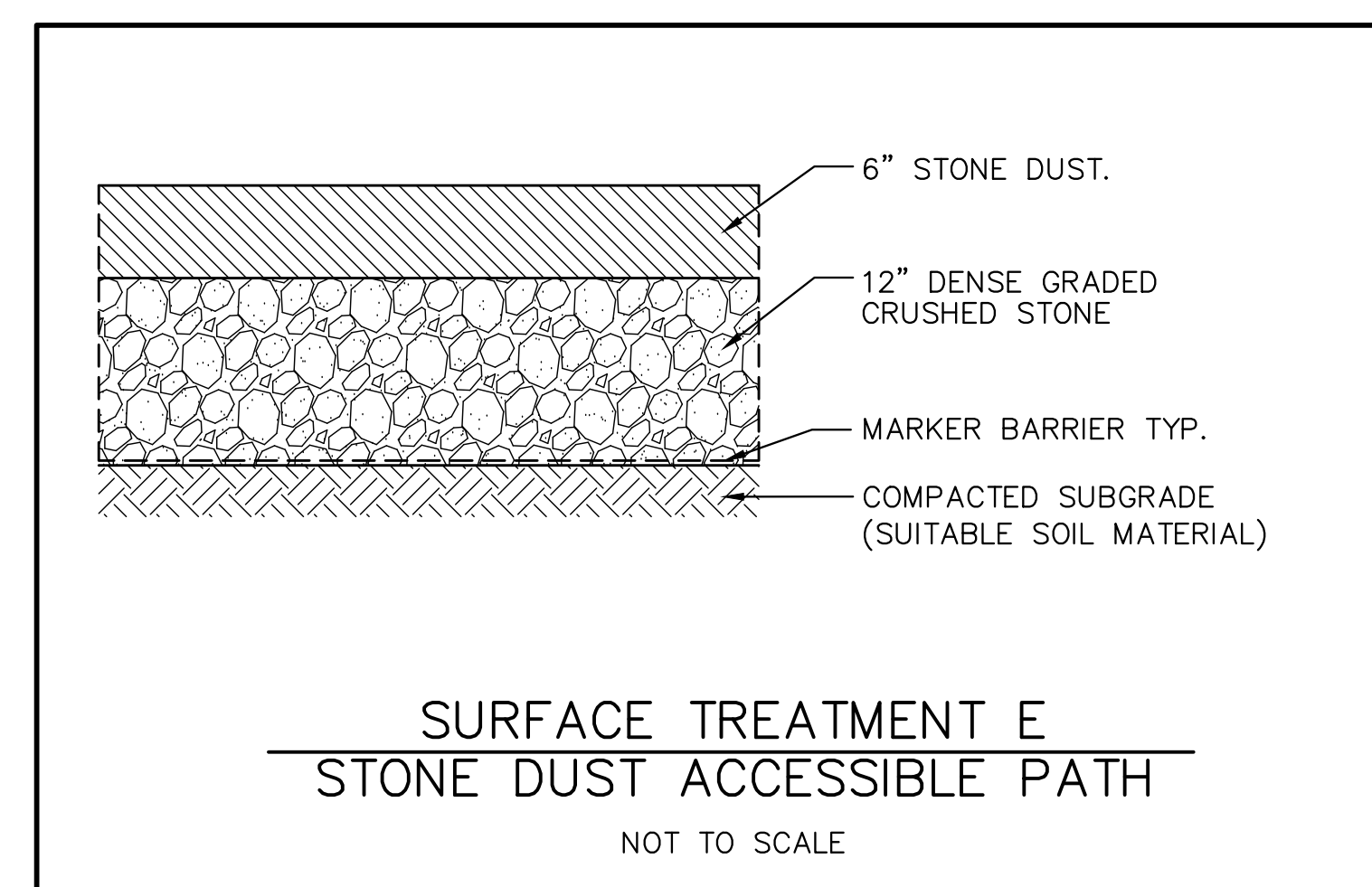
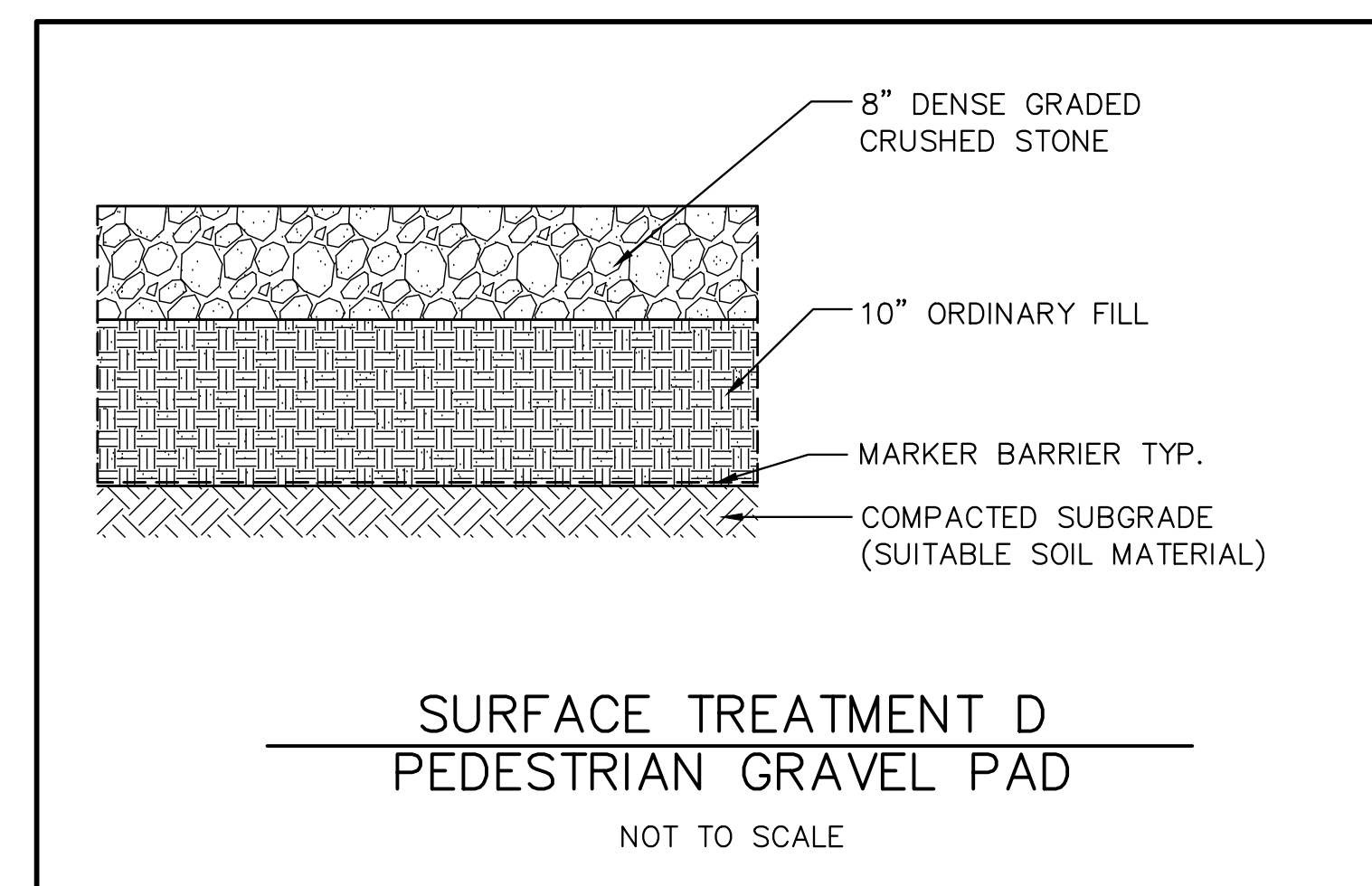
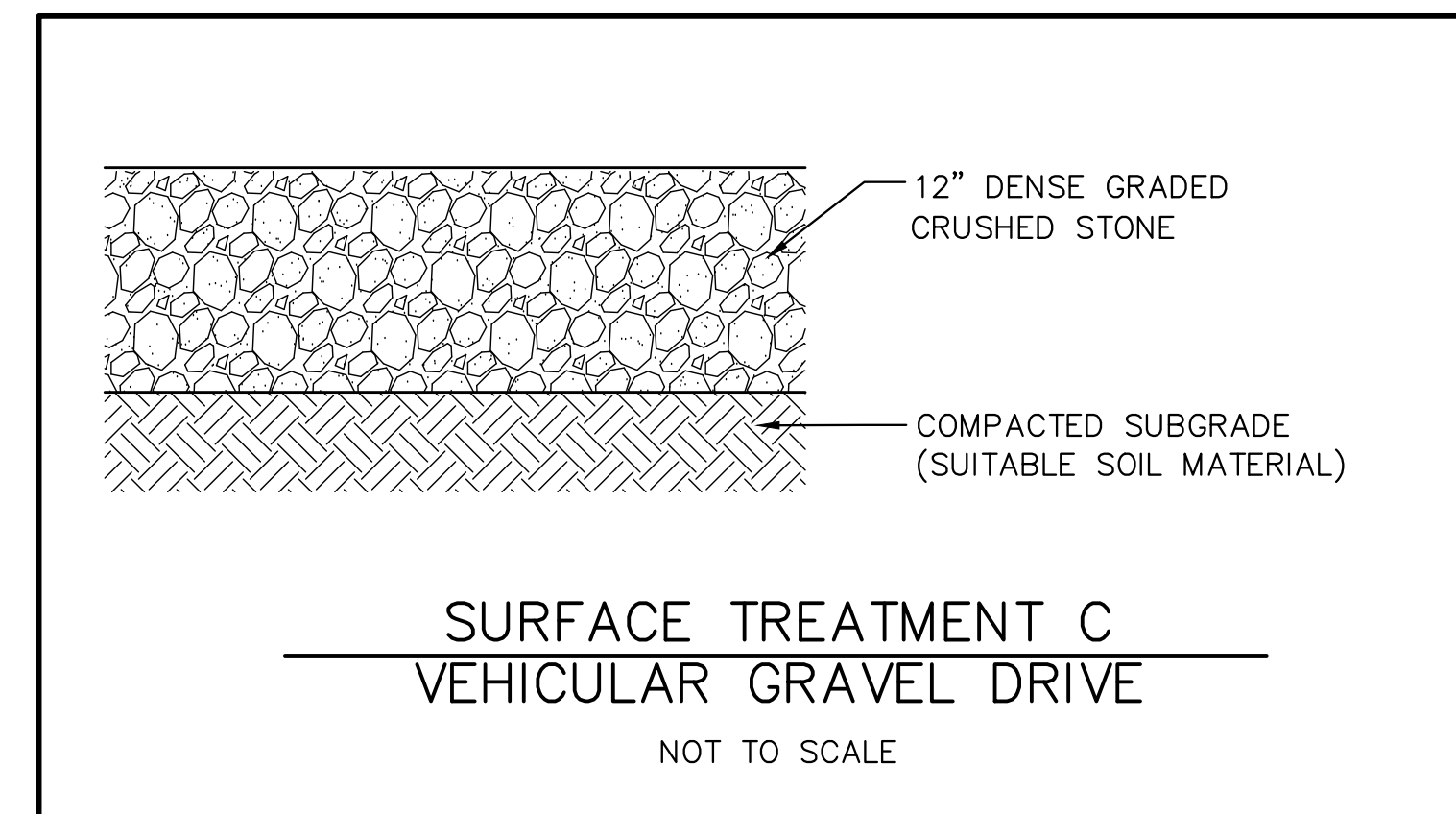
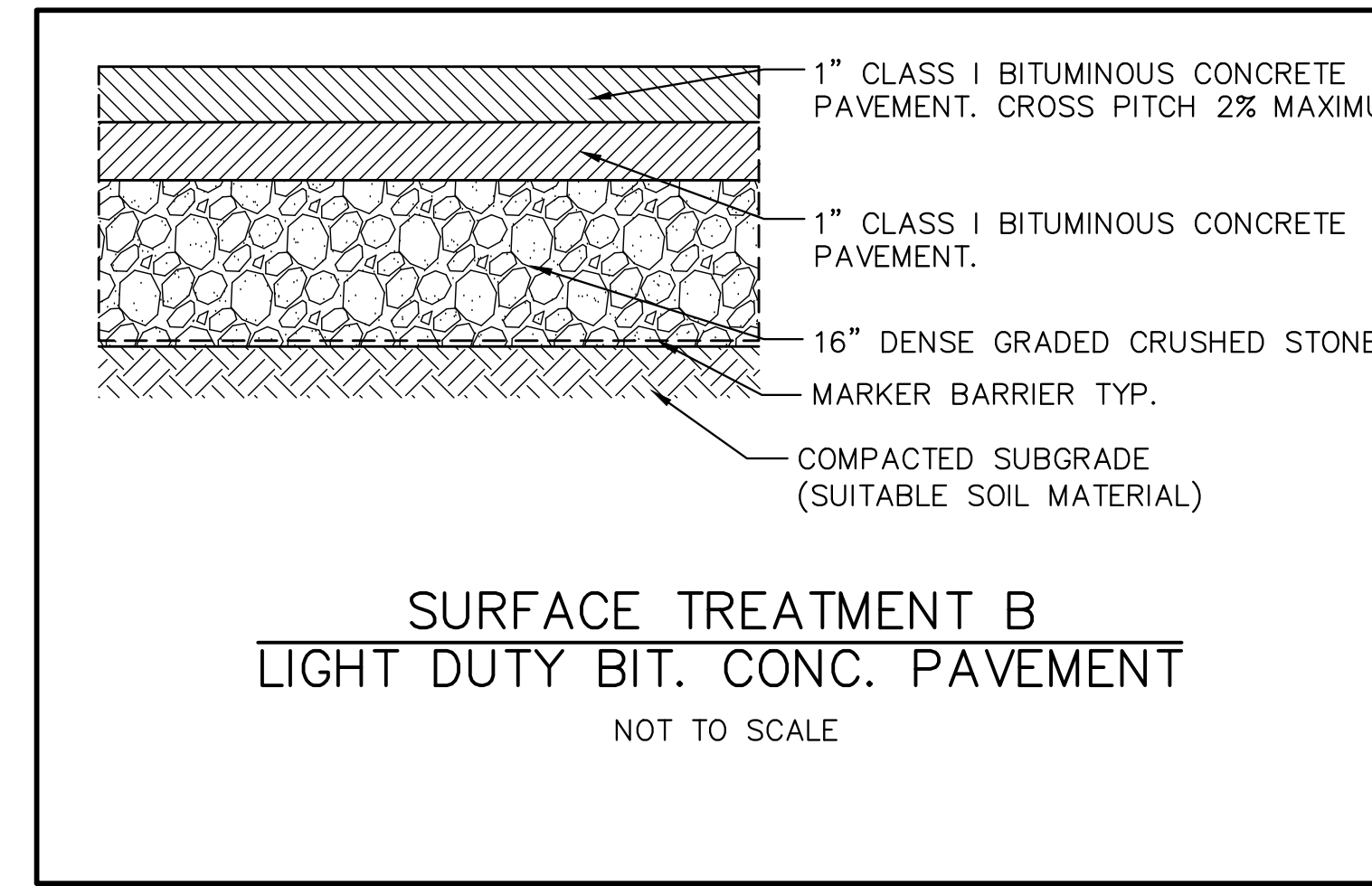
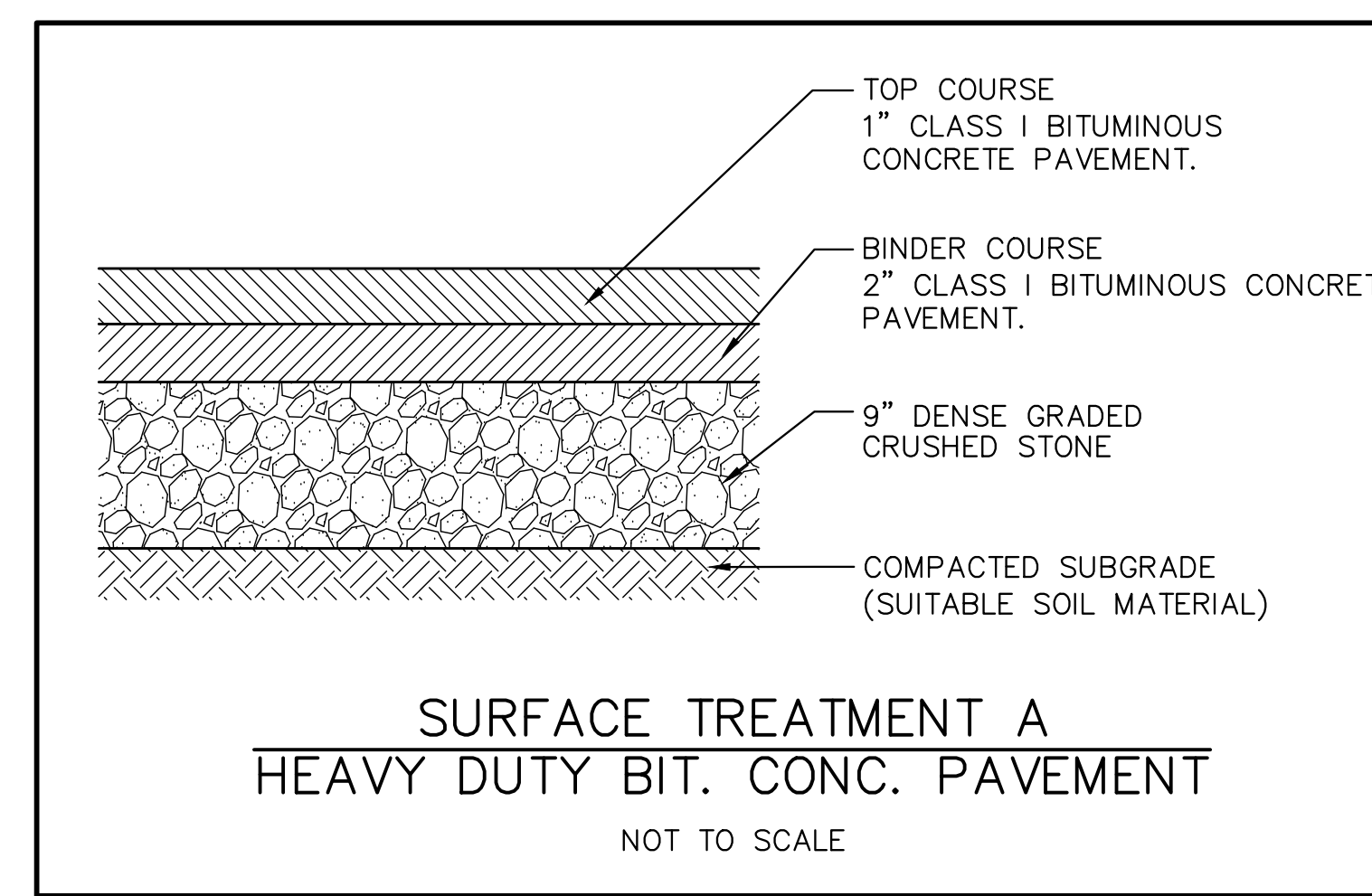
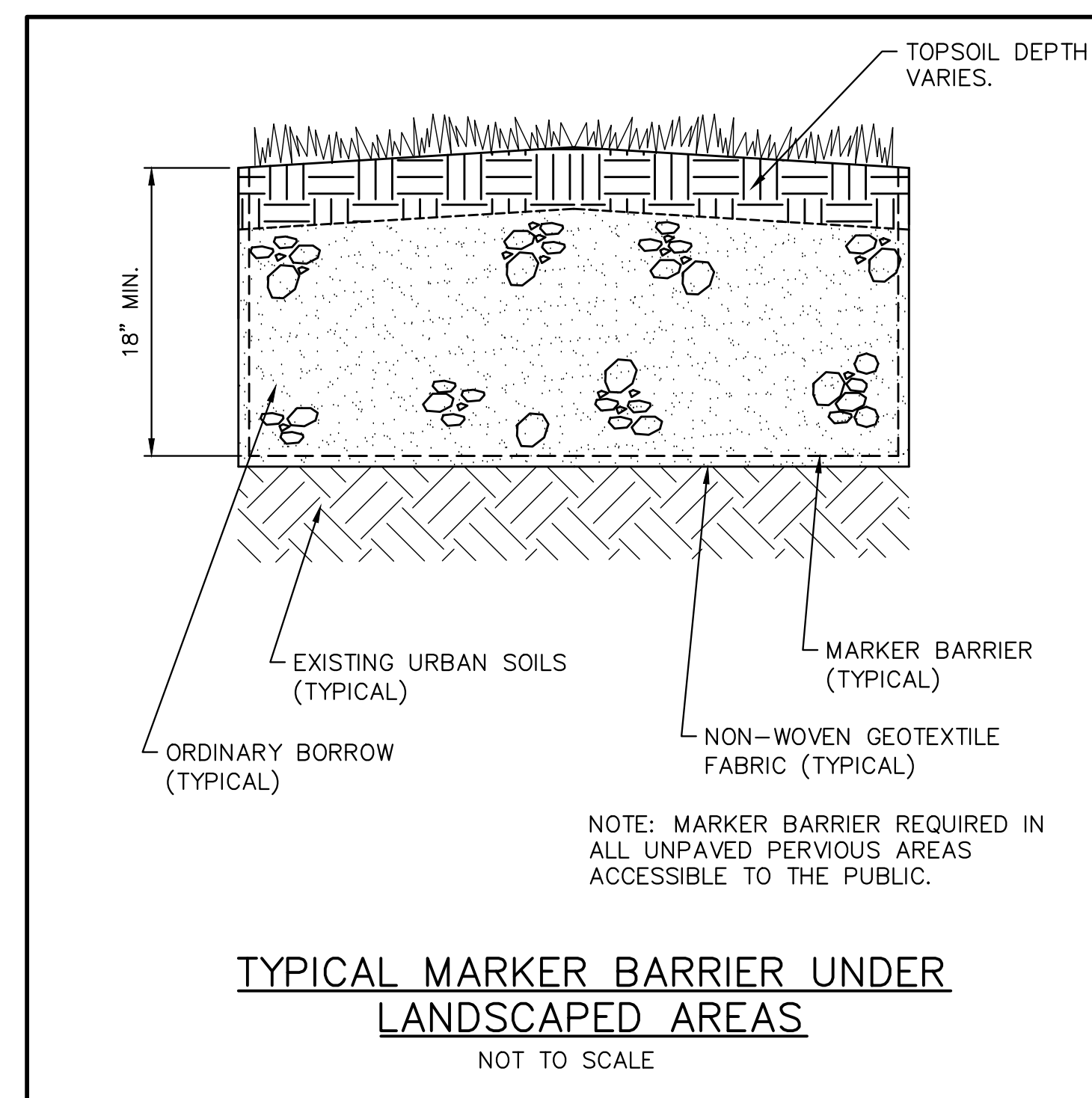
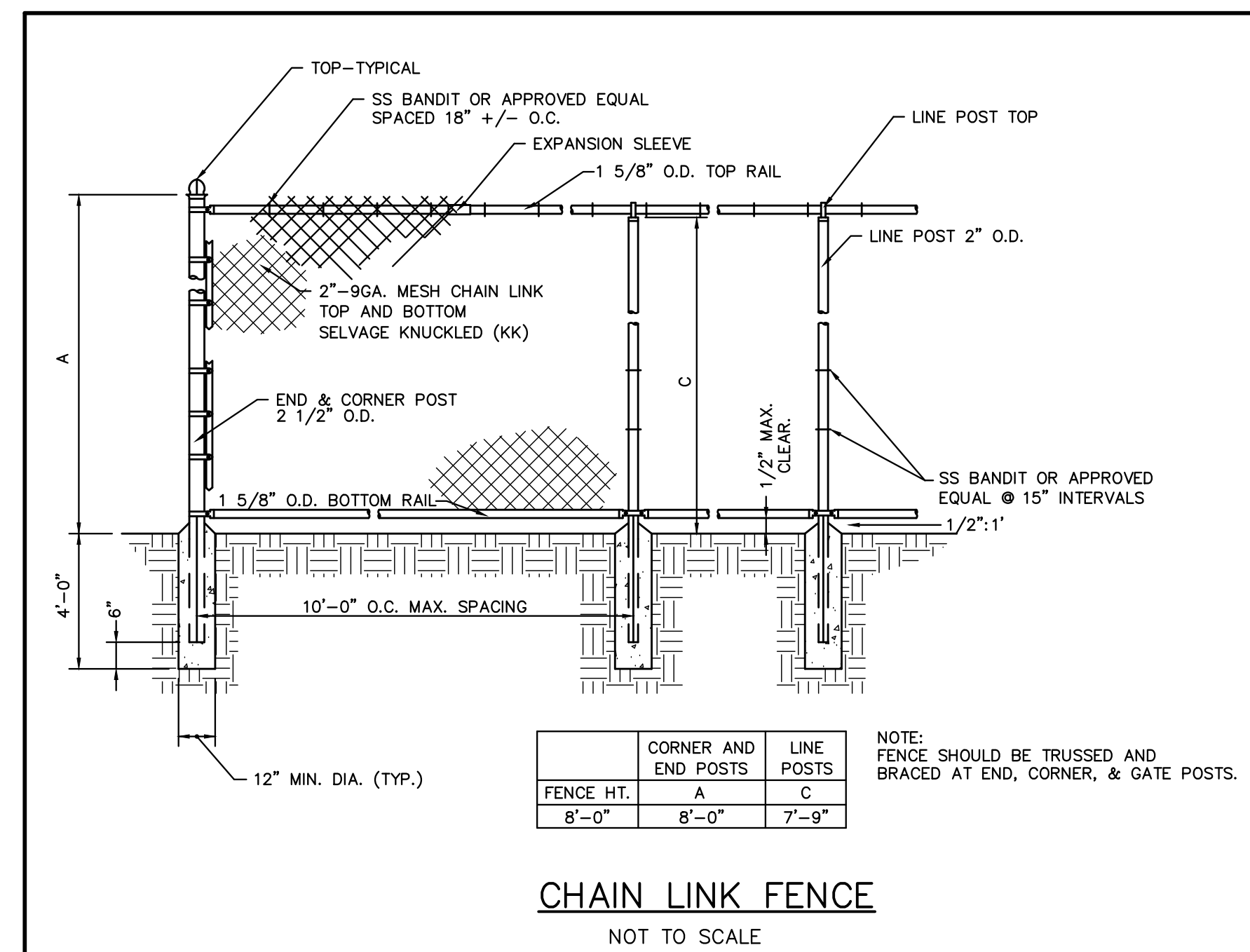
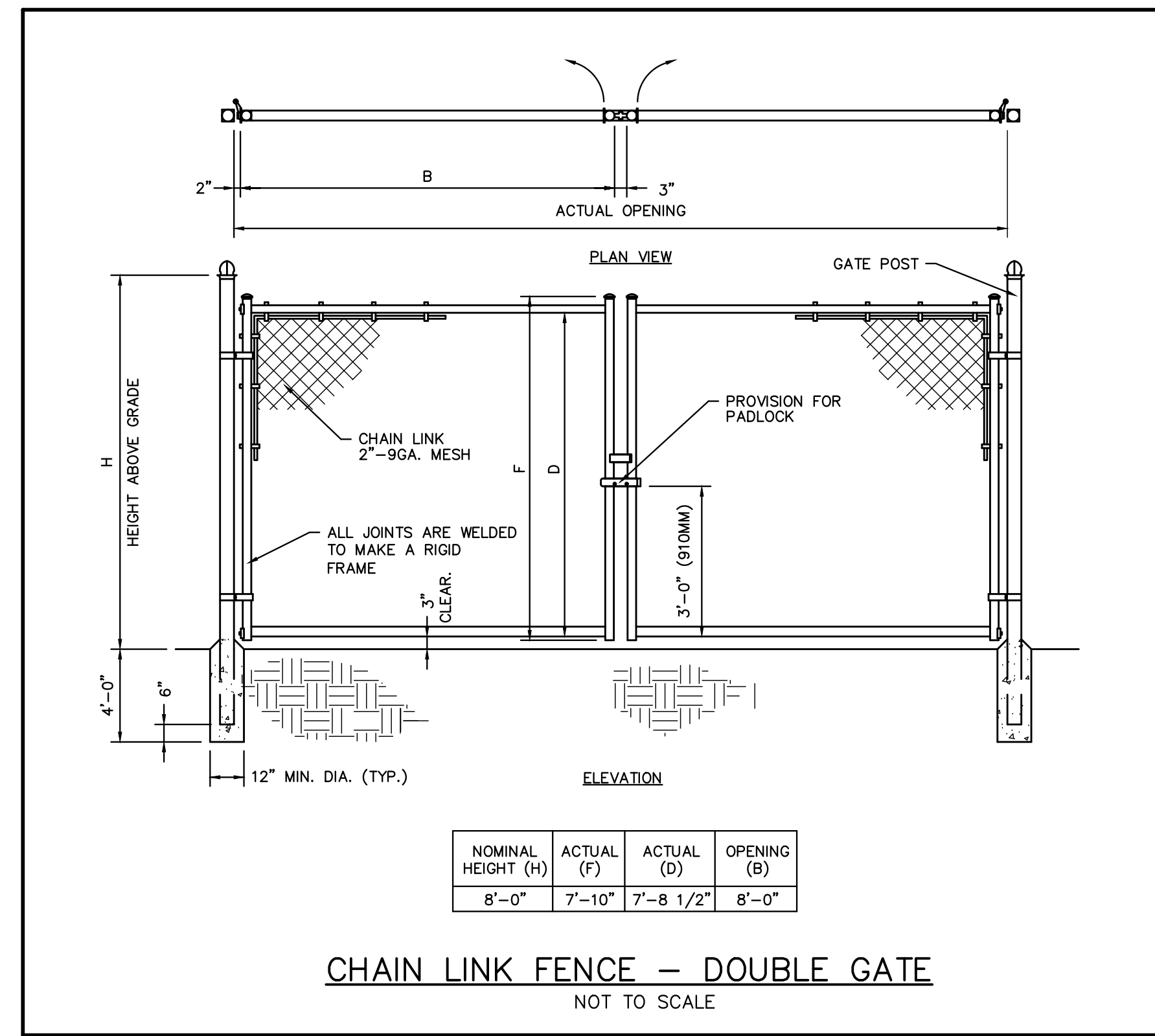
**UTILITY PLAN**

B+T JOB NO. 2854.18

B+T PLAN NO. 285418P439A-009

**C6.1**

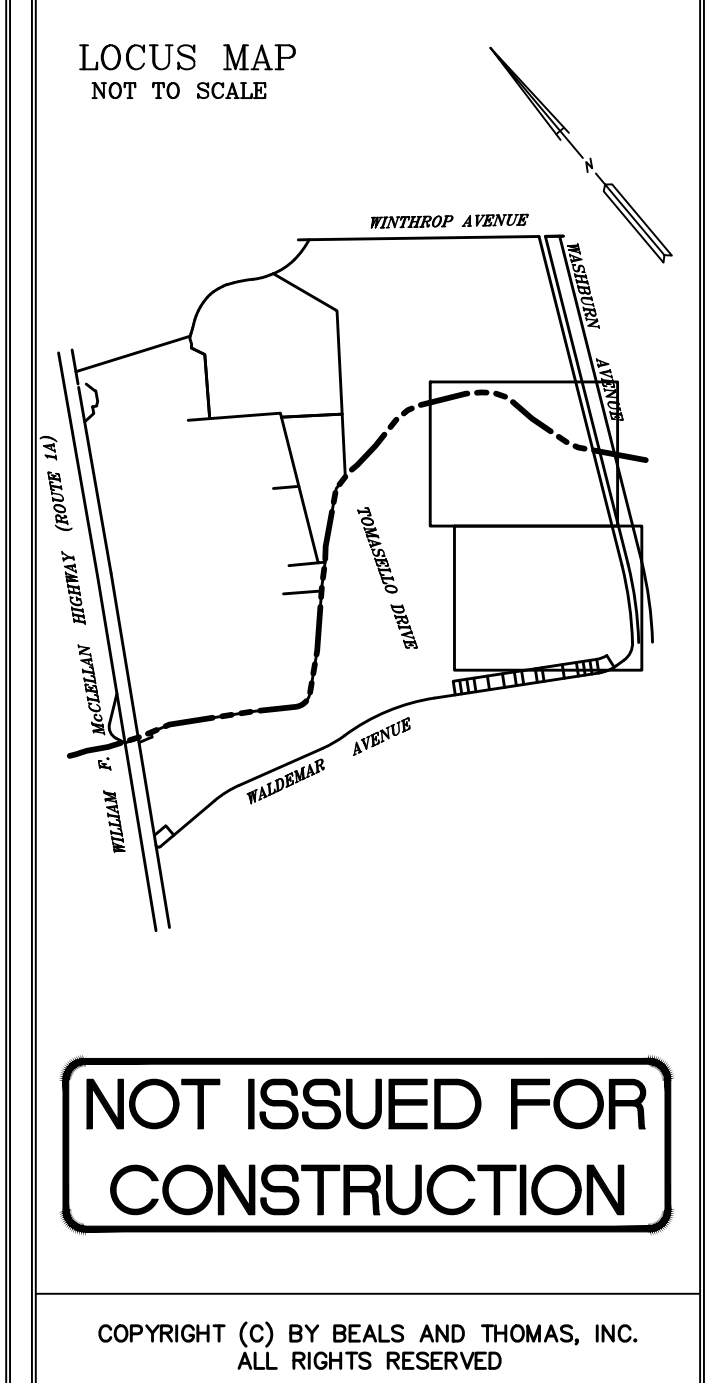




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ONE CONGRESS STREET  
BOSTON, MASSACHUSETTS



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PROFESSIONAL ENGINEER

JEFFREY A. HEIDELBERG  
CIVIL  
No. 45084  
REGISTERED PROFESSIONAL ENGINEER

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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**

BOSTON, MASSACHUSETTS

SCALE: AS SHOWN DATE: JANUARY 19, 2021

**SITE DETAILS**

B+T JOB NO. 285418

B+T PLAN NO. 285418P437A-003

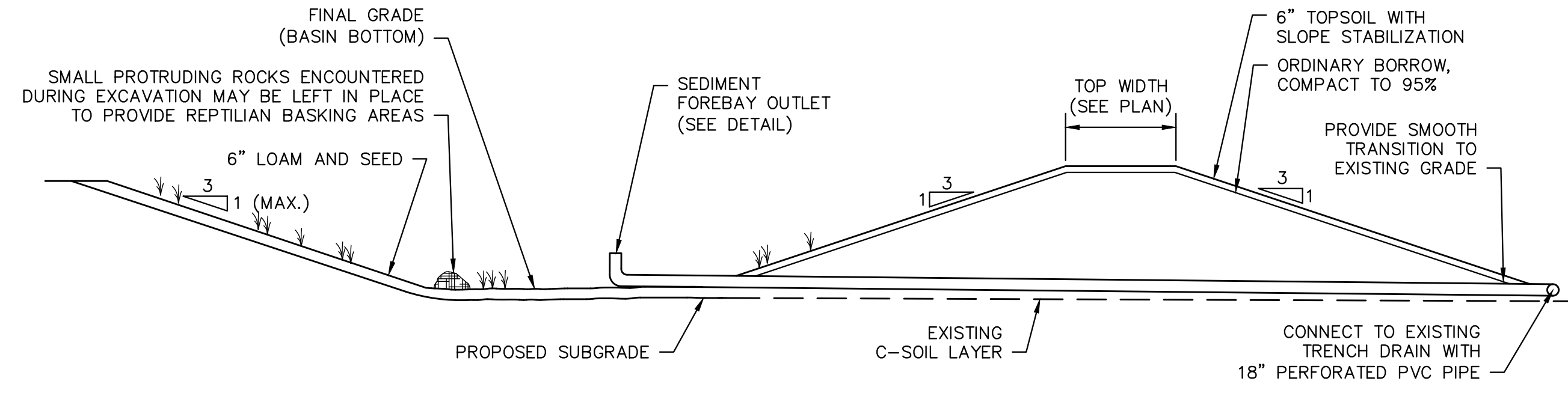
**C7.0**

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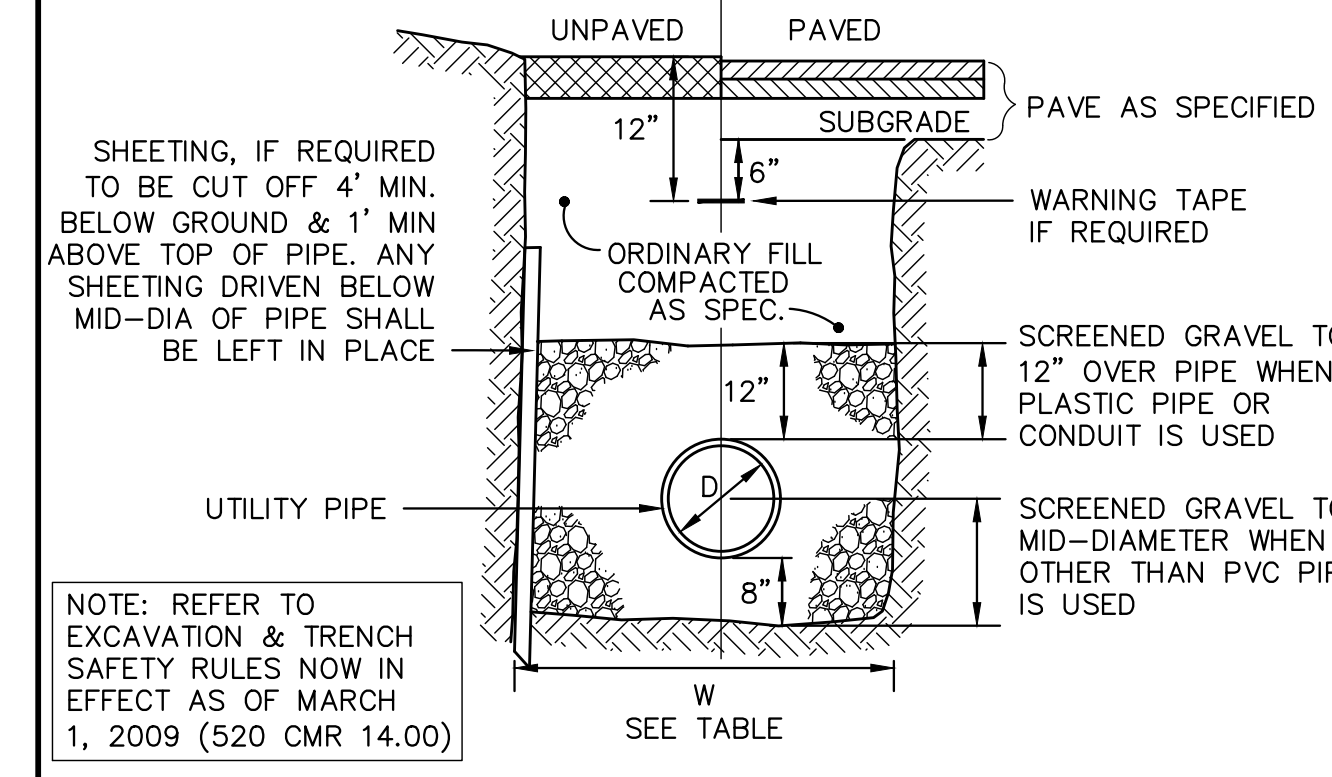
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NOTE:  
FINAL GRADES ARE SHOWN ON GRADING AND DRAINAGE PLANS.



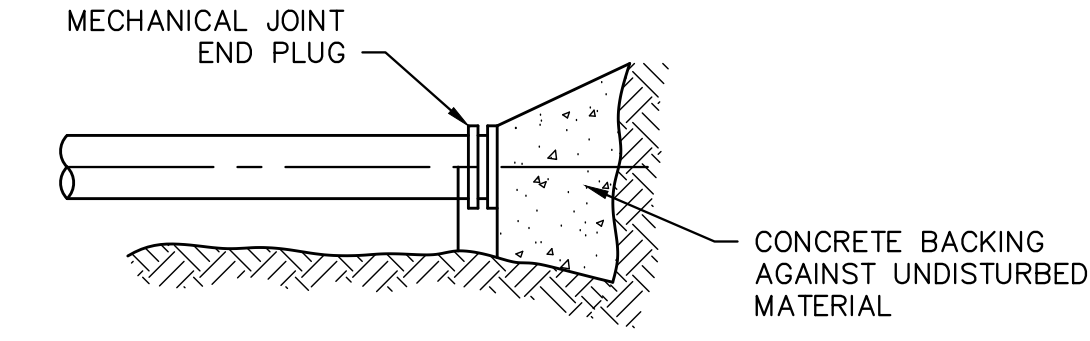
**SEDIMENT FOREBAY SECTION**  
NOT TO SCALE

TRENCH WIDTH (W)		
D DIAMETER OF PIPE	W UNSHEETED	W SHEETED
TO 12"	3'	4'
14" TO 24"	4'	5'
30" TO 36"	5'	6'

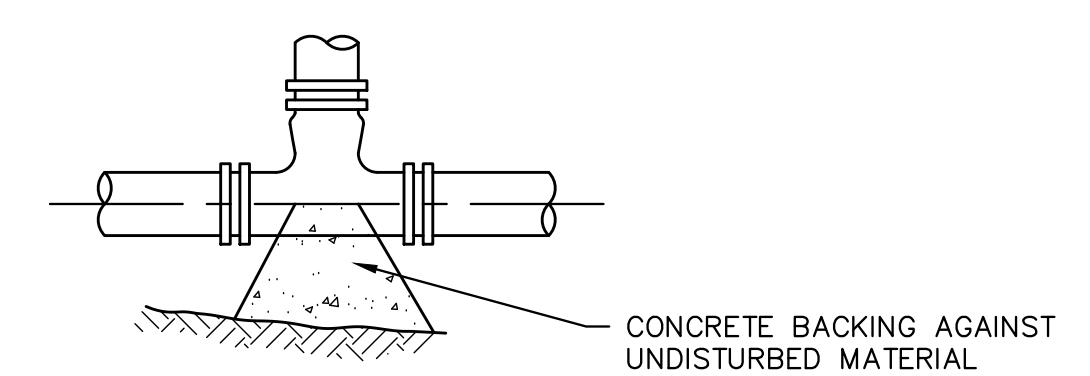


NOTE: REFER TO EXCAVATION & TRENCH SAFETY RULES NOW IN EFFECT AS OF MARCH 1, 2009 (520 CMR 14.00)

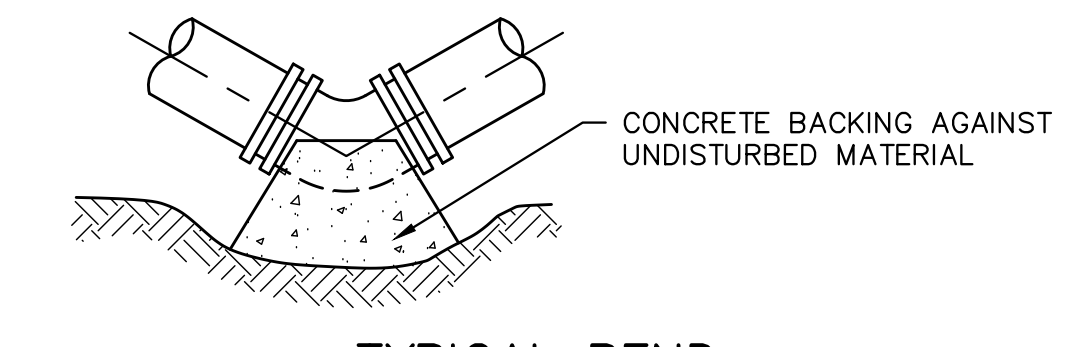
**UTILITY TRENCH**  
NOT TO SCALE



**TYPICAL PLUG**  
NOT TO SCALE



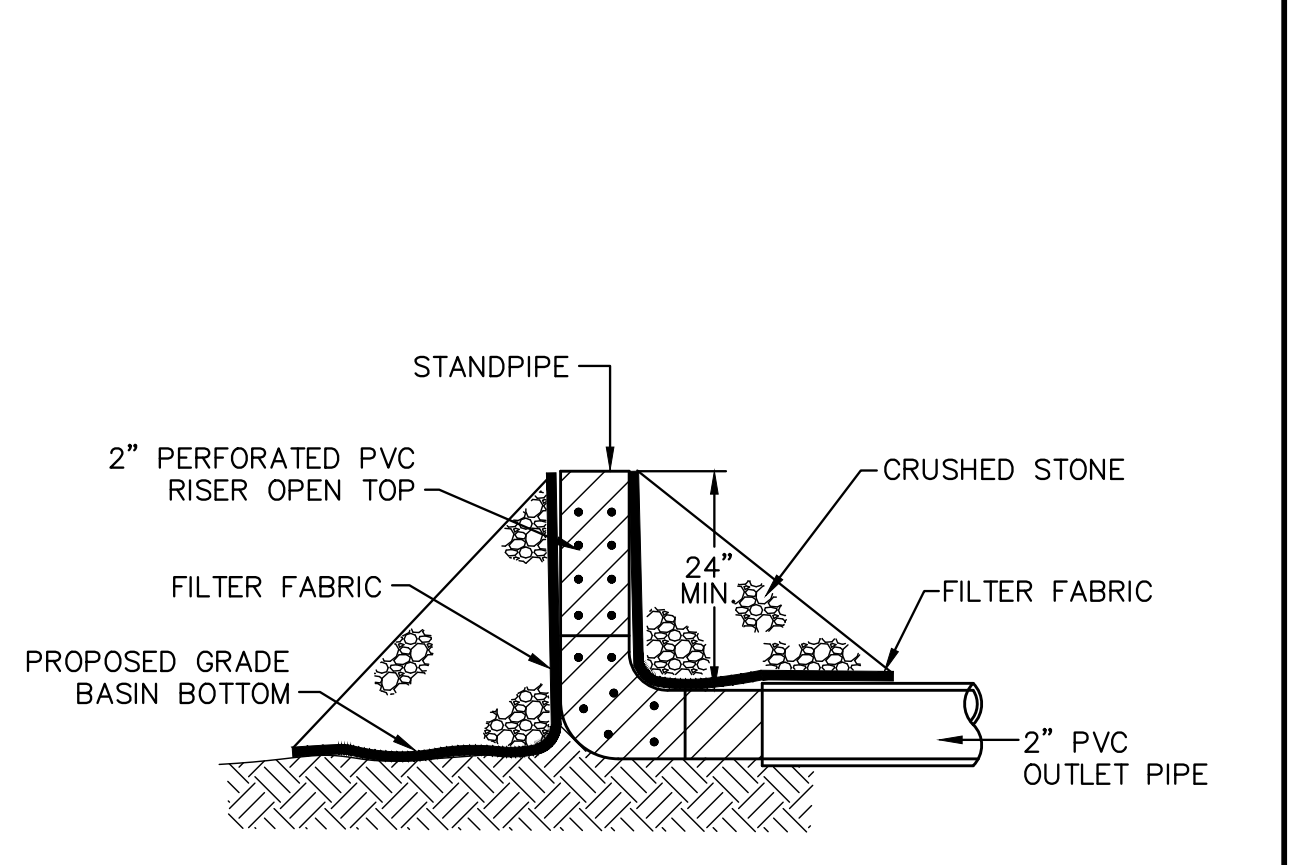
**TYPICAL TEE**  
NOT TO SCALE



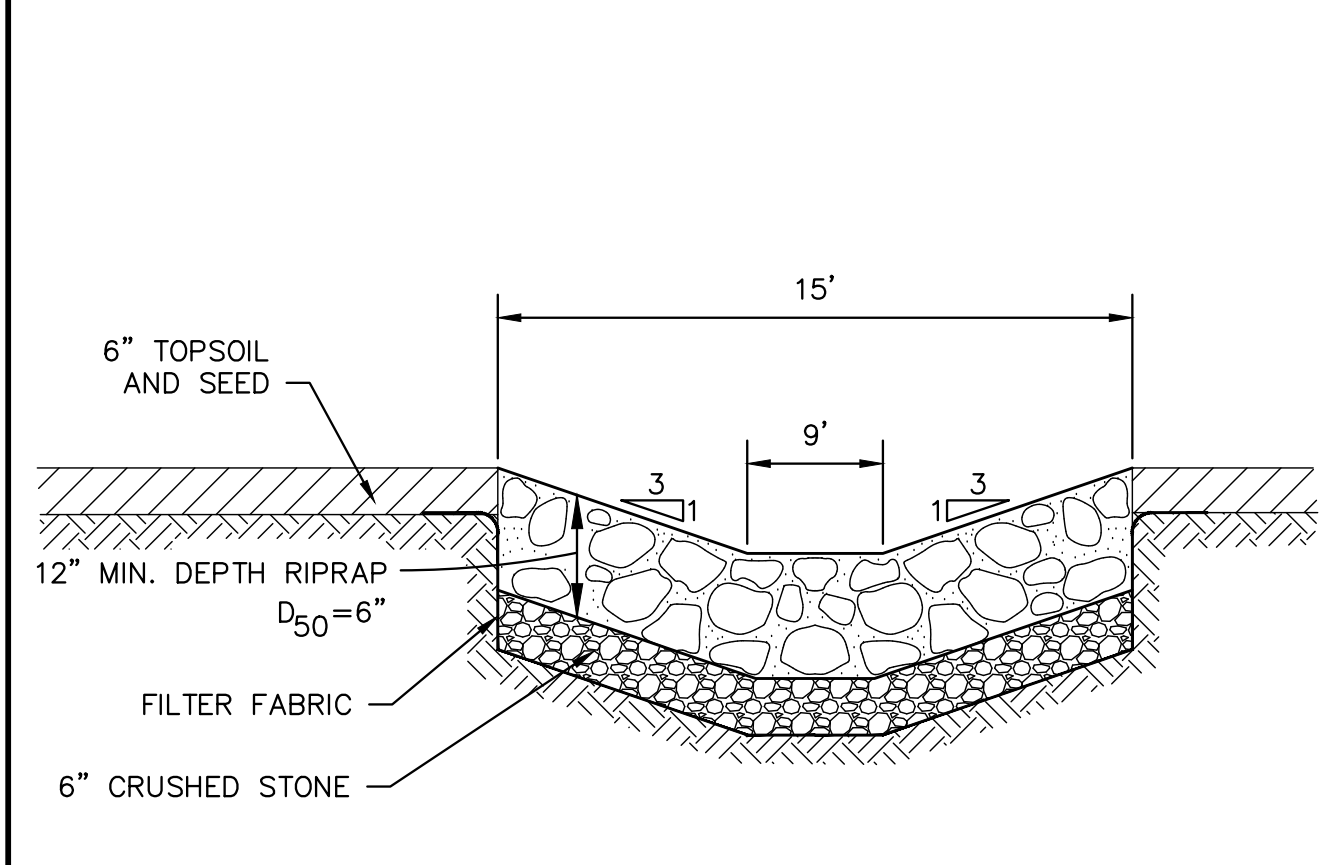
**TYPICAL BEND**  
NOT TO SCALE

SIZE OF MAIN (IN.)	45° BEND	TEES & PLUGS	22 1/2° BEND
8" OR LESS	8	10	8
10" & 12"	22	16	13

**CONCRETE BACKING FOR WATER PIPE**  
NOT TO SCALE

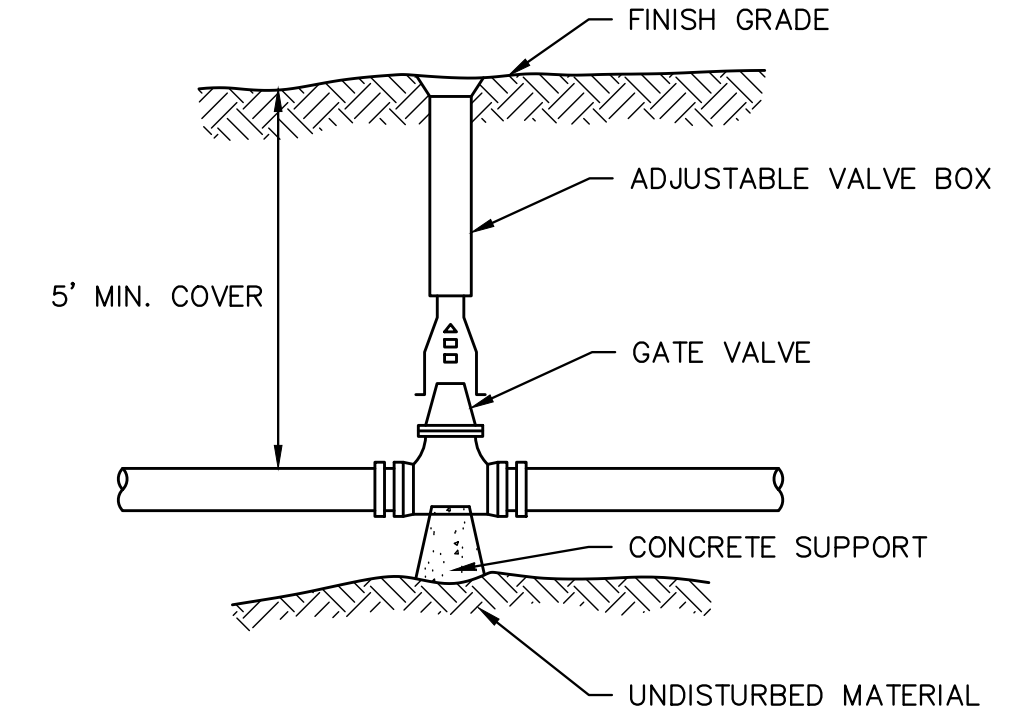


**SEDIMENT FOREBAY OUTLET**  
NOT TO SCALE

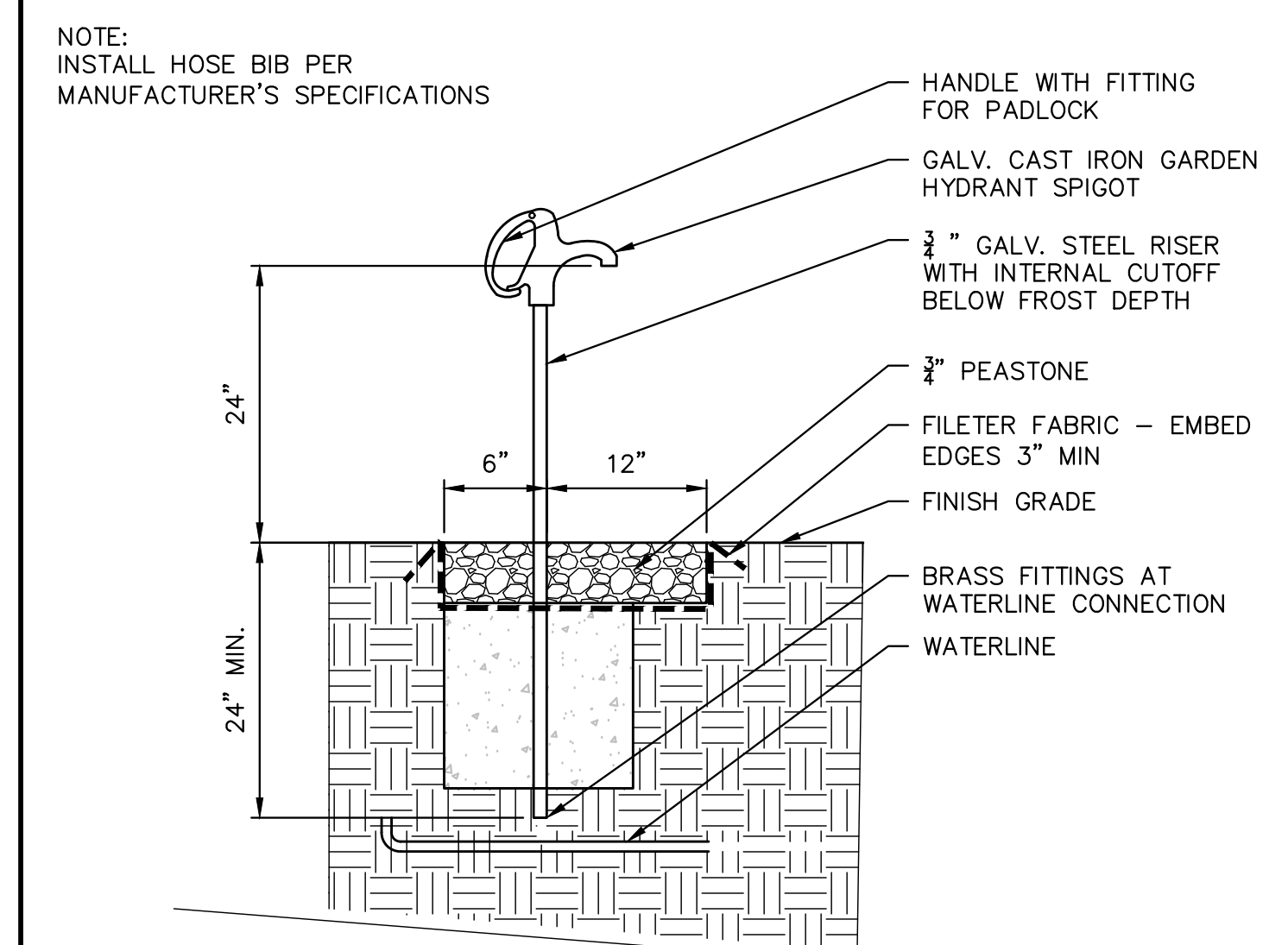


**EMERGENCY SPILLWAY**  
NOT TO SCALE

NOTE:  
VALVES TO OPEN IN DIRECTION AS SPECIFIED BY CITY OR TOWN.



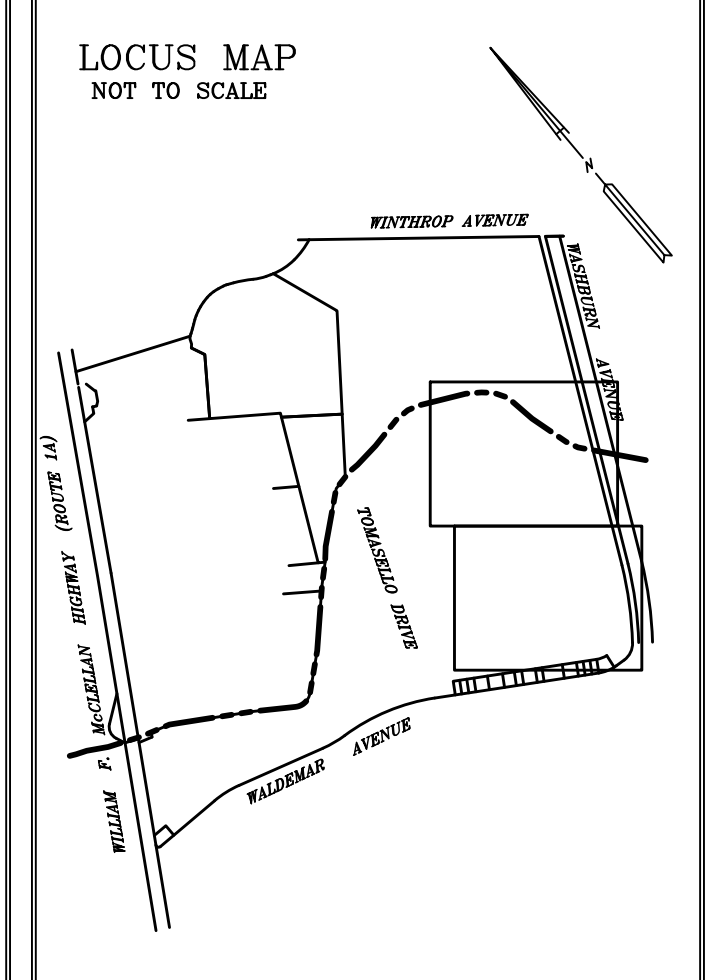
**GATE VALVE**  
NOT TO SCALE



NOTE:  
INSTALL HOSE BIB PER MANUFACTURER'S SPECIFICATIONS

**FROST FREE LOCKING HOSE BIB**  
NOT TO SCALE

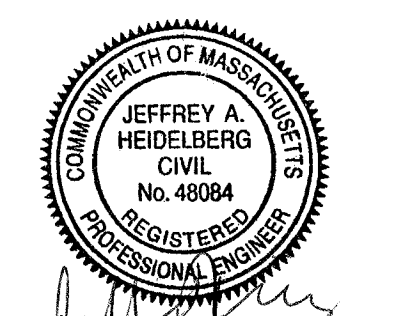
PREPARED FOR:  
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c/o the **HYM Investment Group, LLC**  
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PROJECT:  
**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
BOSTON, MASSACHUSETTS

SCALE: AS SHOWN DATE: JANUARY 19, 2021

**SITE DETAILS**

B+T JOB NO. 285418  
B+T PLAN NO. 285418P437A-004  
**C7.1**

SEE SHEET C1.0 FOR NOTES, REFERENCES, AND LEGEND.

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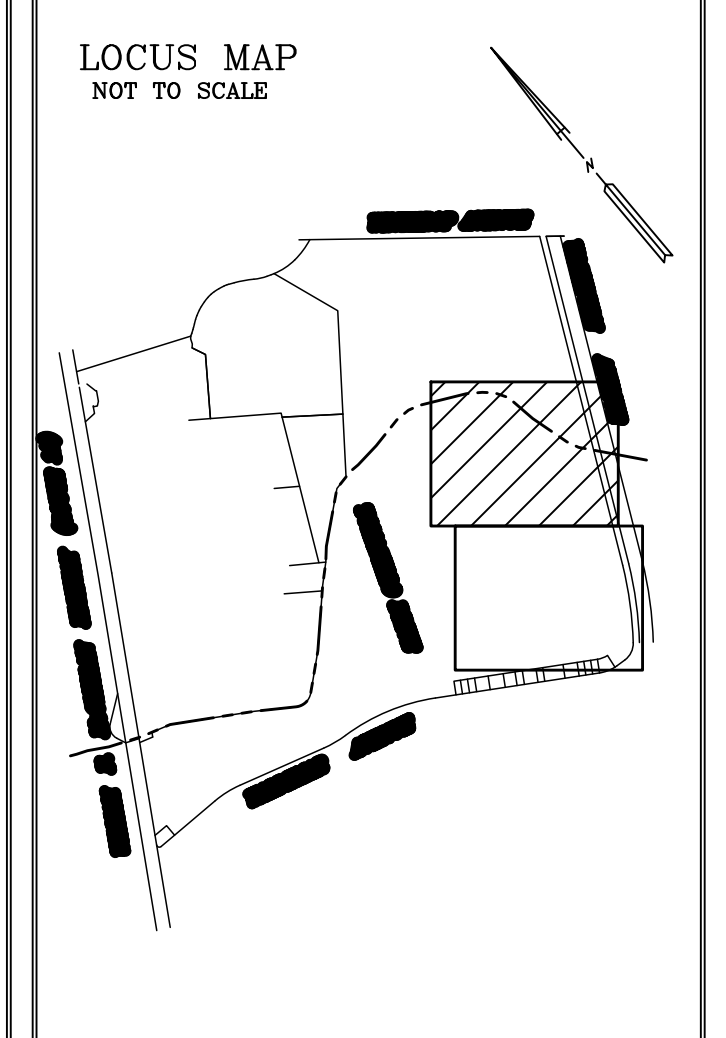
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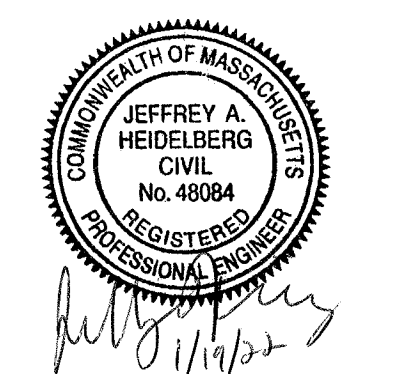
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PROJECT:

**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
 BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021

**FINAL CONDITION PLAN**

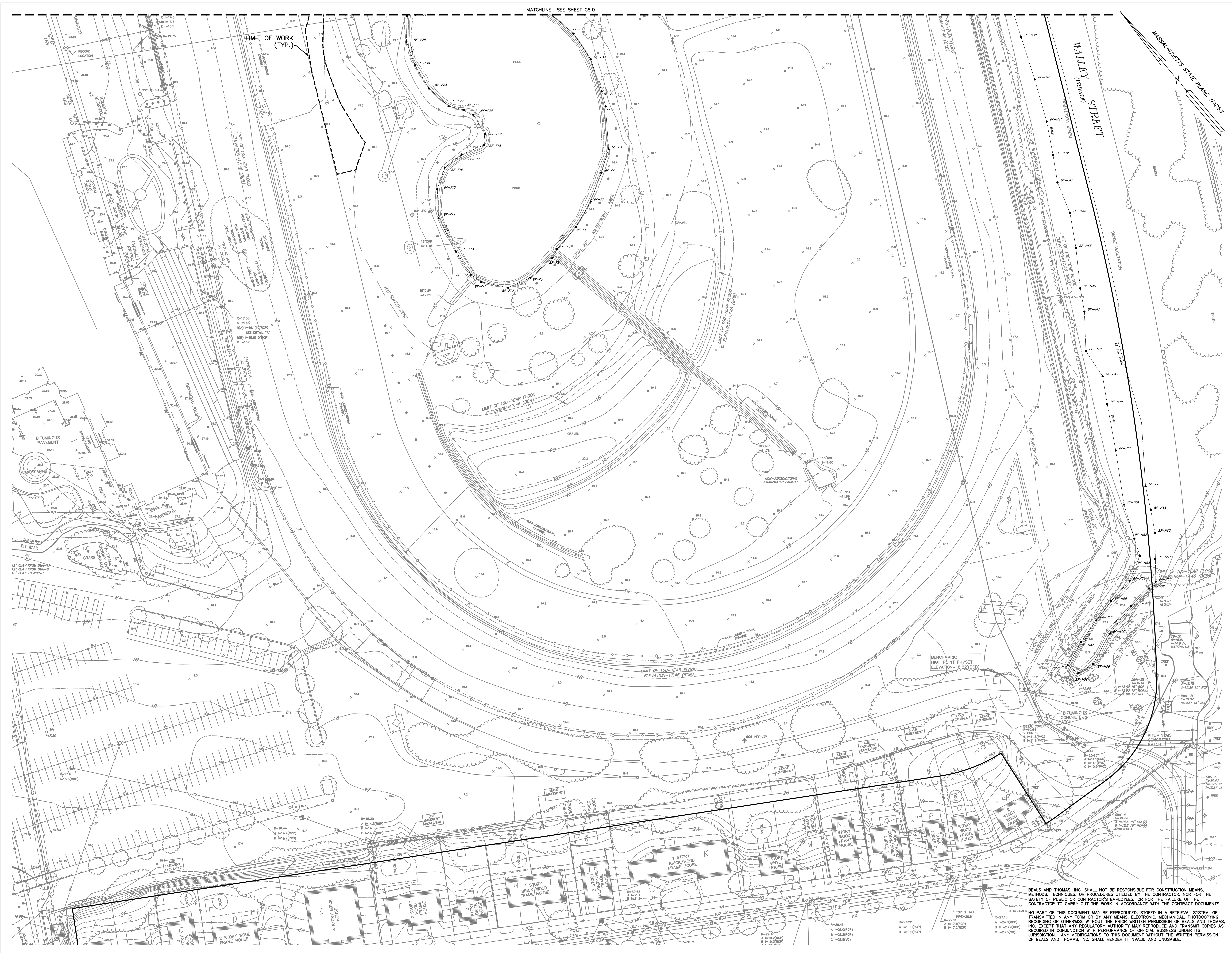
B+T JOB NO. 2854.18

B+T PLAN NO. 285418P451A-001 **C8.0**

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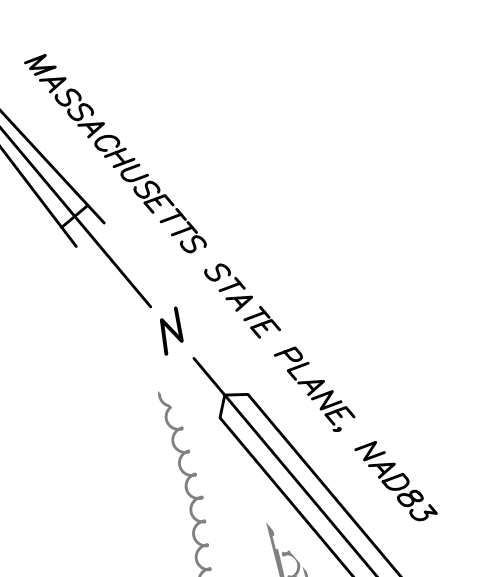
MATCHLINE SEE SHEET C8.1



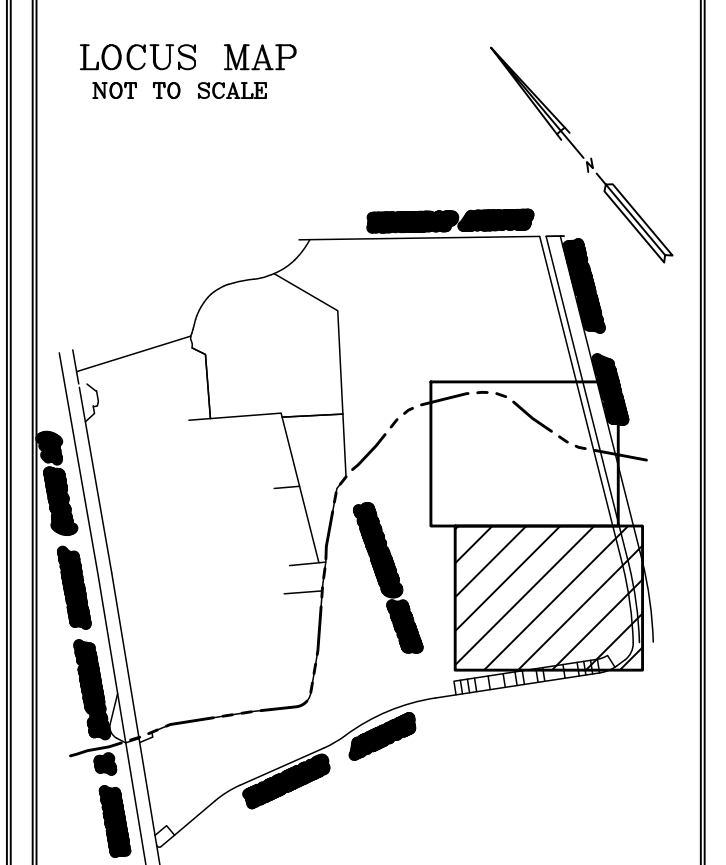
MATCHLINE SEE SHEET C8.0

LIMIT OF WORK (TYP.)

VALLEY STREET (PRIVATE)



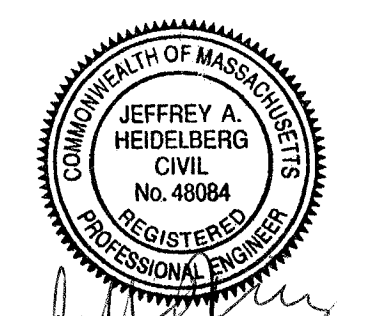
PREPARED FOR:  
**The McClellan Highway Department Company, LLC**  
c/o the HYM Investment Group, LLC  
ONE CONGRESS STREET  
BOSTON, MASSACHUSETTS



**NOT ISSUED FOR CONSTRUCTION**

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PREPARED BY:  
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ISSUE DATE	DESCRIPTION
DES	RFK JAH JAH
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PROJECT:  
**SUFFOLK DOWNS OUTDOOR ENTERTAINMENT VENUE**  
BOSTON, MASSACHUSETTS

SCALE: 1" = 40' DATE: JANUARY 19, 2021  
METERS 0 5 10 25  
FEET 0 20 40 80 120

**FINAL CONDITION PLAN**

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