Notice of Intent

Morrissey Boulevard Tide Gate Project

Dorchester, MA

PREPARED FOR

Massachusetts Department of
Conservation and Recreation
251 Causeway Street
Boston, MA 02114

PREPARED BY

101 Walnut Street
PO Box 9151
Watertown, MA 02471
617.924.1770

July 2020

July 8, 2020

Ref: 14014.01

Boston Conservation Commission
1 City Hall Square, Room 709
Boston, MA 02201

RE: NOI Filing, Morrissey Boulevard Tide Gate Project

ATTN: Amelia Croteau, Executive Secretary

Dear Commissioners,

On behalf of the Applicant, the Department of Conservation and Recreation (DCR), Vanasse Hangen Brustlin, Inc. (VHB) is submitting the supplemental additional information as requested for the Notice of Intent (NOI) to install six inline tide gates at four locations along Morrissey Boulevard in the Dorchester neighborhood of Boston, Massachusetts (the Project). The material provided addresses items required for filings associated with the Boston Wetlands Ordinance.

1. Page A-6 of the narrative details the total alteration of LSCSF but doesn't state the total alteration to the buffer zone. Please revise this section with that information.

   The "Work in Buffer Zone and Waterfront Area" section on Page A-6 has been revised to report the total alteration to the buffer zone. In the process of recalculating the alteration, we discovered that the impact numbers are slightly higher than originally reported, largely due to the temporary impacts created by installation of erosion controls. The impact numbers in the attached NOI have been updated to reflect the more accurate numbers. The entire Project Area is within both Land Subject to Coastal Storm Flowage (LSCSF) and the 100-foot Buffer Zone. Approximately 577 square feet of impact to LSCSF and 100-foot Buffer Zone are proposed. Locations 2, 3 and 4 are also within the 25-foot Waterfront Area associated with Coastal Bank and Coastal Beach. Approximately 413 square feet of impact are proposed within the 25-foot Waterfront Area.

   Since the Project Area is entirely within the existing LSCSF, it is not within the Coastal Flood Resiliency zone.

2. There is no discussion of the performance standards for the resource areas on-site, specifically coastal bank and salt marsh. While the work is only within the buffer zone, the work will be very close to those resource areas in several locations and the Commission will want to know whether the project will meet those performance standards or not. We will want the performance standards listed out with a discussion of whether the project will or will not meet them.

   A discussion of the performance standards for Coastal Beach, Coastal Bank and Salt Marsh has been added to the Regulatory Compliance section in the attached narrative.

3. The abutter notice states that the hearing will occur at Boston City Hall, but due to the public health emergency, all hearing will be conducted virtually. If abutter notices have not been sent out already, please substitute the notice in the NOI with the template on the Commission's webpage (boston.gov/conservation) If they have been sent out, revised notices should be sent out via regular mail.

   Abutters have been re-notified using the current template via regular mail. A copy of the updated abutter notification form is included in the attached NOI.

4. Only some of the sheets in the plan set were signed and stamped. We will need each sheet signed and stamped.

   All plan sheets have been signed and stamped in the attached revised plans.

If you have any questions concerning this submittal or require additional information, please contact me at (617) 607-2783 or by email gcrouch@vhb.com.

Regards,

Gene F. Crouch
Senior Wetland Scientist

Attachments: Revised Notice of Intent
Revised Plans

cc: Thomas Valton, DCR
Priscilla Geigis, DCR
DEP Northeast Regional Office

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Notice of Intent Forms

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 #:
eDEP Transaction #:1189035
City/Town:BOSTON

A.General Information

1. Project Location:

a. Street Address	MORRISSEY BOULEVARD		
b. City/Town	BOSTON	c. Zip Code	02125
d. Latitude	42.30644N	e. Longitude	71.04644W
f. Map/Plat #	N/A	g.Parcel/Lot #	1302364060 & 1600232000

2. Applicant:

☐ Individual ☑ Organization

a. First Name	THOMAS	b.Last Name	VALTON		
c. Organization	DEPARTMENT OF CONSERVATION AND RECREATION				
d. Mailing Address	251 CAUSEWAY STREET, SUITE 600				
e. City/Town	BOSTON	f. State	MA	g. Zip Code	02114
h. Phone Number	339-368-2930	i. Fax		j. Email	thomas.valton@state.ma.us

3.Property Owner:

☐ more than one owner

a. First Name	PRISCILLA	b. Last Name	GEIGIS		
c. Organization	DEPARTMENT OF CONSERVATION AND RECREATION				
d. Mailing Address	251 CAUSEWAY STREET, SUITE 600				
e. City/Town	BOSTON	f.State	MA	g. Zip Code	02114
h. Phone Number	617-626-4986	i. Fax		j.Email	Priscilla.Geigis@mass.gov

4.Representative:

a. First Name	GENE	b. Last Name	CROUCH		
c. Organization	VHB				
d. Mailing Address	101 WALNUT STREET				
e. City/Town	WATERTOWN	f. State	MA	g. Zip Code	02472
h.Phone Number	617-607-2783	i.Fax		j.Email	gcrouch@vhb.com

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

a.Total Fee Paid	~~500.00~~	b.State Fee Paid	237.50	c.City/Town Fee Paid	~~262.50~~

6.General Project Description:

IN ORDER TO MITIGATE THE FREQUENCY OF FLOODING ALONG ALONG MORRISSEY BOULEVARD, DCR IS PROPOSING THE INSTALLATION OF SIX TIDE GATES AT FOUR LOCATIONS TO PREVENT TIDAL CONDITIONS FROM SURCHARGING THE CLOSED DRAINAGE SYSTEM. SEE ATTACHED NARRATIVE FOR A DETAILED PROJECT DESCRIPTION.

7a.Project Type:

1. ☐ Single Family Home	2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing	4. ☐ Commercial/Industrial
5. ☐ Dock/Pier	6. ☐ Utilities
7. ☐ Coastal Engineering Structure	8. ☐ Agriculture (eg., cranberries, forestry)

9. ☐ Transportation 10. ☑ Other

7b.Is any portion of the proposed activity eligible to be treated as a 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:
2. Limited Project

8.Property recorded at the Registry of Deeds for:

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

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

1.Buffer Zone & Resource Area Impacts (temporary & permanent):

☐ This is a Buffer Zone only project - 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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land under Waterbodies and Waterways	1. Square feet	2. square feet
	3. cubic yards dredged	
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ 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 any)

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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under	Land under the ocean below,
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coatstal Dunes, below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab, crea.
i. ☐ Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ 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. ☑ Land Subject to Coastal Storm Flowage	577 1. square feet	

4.Restoration/Enhancement

☐ Restoration/Replacement

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 entered the additional amount here.

a. square feet of BVW b. square feet of Salt Marsh

5.Projects Involves Stream Crossings

☐ Project Involves Streams Crossings

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

a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage of Endangered Species program (NHESP)?

a. ☐ Yes ☑ No

If yes, include proof of mailing or hand delivery of NOI to:
Natural Heritage and Endangered Species
Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

b. Date of map:FROM MAP VIEWER

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

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

1.☐ Percentage/acreage of property to be altered:

(a) within Wetland Resource Area — percentage/acreage

(b) outside Resource Area — percentage/acreage

2.☐ Assessor's Map or right-of-way plan of site

3.☐ Project plans for entire project site, including wetland resource areas and areas outside of wetland 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

c.☐ MESA filing fee (fee information available at: http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html)
Make check payable to "Natural Heritage & Endangered Species Fund" 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

d. OR Check One of the following

1.☐ Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14; 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 Number

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.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

2. For coastal projects only, is any portion of the proposed project located below the mean high waterline or in a fish run?
a. ☐ Not applicable - project is in inland resource area only
b. ☐ Yes ☑ No

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

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

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 S. Rodney French Blvd
New Bedford, MA 02744

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it 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.

3. 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 DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. 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

5. 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

6. 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, Explain why the project is exempt:
1. ☐ Single Family Home

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

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 by regular mail delivery.

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.
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.
☑

a. Plan Title:	b. Plan Prepared By:	c. Plan Signed/Stamped By:	c. Revised Final Date:	e. Scale:
MORRISSEY BOULEVARD TIDE GATES	VHB	ERIC J. MONKIEWICZ	5/20/20	1"=10'

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:

N/A

2. Municipal Check Number
0359765

3. Check date
5/5/2020

4. State Check Number
Vanasse Hangen Brustlin, Inc.

5. Check date

6. Payer name on check: First Name

7. Payer name on check: Last Name

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
6-10-20

3. Signature of Property Owner(if different)

4. Date
6-10-20

5. Signature of Representative (if any)

6. Date
5/19/2020

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 Section C, Items 1-3, 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
WPA Form 3 - Notice of Wetland FeeTransmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1189035
City/Town:BOSTON

A. Applicant Information

1. Applicant:

a. First Name	THOMAS	b.Last Name	VALTON		
c. Organization	DEPARTMENT OF CONSERVATION AND RECREATION				
d. Mailing Address	251 CAUSEWAY STREET, SUITE 600				
e. City/Town	BOSTON	f. State	MA	g. Zip Code	02114
h. Phone Number	3393682930	i. Fax		j. Email	thomas.valton@state.ma.us

2.Property Owner:(if different)

a. First Name	PRISCILLA	b. Last Name	GEIGIS		
c. Organization	DEPARTMENT OF CONSERVATION AND RECREATION				
d. Mailing Address	251 CAUSEWAY STREET, SUITE 600				
e. City/Town	BOSTON	f.State	MA	g. Zip Code	02114
h. Phone Number	6176264986	i. Fax		j.Email	Priscilla.Geigis@mass.gov

3. Project Location:

a. Street Address	MORRISSEY BOULEVARD	b. City/Town	BOSTON

Are you exempted from Fee? ☐

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than $100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total
J.) ANY OTHER ACTIVITY NOT IN CATEGORY 1,3,4,5 OR 6;	1	500.00		500.00

City/Town share of filling fee	State share of filling fee	Total Project Fee
~~$262.50~~	$237.50	~~$500.00~~

City of Boston Environment

NOTICE OF INTENT APPLICATION FORM
Boston Wetlands Ordinance
City of Boston Code, Ordinances, Chapter 7-1.4

Boston File Number

MassDEP File Number

A. GENERAL INFORMATION

1. Project Location

Morrissey Boulevard	Boston	02125
a. Street Address	b. City/Town	c. Zip Code

N/A	1302364060 & 1600232000
f. Assessors Map/Plat Number	g. Parcel /Lot Number

2. Applicant

Thomas	Valton	Department of Conservation and Recreation
a. First Name	b. Last Name	c. Company

251 Causeway Street, Suite 600
d. Mailing Address

Boston	MA	02125
e. City/Town	f. State	g. Zip Code

339-368-2930		thomas.valton@state.ma.us
h. Phone Number	i. Fax Number	j. Email address

3. Property Owner

Priscilla	Geigis	Department of Conservation and Recreation
a. First Name	b. Last Name	c. Company

251 Causeway Street, Suite 600
d. Mailing Address

Boston	MA	02114
e. City/Town	f. State	g. Zip Code

617-626-4986		Priscilla.Geigis@mass.gov
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)

Gene	Crouch	Vanasse Hangen Brustlin, Inc. (VHB)
a. First Name	b. Last Name	c. Company

101 Walnut Street
d. Mailing Address

Watertown	MA	02472
e. City/Town	f. State	g. Zip Code

617-607-2783		gcrouch@vhb.com
h. Phone Number	i. Fax Number	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

In order to mitigate the frequency of flooding along Morrissey Boulevard, DCR is proposing the installation of four tide gates to prevent tidal conditions from surcharging the closed drainage system. Please see attached narrative for a detailed description of the proposed project.

7. Project Type Checklist

a. ☐ Single Family Home
b. ☐ Residential Subdivision
c. ☐ Limited Project Driveway Crossing
d. ☐ Commercial/Industrial
e. ☐ Dock/Pier
f. ☐ Utilities
g. ☐ Coastal Engineering Structure
h. ☐ Agriculture – cranberries, forestry
i. ☐ Transportation
j. ☒ Other

8. Property recorded at the Registry of Deeds

a. County
b. Page Number
c. Book
d. Certificate # (if registered land)

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

Resource Area	**Resource Area Size**	**Proposed Alteration***	**Proposed Migitation**
☐ *Coastal Flood Resilience Zone*	*Square feet*	*Square feet*	*Square feet*

☒ *25-foot Waterfront Area*	413 *Square feet*	413 *Square feet*	413 *Square feet*

2. Inland Resource Areas

Resource Area	**Resource Area Size**	**Proposed Alteration***	**Proposed Migitation**
❑ *Inland Flood Resilience Zone*	*Square feet*	*Square feet*	*Square feet*
❑ *Isolated Wetlands*	*Square feet*	*Square feet*	*Square feet*
❑ *Vernal Pool*	*Square feet*	*Square feet*	*Square feet*
❑ *Vernal Pool Habitat (vernal pool + 100 ft. upland area)*	*Square feet*	*Square feet*	*Square feet*
❑ *25-foot Waterfront Area*	*Square feet*	*Square feet*	*Square feet*

C. OTHER APPLICABLE STANDARDS & REQUIREMENTS

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

2. Is the proposed project subject to provisions of the Massachusetts Stormwater Management
   Yes
3. Is any portion of the proposed project within an Area of Critical Environmental Concern?

   ❑ Yes ☒ No

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.

Thomas J. Vallee — Signature of Applicant — 6-8-20 — Date

Signature of Property Owner (if different) — 6-10-20 — Date

Signature of Representative (if any) — 5/19/2020 — Date

List of Figures

Scale		
1 inch = 2,000 feet	**TIDE GATE PROJECT** **Figure 1: USGS Map** **Dorchester, Massachuetts** **April 2020**	vhb

Scale

N

1 inch = 400 feet

TIDE GATE PROJECT

Figure 2: Aerial Map
Dorchester, Massachuetts
April 2020

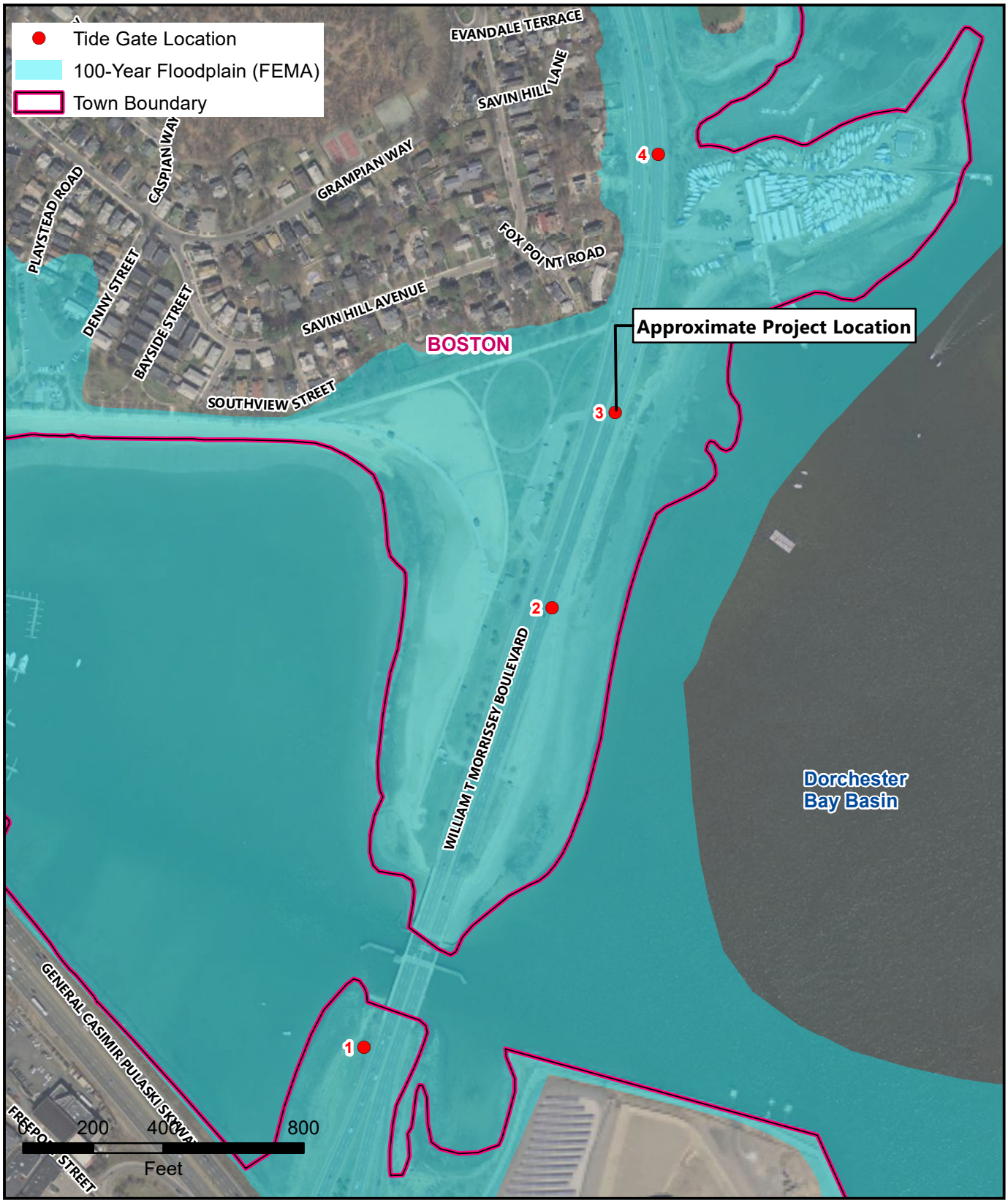
vhb

Scale

1 inch = 2,000 feet

TIDE GATE PROJECT

Figure 3: NHESPMap
Dorchester, Massachuetts
April 2020



Scale

N

1 inch = 400 feet

TIDE GATE PROJECT

Figure 4: FEMA Map
Dorchester, Massachuetts
April 2020

vhb

Attachment A
Notice of Intent Narrative

Attachment A
Notice of Intent Narrative

This Notice of Intent (NOI) is being filed pursuant to the Massachusetts Wetlands Protection Act (WPA), (M.G.L. Chapter 131, Section 40) and its implementing Regulations (310 CMR 10.00) and the Boston Wetlands Ordinance (the Ordinance). This narrative describes wetland resource areas associated with the Site, the proposed work, impacts to wetland resource areas, mitigation measures, and how the Project meets the performance standards of the WPA and Ordinance.

Introduction

The Applicant, the Department of Conservation and Recreation (DCR), is proposing to install six inline tide gates at four locations along Morrissey Boulevard (the Project) in the Dorchester neighborhood of Boston, MA (the Project Site) (Figures 1 and 2). Four new drain manholes are also proposed as part of the Project, two of which will replace existing manholes and two of which will be new additions to the closed drainage system. All proposed manholes are necessary to provide access points for continued maintenance of the proposed tide gates and drainage system.

Under existing conditions, this segment of Morrissey Boulevard must be closed approximately 18-24 times a year due to extensive flooding. The proposed tide gates are intended to prevent tidal waters from surcharging the existing closed drainage system, particularly during large rain events when the system is at maximum capacity. The purpose of the Project is to reduce the frequency of flooding and thus reduce the number of times the road must close for safety purposes. DCR is proposing these tide gates to reduce the frequency of flooding while also minimizing impacts to wetland resource areas. More comprehensive upgrades to the roadway and its drainage infrastructure are contemplated for the future.

The Project will require work within Land Subject to Coastal Storm Flowage (LSCSF) and the 100-foot buffer zone to resource areas regulated by the WPA and Ordinance. Though present in the vicinity of the proposed Project, no work is proposed in Land Under the Ocean, Coastal Beach, Coastal Bank, or Salt Marsh.

Resource areas will be protected from impacts during construction through the implementation of an erosion and sedimentation control program. This program includes provisions to minimize areas of disturbance through phasing and sequencing, limit erosion through stabilization, and prevent sediment from leaving the Project Site by installing structural controls. The Project will not change any drainage patterns or flow of stormwater off the Project Site.

Site Description

The four proposed tide gate locations are situated along an approximately 2,500-foot stretch of Morrissey Boulevard, which straddles the boundary of the Dorchester Bay Basin and the Squantum Channel of Dorchester Bay (Figures 1 and 2). Under current conditions, tidal action frequently backs water up into the closed drainage system via four open-ended outfalls, and surcharges from existing manholes and catch basins into the roadway. Location 1 is located on the western side of Morrissey Boulevard and discharges directly into the Dorchester Bay Basin. The outfalls at Locations 2, 3 and 4 are on the eastern side of Morrissey Boulevard and discharge to the Squantum Channel. Surrounding land use includes Malibu Beach to the west, additional beach area to the east, multi-family residential areas to the southwest and northwest, a National Grid facility to the southeast, and the Savin Hill Yacht club to the north.

Tide and currents information from the National Oceanic and Atmospheric Administration (NOAA) indicates that Mean High Water in the vicinity of the Project is at elevation 4.33 feet NAVD and Mean Low Water is at -5.16 feet NAVD. Based on annual predicted high water levels, the High Tide Line is at elevation 6.7 feet NAVD.

According to the most recently available data provided by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife have been mapped in the vicinity of the Project Site. No work is proposed within NHESP Priority or Estimated Habitat. No certified or potential vernal pools are located near the Project (Figure 3).

The Project Site is not located within or near an Area of Critical Environmental Concern (ACEC). According to the Massachusetts Department of Environmental Protection (DEP), the Project Site is not located within an Outstanding Resource Water area, or an area designated as a Zone II Wellhead Protection Area.

According to the Natural Resources Conservation Service (NRCS) soil survey, soils at the Project Site are mapped as Udorthents with a wet substratum. Exposed site soil is observed to be fill material composed of brick, cobble and broken, degraded asphalt pavement.

The most recently issued Flood Insurance Rate Map (FIRM) for the area (FEMA Floodway Map Number 25025C0091J, effective March 16, 2016, produced by the Federal Emergency Management agency (FEMA), indicates the Project Site is within FEMA Zone AE and the Velocity Zone (VE). The Base Flood Elevation identified by FEMA within the Velocity Zone is 13 feet and 14 (NAVD 88). (Figure 4).

Wetland resource areas near the Project Site are described below.

Wetland Resource Areas

Coastal wetland resource areas have been mapped using topographical information from field survey conducted by Vanasse Hangen Brustlin, Inc. (VHB) in March 2020. Resource area determinations were made in accordance with methods developed by the DEP. Salt marsh boundaries were delineated by field review and located by engineering survey. Where

present, Coastal Bank was delineated based on slopes calculated from topographical survey, in accordance with the DEP Wetlands Program Policy 92-1 and the Commonwealth of Massachusetts' *Applying the Massachusetts Coastal Wetlands Regulations: A Practical Manual for Conservation Commissions to Protect the Storm Damage Prevention and Flood Control Functions of Coastal Resource Areas*.

The following sections of this narrative describe the wetland resource areas regulated under the WPA and Ordinance. Resource areas in the vicinity of the Project are shown on the accompanying Project plans in Attachment E.

The state-regulated wetland resource areas identified at or near the Site include Land Subject to Coastal Storm Flowage (LSCSF), Land Under the Ocean, Coastal Beach, Coastal Bank, and Salt Marsh. All resource areas are associated with Dorchester Bay, one of three small bays located in southern Boston Harbor.

The state-regulated resources are defined under the WPA Regulations (310 CMR 10.00) as follows:

- Land Subject to Coastal Storm Flowage (LSCSF): As defined in 310 CMR 10.04, Land Subject to Coastal Storm Flowage is "land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record."
- Land Under the Ocean: As defined 310 CMR 10.25(2), Land under the Ocean "means land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries."
- Coastal Beach: As defined in 310 CMR 10.27(2), Coastal beach "means unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing human-made structures, when these structures replace one of the above lines, whichever is closest to the ocean."
- Coastal Bank: As defined in 310 CMR 10.30(2), Coastal Banks are "the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland."
- Salt Marsh: As defined in 310 CMR 10.32(2), Salt Marsh is "means a coastal wetland that extends landward up to the highest high tide line, that is, the highest spring tide of the year, and is characterized by plants that are well adapted to or prefer living in, saline soils. Dominant plants within salt marshes typically include salt meadow cord grass (Spartina patens) and/or salt marsh cord grass (Spartina alterniflora), but may also include, without limitation, spike grass (Distichlis spicata), high-tide bush (Iva frutescens), black grass (Juncus gerardii), and common reedgrass (Phragmites). A salt marsh may contain tidal creeks, ditches and pools."

The WPA and Ordinance also establish a 100-foot buffer zone from the boundaries of Salt Marsh, and Coastal Bank and Coastal Beach. The Ordinance also provides for a 25-foot Waterfront Area within the buffer zone and Climate Change Resilience.

The resource areas in the vicinity of each location are described below. All wetlands are hydrologically connected to Dorchester Bay, but have been named according to tide gate locations for ease of discussion in this NOI.

Wetland 1 was delineated with flags WF1-100 through WF1-109. Wetland 1 is a salt marsh bounded by mowed turf grass. Coastal Bank approximately follows the limit of mowing. The high marsh is dominated by high-tide bush and salt meadow cord grass. Downgradient of the high marsh is a rocky beach area with small patches of salt meadow cord grass and sea lavender (*Limonium carolinianum*). Downgradient of the rocky beach is low marsh dominated by salt marsh cord grass.

Wetland 2 is a pocket of salt marsh cord grass growing on a rocky urban beach. There is no Coastal Bank in the vicinity of Wetland 2, as the slope is very gradual. The beach extends up to the sidewalk shoulder and is comprised of urban fill including bricks and granite curbing remnants. There is stone armoring adjacent to the sidewalk, located west of the Wetland 2. Wetland 2 has been delineated with flags WF2-100 to WF2-103.

Wetland 3 is comprised of two pockets of salt marsh. The outfall outlets to a rocky urban beach with rock, bricks and asphalt chunks. The Coastal Bank consists of 2'x2' granite blocks used as riprap. On either side of the outfall, there are pockets of salt marsh cordgrass. The outfall is almost entirely buried. The two pockets of salt marsh have been delineated with flags WF3-100 to WF3-104 and WF3-200 to WF3-207.

Wetland 4 is a naturalized salt marsh. The low marsh is dominated by healthy salt marsh cord grass, salt meadow cord grass and spike grass. The wrack line ranges from 2 to 15 feet wide in the high marsh, which is dominated by high tide bush. The upland is a mowed roadside shoulder and urban rock fill with a stand of staghorn sumac (*Rhus hirta*) and black locust (*Robinia pseudoacacia*). The salt marsh has been delineated with flags WF4-100 through WF4-112. Wetland flags 4-107 through WF4-112 consist of a highly disturbed eroded area with wooden dock remnants, fringed by salt meadow cord grass and sea lavender. The adjacent upland in the vicinity of flags WF4-107 to WF4-112 consists of asphalt debris and several red cedar (*Juniperus virginiana*) saplings.

Waterfront Area

As previously mentioned, the WPA and Ordinance also establish a 100-foot buffer zone from the boundaries of Salt Marsh, and Coastal Bank and Coastal Beach. The Ordinance also provides for a 25-foot Waterfront Area and Climate Change Resilience. The Waterfront Area in the vicinity of each location is described below.

Location 1 is comprised of maintained turf grass within public parkland. At the time of wetland delineation, the grass was mowed to a length of approximately 0.5 inches. All proposed work at Location 1 is outside the 25-foot Waterfront Area.

Location 2 is comprised of bituminous concrete sidewalk and paved roadway. Coastal Beach extends up to the sidewalk shoulder at this location. The Waterfront Area is almost entirely impervious, with a small vegetated filter strip located between the sidewalk and roadway.

Location 3 is comprised of mowed roadside shoulder and a small upland slope with black locust trees. The Waterfront Area extends onto the concrete sidewalk, vegetated filter strip and paved roadway.

Location 4 contains mowed roadside shoulder and urban rock fill with a stand of staghorn sumac (*Rhus hirta*) and black locust (*Robinia pseudoacacia*). The Waterfront Area extends onto the concrete sidewalk, vegetated filter strip and paved roadway.

Work Description

DCR proposes to perform maintenance and repair to the existing drainage infrastructure at the Project Site. This includes installing six new tide gates within existing stormwater infrastructure at four locations. Under current conditions, DCR must shut down Morrissey Boulevard 18-24 times a year due to flooding. The proposed tide gates are intended to reduce the frequency of flooding and road closure, while minimizing impacts to wetland resources.

Proposed work includes installation of tide gates at four locations along Morrissey Boulevard. The tide gates are WaStop systems produced by Wapro AB. Due to its unique pulsating flow action, the valve is self-cleansing ensuring mud and other debris is keep clear of the outfall enabling stormwater to run off the road and nearby property while stopping tidal backflow.

Construction activities include fitting the six inline tide gates within existing drainage pipes at the four locations shown on the attached plans. Four new drain manholes will be installed, two of which will replace existing manholes and two of which will be new additions to the closed drainage system. All proposed manholes are necessary to allow installation of the tide gates and provide access points for maintenance of the tide gates and drainage system. Once construction is complete, excavated areas will be back-filled and the upland will be stabilized to match the existing conditions. Below is a summary of work at each location:

- At Location 1, an approximately 12-foot by 12-foot work area will be required to install a new manhole and 30-inch tide gate. The mowed lawn area will be excavated to access the existing 30" reinforced concrete pipe (RCP) conveying roadway drainage across the mowed area to the north.
- At Location 2, an approximately 8-foot by 8-foot work area will be required to install a new manhole and a 24" tide gate, a 12" tide gate, and a 15" tide gate at an existing manhole, where three inlet pipes converge and outlet to one 24" RCP outlet pipe that drains to the east.
- At Location 3, an approximately 8-foot by 8-foot work area will be required to install a new manhole and one 18" tide gate in the vegetated upland road shoulder.
- At Location 4, an approximately 8-foot by 8-foot work area will be required to install a new manhole and one 15" tide gate. The work area is partially within the bituminous concrete sidewalk and partially within the vegetated strip between the sidewalk and paved roadway.

Boston Harbor tide charts and weather forecasts will be consulted prior to the start of work, to avoid work during predicted Spring tides or during storm events, when high tides have elevated potential to impact the Project work area.

Work in Wetland Resource Areas

The proposed Project will require work within regulated resources associated with Dorchester Bay. Work will be conducted within Land Subject to Coastal Storm Flowage and the 100-foot Buffer Zone to wetland resource areas. While present in the vicinity of the Project Site, no work is proposed in Land Under the Ocean, Coastal Beach, Coastal Bank, or Salt Marsh. The tide gates have been strategically located so that construction does not impact any resource areas but LSCSF. This also allows future maintenance and repairs to be made without impacts to resource areas.

Work in Land Subject to Coastal Storm Flowage

As identified in the FEMA FIRM, the Project Site is located Within FEMA Zone AE and the Velocity Zone (VE). The Base Flood Elevation identified by FEMA within the Velocity Zone is 13 feet and 14 (NAVD 88). The Zone AE Floodplain is at elevation 11 feet (NAVD 88).

The proposed work will temporarily impact approximately 577 square feet of LSCSF, which includes excavation areas and manhole installations. All final grades will match the existing grades. No significant loss of flood storage volume will occur as part of this Project.

Since the entire project is within the existing LSCSF, the work area is not within the Coastal Flood Resiliency Zone.

Work in Buffer Zone and Waterfront Area

All four locations are within the 100-foot Buffer Zone to coastal resources. Locations 2, 3 and 4 are also within the 25-foot Waterfront Area associated with Coastal Bank and Coastal Beach. Work in the Buffer Zone and Waterfront Area includes excavation areas and manhole installations. Construction access to the Project Site will be through the adjacent roadway and upland roadway shoulders. Approximately 577 square feet of impact is proposed within the 100-foot Buffer Zone to coastal resources, approximately 413 square feet of which is proposed within the 25-foot Waterfront Area.

Mitigation Measures

A suite of mitigation measures is proposed to prevent short- and long-term impacts to wetland resource areas. Mitigation measures proposed for this Project are described below.

Erosion and Sediment Controls

An erosion and sedimentation control program will be implemented to minimize temporary impacts to wetland resource areas during the construction phase of the Project. The

program incorporates Best Management Practices (BMPs) specified in guidelines developed by the DEP and the U.S. Environmental Protection Agency (EPA).

Proper implementation of the erosion and sedimentation control program will:

- Minimize exposed areas through sequencing and temporary stabilization;
- Place structures to manage stormwater runoff and erosion; and
- Establish a permanent vegetative cover or other forms of stabilization as soon as practicable.

The following sections describe the controls that will be used and practices that will be followed during construction. These practices comply with criteria contained in the NPDES General Permit for Discharges from Large and Small Construction Activities issued by the EPA.

Non-Structural Practices

Non structural practices to be used during construction include temporary stabilization, permanent seeding, pavement sweeping and dust control. These practices will be initiated as soon as practicable in appropriate areas at the Project Site.

Permanent Seeding

Upon completion of work, any upland areas not covered by pavement, other forms of stabilization, or other methods of landscaping will be seeded with a high quality commercial perennial seed mix. The mix will be applied in accordance with the manufacture's recommended application rate with mulch or bonded fiber matrix as described above.

Pavement Sweeping

Paved areas impacted by Project work, shall be swept as needed during construction. The sweeping program will remove sediment and other contaminants directly from paved surfaces before their release into stormwater runoff. Pavement sweeping has been demonstrated to be an effective initial treatment for reducing pollutant loading into stormwater. Once construction has been completed, sweeping at the Site will occur as required.

Structural Practices

Structural erosion and sedimentation controls that may be used on the Site consist of erosion control barriers.

Erosion Control Barriers

Prior to any ground disturbance, straw wattle, silt fence, or other approved erosion control barrier will be installed at the down gradient limit of work. Erosion control barriers will be held in place with wooden stakes. If silt fence is used, the toe will be entrenched to prevent underflow.

If sediment has accumulated to a depth which impairs proper functioning of the barrier, it will be removed by hand or by machinery operating upslope of the barriers. This material will be either reused in the Project area or disposed of at a suitable offsite location. Any damaged sections of the barrier will be repaired or replaced immediately upon discovery.

Regulatory Compliance

Proposed work will occur within LSCSF and the 100-foot buffer zone to resources areas as regulated by the WPA and Ordinance. The following discusses compliance with the regulatory standards.

Work within Wetland Resource Areas

As demonstrated below, work proposed in the resource areas complies with the requirements outlined in the WPA and Ordinance.

Work in Land Subject to Coastal Storm Flowage

The Project includes work within approximately 577 square feet of LSCSF. Any displaced flood waters in LSCSF have a direct and unrestricted hydraulic connection to Dorchester Bay. The WPA Regulations and the Ordinance therefore do not include any performance standards for LSCSF.

Work in Buffer Zone

As identified in 310 CMR 10.53(1) of the WPA Regulations, "the Issuing Authority may consider the characteristics of the Buffer Zone, such as the presence of steep slopes, that may increase the potential for adverse impacts on Resource Areas. Conditions may include limitations on the scope and location of work in the Buffer Zone as necessary to avoid alteration of Resource Areas. The Issuing Authority may require erosion and sedimentation controls during construction, a clear limit of work, and the preservation of natural vegetation adjacent to the Resource Area and/or other measures commensurate with the scope and location of the work within the Buffer Zone to protect the interests of M.G.L. c. 131 § 40."

The proposed Project has been designed to address these requirements. As identified in the Mitigation Measures section of this attachment, an erosion and sedimentation control program will be implemented to prevent adverse impacts during construction. Loam and seed will be spread to restore a vegetated edge to upland areas activities. Excavation activities will be confined to existing paved areas.

- Waterfront Area

  The characteristic of the Waterfront Area will not be altered by this Project. Much of the Waterfront Area is public beach or park and will remain with full public access. Location 1 is outside the Waterfront Area. Work at Location 2 will be within the existing paved sidewalk. Work at Locations 3 and 4 are within maintained grass areas adjacent to the paved sidewalk or roadway and any disturbed areas will be restored

with loam and seed. Overall the character of the Waterfront Area or public access to the waterfront will not be changed.

Work in Coastal Beach

Location 2 is adjacent to Coastal Beach. In this area, Coastal Beach beach extends up to the sidewalk shoulder and is comprised of urban fill including bricks and granite curbing remnants. The Coastal Beach is significant to storm damage prevention, flood control or the protection of wildlife habitat. As such, the following performance standards listed in 310 CMR 10.27 apply:

(3) Any project on a coastal beach, except any project permitted under 310 CMR 10.30(3)(a), shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent downdrift coastal beach.

No work is proposed within Coastal Beach. For this reason, no adverse effects to Coastal Beach are anticipated.

(4) Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

(a) beach form and volume. In evaluating necessity, coastal engineering, physical oceanographic and/or coastal geologic information shall be considered.

(b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.

(c) Jetties trapping littoral drift material shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.

No groin, jetty, solid pier, or other such solid fill structure is proposed within Coastal Beach.

(5) Notwithstanding 310 CMR 10.27(3), beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

No beach nourishment is proposed as part of this Project.

(6) In addition to complying with the requirements of 310 CMR 10.27(3) and (4), a project on a tidal flat shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries and wildlife habitat caused by:

(a) alterations in water circulation;

(b) alterations in the distribution of sediment grain size; and

(c) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

No work is proposed within tidal flat.

(7) Notwithstanding the provisions of 310 CMR 10.27(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

No Priority or Estimated Habitats of Rare Species have been identified by NHESP within the Project area. The proposed Project will not have any adverse effect on specified habitat sites of rare species.

Work in Coastal Bank

The Coastal Bank on the Project Site is previously disturbed and developed with mowed grass, granite blocks and roadway shoulder. The Coastal Bank at the Project site does not typically supply sediment to the adjacent coastal beach. No impact to Coastal Bank is proposed. The Coastal Bank is significant to storm damage prevention and flood control because it is a vertical buffer to storm waters. As such, the following performance standards listed in 310 CMR 10.30 apply:

(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

No work is proposed within Coastal Bank. Work within the 100-foot Buffer Zone to Coastal Bank will be limited to flat, mowed areas and existing impervious areas. Work in these previously disturbed areas will not adversely affect the stability of the Coastal Bank.

(7) Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

No bulkheads, revetments, seawalls, groins or other coastal engineering structures are proposed on Coastal Bank.

(8) Notwithstanding the provisions of 310 CMR 10.3(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37."

No Priority or Estimated Habitats of Rare Species have been identified by NHESP within the Project area. The proposed Project will not have any adverse effect on specified habitat sites of rare species.

Work in Salt Marsh

Proposed work takes place in the vicinity of several pockets of Salt Marsh. However, no impact to Salt Marsh is proposed as part of this Project. When a Salt Marsh is determined to be significant to the protection of marine fisheries, the prevention of pollution, storm damage prevention or ground water supply, the following performance standards listed in 310 CMR 10.32 apply:

(3) A proposed project in a salt marsh, on lands within 100 feet of a salt marsh, or in a body of water adjacent to a salt marsh shall not destroy any portion of the salt marsh and shall not

have an adverse effect on the productivity of the salt marsh. Alterations in growth, distribution and composition of salt marsh vegetation shall be considered in evaluating adverse effects on productivity. 310 CMR 10.32(3) shall not be construed to prohibit the harvesting of salt hay.

No work is proposed within Salt Marsh. Work within the 100-foot Buffer Zone to Salt Marsh will be limited to flat, upland mowed grass areas and existing impervious areas. Work in these previously disturbed areas will not adversely affect the productivity of the Salt Marsh.

(4) Notwithstanding the provisions of 310 CMR 10.32(3), a small project within a salt marsh, such as an elevated walkway or other structure which has no adverse effects other than blocking sunlight from the underlying vegetation for a portion of each day, may be permitted if such a project complies with all other applicable requirements of 310 CMR 10.21 through 10.37.

No work is proposed within Salt Marsh. The Project will not block sunlight from any portion of the Salt Marsh once work is completed.

(5) Notwithstanding the provisions of 310 CMR 10.32(3), a project which will restore or rehabilitate a salt marsh, or create a salt marsh, may be permitted in accordance with 310 CMR 10.11 through 10.14, 10.24(8), and/or 10.53(4).

The proposed Project will not restore, rehabilitate, or create a Salt Marsh.

(6) Notwithstanding the provisions of 310 CMR 10.32(3) through (5), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.37.

No Priority or Estimated Habitats of Rare Species have been identified by NHESP within the Project area. The proposed Project will not have any adverse effect on specified habitat sites of rare species.

Climate Change Resilience

According to Section 7-1.4(n) of the Ordinance, "*The Applicant shall, to the extent applicable as determined by the Commission, 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. These considerations include but are not limited to sea level rise, increased heat waves, extreme precipitation events, stormwater runoff, changing precipitation patterns and changes in coastal and stormwater flooding.*"

The Project consists of roadway drainage infrastructure improvements to provide help reducing the incidence of flooding of the roadway during high tide and storm events. The Project location is within the coastal zone and the 100-year floodplain and is within the 2050 anticipated high tide based on the Climate Ready Boston Map. The proposed drainage improvements are intended to provide short term help reducing the incidents of roadway flooding. A more comprehensive plan to provide long term measures to address roadway flooding is being developed by DCR and will be presented to the Commission in the future.

Stormwater Management

Runoff from the existing Site is collected in a closed drainage system through a series of catch basins and manholes and discharges via four outfalls. Stormwater flow and treatment will not be altered by the Project. The inline tide gates will be installed upstream of new drain manholes to provide an access point for maintenance on the tide gates. Proposed drainage patterns are not being altered as part of the Project and no new impervious area is being proposed.

The WPA Regulations at 310 CMR 10.05(6)(k) establish 10 Stormwater Management Standards (the Standards) that projects must comply with unless they are determined to be exempt. The Project has been designed to fully comply with the 10 Stormwater Management Standards. A Stormwater Checklist is included as Attachment C of this filing.

Summary

DCR is proposing to install tide gates at four locations along Morrissey Boulevard. DCR is proposing these tide gates to reduce the frequency of flooding while minimizing impacts to wetland resource areas. More comprehensive upgrades to the roadway and its drainage infrastructure are contemplated for the future.

The proposed Project requires approximately 577 square feet of impact to LSCSF. The Project will also require impacts to the 100-foot Buffer Zone regulated by the WPA and Ordinance. Wetland resource areas will be protected from impacts during construction through the implementation of an erosion and sedimentation control program that includes provisions to minimize areas of disturbance through phasing and sequencing, limit erosion through stabilization, and prevent sediment from leaving the site by installing structural controls. The Project will not change any drainage patterns or flow of stormwater off the Project Site.

On behalf of the Applicant, we respectfully request that the Boston Conservation Commission find these measures adequately protective of the interests identified in the WPA and the Ordinance and issue an Order of Conditions approving the work describe in this NOI and shown on the accompanying plan.

Attachment B
Abutter Notification

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 DEPARTMENT OF CONSERVATION AND RECREATION (DCR)** 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 **MORRISSEY BOULEVARD.**

C. The project involves **INSTALLING SIX TIDE GATES AT FOUR LOCATIONS ALONG MORRISSEY BOULEVARD**.

D. Copies of the Notice of Intent may be obtained by contacting the Boston Conservation Commission at **CC@boston.gov**.

E. Copies of the Notice of Intent may be obtained from **GENE CROUCH (REPRESENTATIVE) BY CALLING 617-607-2783** between the hours of **9AM AND 6PM, TUESDAY THROUGH THURSDAY.**

F. In accordance with the Commonwealth of Massachusetts Executive Order Suspending Certain Provisions of the Open Meeting Law, 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** 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, tine, and place, will be posted on www.boston.gov/public-notices and in Boston City Hall not less than forty-eight (48) hours in advance.

NOTE: If you would like to provide comments, you may attend the public hearing or send written comments to 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.

AFFIDAVIT OF SERVICE
Under the Massachusetts Wetlands Protection Act
and the
ORDINANCE PROTECTING LOCAL WETLANDS AND
PROMOTING CLIMATE CHANGE ADAPTATION IN
THE CITY OF BOSTON

I Gene Crouch hereby certify under the pains
Applicant/Representative's Name

and penalties of perjury that on July 7, 2020 I gave re-notification
Submittal Date

to Abutters in connection with the following matter:
A Notice of Intent filed by

The Department of Conservation and Recreation with the Boston Conservation

Applicant's Name

Commission for property along Morrissey Boulevard
Project Address

The form of notification, and a list of the abutters to whom it was given and their addressed are attached to this Affidavit of Service

Signature 7/8/2020
Date

PID	OWNER	ADDRESSEE	MLG_ADDRESS	MLG_CITYSTATE	MLG_ZIPCODE	LOC_ADDRESS	LOC_CITY	LOC_ZIPCODE
1600212010	12 EVERDEAN STREET	12 EVERDEAN STREET	12 EVERDEAN ST	DORCHESTER MA	2122	12 EVERDEAN ST	DORCHESTER	2122
1302364050	135 MORRISSEY OWNER LLC	135 MORRISSEY OWNER LLC	ONE POST OFFICE SQ STE 3150	BOSTON MA	2109	135 WM T MORRISSEY BL	SOUTH BOSTON	2127
1302311000	227 SAVIN HILL AVENUE REALTY	227 SAVIN HILL AVENUE REALTY	227 SAVIN HILL AVE	DORCHESTER MA	2125	227 SAVIN HILL AV	DORCHESTER	2125
1302585026	AGUILAR OSCAR O	AGUILAR OSCAR O	157 IVY ST	BROOKLINE MA	2446	306 SAVIN HILL AV #13	DORCHESTER	2125
1302372004	ANDREYCAK & TOWNSHEND LLC	ANDREYCAK & TOWNSHEND LLC	46 O ST	SOUTH BOSTON MA	2127	299 SAVIN HILL AV #2	DORCHESTER	2125
1302331016	AURISE LORA	AURISE LORA	247 SAVIN HILL AV #3	DORCHESTER MA	2125	247 SAVIN HILL AV #3	DORCHESTER	2125
1302589004	BARRON ANDREA D	BARRON ANDREA D	296 SAVIN HILL AV #2	DORCHESTER MA	2125	296 SAVIN HILL AV #2	DORCHESTER	2125
1302367000	BLAKE BRIAN	BLAKE BRIAN	289 SAVIN HILL AV	DORCHESTER MA	2125	289 SAVIN HILL AV	DORCHESTER	2125
1303401000	BOSTON COLLEGE HIGH	BOSTON COLLEGE HIGH	160 WM T MORRISSEY BLVD	DORCHESTER MA	2125	160 150 WM T MORRISSEY BL	DORCHESTER	2125
1302351001	BRETT JAMES T	BRETT JAMES T	7 WEDMORE ST	DORCHESTER MA	2125	WEDMORE ST	DORCHESTER	2125
1302352000	BRETT JAMES T	BRETT JAMES T	7 WEDMORE ST	DORCHESTER MA	2125	7 WEDMORE ST	DORCHESTER	2125
1302354000	BRETT JAMES T	BRETT JAMES T	7 WEDMORE ST	DORCHESTER MA	2125	WEDMORE ST	DORCHESTER	2125
1302357000	BRETT JAMES T	BRETT JAMES T	7 WEDMORE ST	DORCHESTER MA	2125	WEDMORE ST	DORCHESTER	2125
1302363002	BROTCHIE WILLIAM K	BROTCHIE WILLIAM K	285 MORRISSEY BL	DORCHESTER MA	2125	285 WM T MORRISSEY BL	DORCHESTER	2125
1302323000	CABRAL CARLOS E	CABRAL CARLOS E	235 SAVIN HILL AV	DORCHESTER MA	2125	235 SAVIN HILL AV	DORCHESTER	2125
1302338000	CAHOON GEORGE B JR	CAHOON GEORGE B JR	257 SAVIN HILL AVENUE	DORCHESTER MA	2125	2 EVANDALE TE	DORCHESTER	2125
1302317000	CARDINALE STEPHEN F	CARDINALE STEPHEN F	401 WM T MORRISSEY VL	DORCHESTER MA	2125	401 WM T MORRISSEY BL	DORCHESTER	2125
1302312000	CARNEY BERNARD T	CARNEY BERNARD T	231 SAVIN HILL AVE	DORCHESTER MA	2125	231 SAVIN HILL AV	DORCHESTER	2125
1302468000	CARNEY ROBERT	CARNEY ROBERT	240 SAVIN HILL AV	DORCHESTER MA	2125	240 SAVIN HILL AV	DORCHESTER	2125
1600192000	CHAU HA K	CHAU HA K	7 EVERDEAN ST	DORCHESTER MA	2122	7 EVERDEAN ST	DORCHESTER	2122
1600003000	CITY OF BOSTON	CITY OF BOSTON	100 FEDERAL	BOSTON MA	2110	FREEPORT ST	DORCHESTER	2122
1600004000	CITY OF BOSTON BY FCL	CITY OF BOSTON BY FCL	FREEPORT ST	DORCHESTER MA	2122	FREEPORT ST	DORCHESTER	2122
1600219000	COLBEA ENTERPRISES LLC	COLBEA ENTERPRISES LLC	2050 PLAINFIELD PIKE	CRANSTON RI	2921	655 WM T MORRISSEY BL	DORCHESTER	2122
1600231000	COMM OF MASS DPW	COMM OF MASS DPW	VICTORY RD	DORCHESTER MA	2122	VICTORY RD	DORCHESTER	2122
1302364060	COMMONWEALTH OF MASS	COMMONWEALTH OF MASS	WM T MORRISSEY BLVD	DORCHESTER MA	2125	WM T MORRISSEY BL	SOUTH BOSTON	2127
1303391000	COMMONWEALTH OF MASS	COMMONWEALTH OF MASS	WM T MORRISSEY BLVD	DORCHESTER MA	2125	WM T MORRISSEY BL	DORCHESTER	2125
1303400000	COMMONWEALTH OF MASS	COMMONWEALTH OF MASS	200 WM T MORRISSEY BLVD	DORCHESTER MA	2125	200 WM T MORRISSEY BL	DORCHESTER	2125
1600220000	COMMONWLTH OF MASS	COMMONWLTH OF MASS	FREEPORT ST	DORCHESTER MA	2122	FREEPORT ST	BOSTON	2122
1600002000	COMMWLTH OF MASS	COMMWLTH OF MASS	WM T MORRISSEY BLVD	DORCHESTER MA	2122	WM T MORRISSEY BL	DORCHESTER	2122
1600232000	COMMWLTH OF MASS	COMMWLTH OF MASS	FREEPORT	DORCHESTER MA	2122	FREEPORT ST	DORCHESTER	2122
1302364002	COMMWLTH OF MASS	COMMWLTH OF MASS	MOUNT VERNON	DORCHESTER MA	2125	MT VERNON ST	DORCHESTER	2125
1302364055	COMMWLTH OF MASS	COMMWLTH OF MASS	WM T MORRISSEY BLVD	DORCHESTER MA	2125	WM T MORRISSEY BL	SOUTH BOSTON	2127
1600210000	CONNOLLY THOMAS F JR	CONNOLLY THOMAS F JR	20 EVERDEAN ST	DORCHESTER MA	2122	20 EVERDEAN ST	BOSTON	2122
1302360000	CROKE ROGER L	CROKE ROGER L	273 SAVIN HILL AVE	DORCHESTER MA	2125	273 275 SAVIN HILL AV	DORCHESTER	2125
1302585018	CROWELL VIVIAN S	CROWELL VIVIAN S	1A HAMPSHIRE RD	FRAMINGHAM MA	1702	306 SAVIN HILL AV #9	DORCHESTER	2125
1600213000	DANG TAI V	DANG TAI V	8 EVERDEAN ST	DORCHESTER MA	2122	8 EVERDEAN ST	BOSTON	2122
1302318000	DAVIS KHAN-DOHERTY FARIDA	DAVIS KHAN-DOHERTY FARIDA	18 FOX POINT RD	DORCHESTER MA	2125	18 FOX POINT RD	DORCHESTER	2125
1302319000	DAVIS KHAN-DOHERTY FARIDA	DAVIS KHAN-DOHERTY FARIDA	18 FOX POINT RD	DORCHESTER MA	2125	FOX POINT RD	DORCHESTER	2125
1302324000	DEABLER KEVIN	DEABLER KEVIN	237 SAVIN HILL AV	DORCHESTER MA	2125	237 SAVIN HILL AV	DORCHESTER	2125
1302358000	DECHIARA PAUL F LT	DECHIARA PAUL F LT	269 SAVIN HILL AV	DORCHESTER MA	2125	269 SAVIN HILL AV	DORCHESTER	2125
1302359000	DECHIARA PAUL F LT	DECHIARA PAUL F LT	269 SAVIN HILL AV	DORCHESTER MA	2125	269 SAVIN HILL AV	DORCHESTER	2125
1302585022	DEVER BRENDAN P	DEVER BRENDAN P	306 SAVIN HILL AV #11	DORCHESTER MA	2125	306 SAVIN HILL AV #11	DORCHESTER	2125
1302329001	DIENER ROBERT B	DIENER ROBERT B	243A SAVIN HILL AVE	DORCHESTER MA	2125	243 A SAVIN HILL AV	DORCHESTER	2125
1600211000	DO LAM K	DO LAM K	16 EVERDEAN ST	DORCHESTER MA	2122	16 EVERDEAN ST	BOSTON	2122
1302315000	DONOVAN ANDREW M	DONOVAN ANDREW M	11 FOX POINT RD	DORCHESTER MA	2125	11 FOX POINT RD	DORCHESTER	2125
1600222000	EXPRESSWAY MOTORS LLC	EXPRESSWAY MOTORS LLC	700 MORRISSEY BLVD	DORCHESTER MA	2122	650 700 WM T MORRISSEY BL	DORCHESTER	2122
1302585024	FATA ROBERT J	FATA ROBERT J	306 SAVIN HILL AV	DORCHESTER MA	2125	306 SAVIN HILL AV #12	DORCHESTER	2125
1302589002	FILOMENO ALEXANDER J	FILOMENO ALEXANDER J	296 SAVIN HILL AV #1	DORCHESTER MA	2125	296 SAVIN HILL AV #1	DORCHESTER	2125
1302372002	FLOOD COURTNEY E	FLOOD COURTNEY E	299 SAVIN HILL AVE #1	DORCHESTER MA	2125	299 SAVIN HILL AV #1	DORCHESTER	2125
1302585000	FOX POINT CONDO TR	FOX POINT CONDO TR	308 SAVIN HILL AV	DORCHESTER MA	2125	308 306 SAVIN HILL AV	DORCHESTER	2125
1600191000	FREEPORT REALTY II LLC	FREEPORT REALTY II LLC	337 FREEPORT ST	DORCHESTER MA	2122	333 FREEPORT ST	DORCHESTER	2122
1600214000	FREEPORT REALTY LLC	FREEPORT REALTY LLC	337 FREEPORT ST	DORCHESTER MA	2122	4 EVERDEAN ST	BOSTON	2122
1600190000	FROMM WALTER F JR	FROMM WALTER F JR	329 FREEPORT ST	DORCHESTER MA	2122	329 331 FREEPORT ST	DORCHESTER	2122
1302585030	GALES ANTHONY	GALES ANTHONY	306 SAVIN HILL AV #15	DORCHESTER MA	2125	306 SAVIN HILL AV #15	DORCHESTER	2125
1302316000	GIORDANI JAMES	GIORDANI JAMES	10 FOX POINT RD	DORCHESTER MA	2125	FOX POINT RD	DORCHESTER	2125
1302321000	GIORDANI JAMES	GIORDANI JAMES	10 FOX POINT RD	DORCHESTER MA	2125	10 FOX POINT RD	DORCHESTER	2125
1302593000	HASTREITER BRIAN W	HASTREITER BRIAN W	92 GRAMPIAN WAY	DORCHESTER MA	2125	92 GRAMPIAN WY	DORCHESTER	2125
1302469000	HUTCHINSON EDWARD T	HUTCHINSON EDWARD T	238 SAVIN HILL AV	DORCHESTER MA	2125	238 SAVIN HILL AV	DORCHESTER	2125
1302313000	KAREN R PAVIDIS REVOCABLE	KAREN R PAVIDIS REVOCABLE	233 SAVIN HILL AVE	DORCHESTER MA	2125	233 SAVIN HILL AV	DORCHESTER	2125
1302340000	KNASAS ALFRED B ETAL	KNASAS ALFRED B ETAL	8 EVANDALE TERR	DORCHESTER MA	2125	6 EVANDALE TE	DORCHESTER	2125
1302341000	KNASAS ALFRED B ETAL	KNASAS ALFRED B ETAL	8 EVANDALE TERRACE	DORCHESTER MA	2125	8 EVANDALE TE	DORCHESTER	2125
1600212000	LABORERS LOCAL UNION 223	LABORERS LOCAL UNION 223	12A EVERDEAN	DORCHESTER MA	2122	12A EVERDEAN ST	BOSTON	2122
1302368000	LAFFERTY JOSEPH R	LAFFERTY JOSEPH R	291 SAVIN HILL AV	DORCHESTER MA	2125	291 SAVIN HILL AV	DORCHESTER	2125
1302588000	LAFFERTY MICHAEL J	LAFFERTY MICHAEL J	300 SAVIN HILL AV	DORCHESTER MA	2125	300 SAVIN HILL AV	DORCHESTER	2125
1302585008	LAM CHIEU V	LAM CHIEU V	306 SAVIN HILL AVE #4	DORCHESTER MA	2125	306 SAVIN HILL AV #4	DORCHESTER	2125
1302310000	LATERMAN BARRY J	LATERMAN BARRY J	225 SAVIN HILL AV	DORCHESTER MA	2125	225 SAVIN HILL AV	DORCHESTER	2125
1600189000	LE NHUT MINH	LE NHUT MINH	325 FREEPORT ST	DORCHESTER MA	2122	325 327 FREEPORT ST	DORCHESTER	2122
1302326000	LESCINSKAS RONALD	LESCINSKAS RONALD	241 SAVIN HILL AV	DORCHESTER MA	2125	241 SAVIN HILL AV	DORCHESTER	2125
1302585032	LEVY DAVID L	LEVY DAVID L	73 WALLIS ROAD	CHESTNUT HILL MA	2467	306 SAVIN HILL AV #16	DORCHESTER	2125
1302365000	LYDON MARK	LYDON MARK	10 OLD COLONY TE	DORCHESTER MA	2125	10 OLD COLONY TE	DORCHESTER	2125
1302585004	MANSOUR JOHN A	MANSOUR JOHN A	PO BOX 53	EAST BOSTON MA	2128	306 SAVIN HILL AV #2	DORCHESTER	2125
1302334000	MASCELLUTI PATRICIA C	MASCELLUTI PATRICIA C	251 SAVIN HILL AV	DORCHESTER MA	2125	251 SAVIN HILL AV	DORCHESTER	2125
1302467000	MCDONOUGH REALTY TRUST	MCDONOUGH REALTY TRUST	242 SAVIN HILL AVE	DORCHESTER MA	2125	242 SAVIN HILL AV	DORCHESTER	2125
1302585028	MCGOWAN JAMES	MCGOWAN JAMES	306 SAVIN HILL AV # 14	DORCHESTER MA	2125	306 SAVIN HILL AV #14	DORCHESTER	2125
1302327000	MCNALLY MICHAEL D	MCNALLY MICHAEL D	ONE WESTINGHOUSE PLAZA	BOSTON MA	2136	SAVIN HILL AV	DORCHESTER	2125
1600193000	MEDINA HERNANE	MEDINA HERNANE	11 EVERDEAN ST	DORCHESTER MA	2122	11 EVERDEAN ST	DORCHESTER	2122
1302335000	MILLER DOREEN ELIZABETH	MILLER DOREEN ELIZABETH	253 SAVIN HILL AV	DORCHESTER MA	2125	253 SAVIN HILL AV	DORCHESTER	2125
1302349000	MILLER RICHARD H TS	MILLER RICHARD H TS	259 SAVIN HILL AVE	DORCHESTER MA	2125	259 SAVIN HILL AV	DORCHESTER	2125
1302585010	MONTANI CHRISTOPHER J	MONTANI CHRISTOPHER J	306 SAVIN HILL AVE #5	DORCHESTER MA	2125	306 SAVIN HILL AV #5	DORCHESTER	2125
1302589006	MORIN MASSINO GIACONO	MORIN MASSINO GIACONO	296 SAVIN HILL AV #3	DORCHESTER MA	2125	296 SAVIN HILL AV #3	DORCHESTER	2125
1302309000	MURRAY CYNTHIA A	MURRAY CYNTHIA A	223 SAVIN HILL AV	DORCHESTER MA	2125	223 SAVIN HILL AV	DORCHESTER	2125
1600230000	NATIONAL GRID ENERGY SERVICI	NATIONAL GRID ENERGY SERVICE	40 SYLVAN RD	WALTHAM MA	2451	238 220 VICTORY RD	DORCHESTER	2122
1302328000	NGO HIEP	NGO HIEP	375 MORRISSEY BL	DORCHESTER MA	2125	375 WM T MORRISSEY BL	DORCHESTER	2125
1302328001	NGO HIEP	NGO HIEP	375 MORRISSEY BL	DORCHESTER MA	2125	SAVIN HILL AV	DORCHESTER	2125
1302344001	NGO HIEP	NGO HIEP	375 MORRISSEY BL	DORCHESTER MA	2125	WM T MORRISSEY BL	DORCHESTER	2125
1302324001	NGUYEN ANH	NGUYEN ANH	51 GREENWOOD AV	HYDE PARK MA	2136	397 WM T MORRISSEY BL	DORCHESTER	2125
1302320000	NGUYEN TONY	NGUYEN TONY	399 WM T MORRISSEY BLVD	DORCHESTER MA	2125	399 WM T MORRISSEY BL	DORCHESTER	2125
1302585020	NGUYEN TUAN Q	NGUYEN TUAN Q	306 SAVIN HILL AV #10	DORCHESTER MA	2125	306 SAVIN HILL AV #10	DORCHESTER	2125
1302325000	POWERS PATRICIA	POWERS PATRICIA	239 SAVIN HILL AV	DORCHESTER MA	2125	239 SAVIN HILL AV	DORCHESTER	2125
1302329002	POWERS ROSEMARY J	POWERS ROSEMARY J	243B SAVIN HILL AV	DORCHESTER MA	2125	243 B SAVIN HILL AV	DORCHESTER	2125
1302350000	QUINLAN THOMAS F	QUINLAN THOMAS F	265 SAVIN HILL AVE	DORCHESTER MA	2125	SAVIN HILL AV	DORCHESTER	2125
1302351000	QUINLAN THOMAS F	QUINLAN THOMAS F	265 SAVIN HILL AVE	DORCHESTER MA	2125	265 SAVIN HILL AV	DORCHESTER	2125
1600215000	RASO CHARLES TS	RASO CHARLES TS	339 FREEPORT ST	DORCHESTER MA	2122	339 341 FREEPORT ST	BOSTON	2122
1600216000	RASO CHARLES TS	RASO CHARLES TS	645 MORRISSEY BLVD	BOSTON MA	2122	343 343H FREEPORT ST	DORCHESTER	2122
1600217000	RASO CHARLES TS	RASO CHARLES TS	645 MORRISSEY BLVD	BOSTON MA	2122	345 347 FREEPORT ST	BOSTON	2122
1600218000	RASO CHARLES TS	RASO CHARLES TS	645 WM T MORRISSEY BLVD	DORCHESTER MA	2122	645 WM T MORRISSEY BL	BOSTON	2122
1600218025	RASO CHARLES TS	RASO CHARLES TS	645 WM T MORRISSEY BLVD	DORCHESTER MA	2122	WM T MORRISSEY BL	DORCHESTER	2122
1302372006	RDM 2004 REVOCABLE TRUST -	RDM 2004 REVOCABLE TRUST -	299 SAVIN HILL AV	DORCHESTER MA	2125	299 SAVIN HILL AV #3	DORCHESTER	2125
1302333001	REARDON ALICE M	REARDON ALICE M	2570 N W 112TH AV	CORAL SPRINGS FL	33065	SAVIN HILL LA	DORCHESTER	2125
1302333002	REARDON ALICE M	REARDON ALICE M	2570 N W 112TH AV	CORAL SPRINGS FL	33065	5 SAVIN HILL LA	DORCHESTER	2125
1302330000	RINELLA ANDREA	RINELLA ANDREA	245 SAVIN HILL AVE	DORCHESTER MA	2125	245 SAVIN HILL AV	DORCHESTER	2125
1302330001	RINELLA ANDREA	RINELLA ANDREA	245 SAVIN HILL AVE	DORCHESTER MA	2125	SAVIN HILL AV	DORCHESTER	2125
1302585012	RITCHIE HOLLIS W ETAL	RITCHIE HOLLIS W ETAL	306 SAVIN HILL AV #6	DORCHESTER MA	2125	306 SAVIN HILL AV #6	DORCHESTER	2125
1302370000	RUBY DANIEL	RUBY DANIEL	293 SAVIN HILL AVE	DORCHESTER MA	2125	293 SAVIN HILL AV	DORCHESTER	2125
1302331014	RUSSELL DEIRDRE	RUSSELL DEIRDRE	247 SAVIN HILL AV #2	DORCHESTER MA	2125	247 SAVIN HILL AV #2	DORCHESTER	2125
1302322000	RUSSELL MATTHEW L	RUSSELL MATTHEW L	8 FOX POINT RD	DORCHESTER MA	2125	8 FOX POINT RD	DORCHESTER	2125
1600194000	SALAS FRANCISCO	SALAS FRANCISCO	15 EVERDEAN	DORCHESTER MA	2122	15 EVERDEAN ST	DORCHESTER	2122
1303392000	SAVIN HILL YACHT CLB INC	SAVIN HILL YACHT CLB INC	400 WM T MORRISSEY BL	DORCHESTER MA	2125	400 WM T MORRISSEY BL	DORCHESTER	2125

1302585006	SILVEY COREEN M	SILVEY COREEN M	306 SAVIN HILL AV #3	DORCHESTER MA	2124	306	SAVIN HILL AV #3	DORCHESTER	2125
1302585002	SKUDRIS PAUL W	SKUDRIS PAUL W	88 ASSABET RD &	QUINCY MA	2169	306	SAVIN HILL AV #1	DORCHESTER	2125
1302466000	SLEZAS ROMAS VIKTORAS ETAL	SLEZAS ROMAS VIKTORAS ETAL	244 SAVIN HILL AVE	DORCHESTER MA	2125	244	SAVIN HILL AV	DORCHESTER	2125
1302314000	SNYDER VANN J	SNYDER VANN J	9 FOX POINT RD	DORCHESTER MA	2125	9	FOX POINT RD	DORCHESTER	2125
1600212014	STANGARONE JESSICA	STANGARONE JESSICA	12 EVERDEAN ST #2	DORCHESTER MA	2122	12	EVERDEAN ST #2	DORCHESTER	2122
1302585014	SWEENEY JOHN P	SWEENEY JOHN P	306 SAVIN HILL AVE #7	DORCHESTER MA	2125	306	SAVIN HILL AV #7	DORCHESTER	2125
1302366000	THOMAS OWEN	THOMAS OWEN	2 OLD COLONY TE	DORCHESTER MA	2125	2	OLD COLONY TE	DORCHESTER	2125
1302587000	THREE-02-304 SAVIN HILL AV	THREE-02-304 SAVIN HILL AV	304 SAVIN HILL AVE	DORCHESTER MA	2125	304 302	SAVIN HILL AV	DORCHESTER	2125
1302331012	TOBEY KATHRYN MARY	TOBEY KATHRYN MARY	247 SAVIN HILL AV #1	DORCHESTER MA	2125	247	SAVIN HILL AV #1	DORCHESTER	2125
1302339000	TUROLSKI STEFAN	TUROLSKI STEFAN	4 EVANDALE TE	DORCHESTER MA	2125	4	EVANDALE TE	DORCHESTER	2125
1302331000	TWO 47 SAVIN HILL AV CONDO	TWO 47 SAVIN HILL AV CONDO	247 SAVIN HILL AV	DORCHESTER MA	2125	247	SAVIN HILL AV	DORCHESTER	2125
1302372000	TWO 99 SAVIN HILL AV CONDO	TWO 99 SAVIN HILL AV CONDO	2309 SHOREWOOD HILLS AV	HENDERSON NV	89052	299	SAVIN HILL AV	DORCHESTER	2125
1302589000	TWO-96 SAVIN HILL AV CONDO	TWO-96 SAVIN HILL AV CONDO	42 CHELMSFORD ST #2	DORCHESTER MA	2122	296	SAVIN HILL AV	DORCHESTER	2125
1302363000	WALPOLE ROBERT HENRY	WALPOLE ROBERT HENRY	277 SAVIN HILL AVE	DORCHESTER MA	2125	277 279	SAVIN HILL AV	DORCHESTER	2125
1302363001	WALPOLE ROBERT HENRY	WALPOLE ROBERT HENRY	277 SAVIN HILL AVE	DORCHESTER MA	2125	OLD COLONY TE		DORCHESTER	2125
1302590000	WALSH DONALD A ETAL	WALSH DONALD A ETAL	268 SAVIN HILL AVE	DORCHESTER MA	2125	SAVIN HILL AV		DORCHESTER	2125
1302591000	WALSH DONALD A ETAL	WALSH DONALD A ETAL	268 SAVIN HILL AVE	DORCHESTER MA	2125	268	SAVIN HILL AV	DORCHESTER	2125
1302585016	WARD JAMES C	WARD JAMES C	32 SUNFLOWER RD	HOLBROOK MA	2343	306	SAVIN HILL AV #8	DORCHESTER	2125
1302345000	WAROT CELINA	WAROT CELINA	7 EVANDALE TE	DORCHESTER MA	2125	7	EVANDALE TE	DORCHESTER	2125
1302346000	WAROT CELINA N	WAROT CELINA N	7 EVANDALE TE	DORCHESTER MA	2125	EVANDALE TE		DORCHESTER	2125
1302347000	WAROT ZDZISLAW A ETAL	WAROT ZDZISLAW A ETAL	3 EVANDALE TERR	DORCHESTER MA	2125	3	EVANDALE TE	DORCHESTER	2125
1302348000	WAROT ZDZISLAW A ETAL	WAROT ZDZISLAW A ETAL	3 EVANDALE TE	DORCHESTER MA	2125	EVANDALE TE		DORCHESTER	2125
1600212012	WASH ALLISON	WASH ALLISON	12 EVERDEAN ST #1	DORCHESTER MA	2122	12	EVERDEAN ST #1	DORCHESTER	2122
1302333000	WHALEN DOUGLAS J	WHALEN DOUGLAS J	249 SAVIN HILL AV	DORCHESTER MA	2125	249	SAVIN HILL AV	DORCHESTER	2125
1302329000	WILSON ELIZABETH M	WILSON ELIZABETH M	243 SAVIN HILL AV	DORCHESTER MA	2125	243	SAVIN HILL AV	DORCHESTER	2125
1302337000	WOJCIK MICHALINA	WOJCIK MICHALINA	257 SAVIN HILL AV	DORCHESTER MA	2125	257	SAVIN HILL AV	DORCHESTER	2125
1302587002	ZWEIG JON	ZWEIG JON	302 SAVIN HILL AV #1	DORCHESTER MA	2125	302 -304	SAVIN HILL AV #1	DORCHESTER	2125
1302587006	ZWEIG JONATHAN L	ZWEIG JONATHAN L	555 S BARRINGTON AV #317	LOS ANGELES CA	90049	302 -304	SAVIN HILL AV #3	DORCHESTER	2125
1302587004	ZWEIG KENNETH E	ZWEIG KENNETH E	304 SAVIN HILL AV #2	DORCHESTER MA	2125	302 -304	SAVIN HILL AV #2	DORCHESTER	2125

Attachment C
Stormwater Memorandum and Checklist

Memorandum

To: Boston Conservation Commission
1 City Hall Square, Room 709
Boston, MA 02201

Date: April 21, 2020

Project #: 14371.00

From: Jillian Baumbach, PE
Maria Briones, EIT
Eric Monkiewicz, PE

Re: Stormwater Management Memorandum
Morrissey Boulevard (Dorchester)

This Stormwater Management Memorandum has been prepared to show compliance with the Massachusetts Stormwater Management Standards in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00).

Project Description

The Applicant, the Department of Conservation and Recreation (DCR), is proposing to install six inline tide gates at four locations along Morrissey Boulevard (the Project) in the vicinity of the Dorchester Bay Basin in the Dorchester neighborhood of Boston, MA (the Site). According to DCR and the City of Boston, this segment of Morrissey Boulevard, which spans from 450 north of the I-93 overpass to approximately the Savin Hill Yacht Club, floods many times a year. Flooding is extensive enough to close the road approximately 18-24 times a year according to DCR. In order to mitigate the frequency of flooding along this portion of Morrissey Boulevard, DCR is proposing the installation of six tide gates at four locations to prevent tidal waters from surcharging the existing closed drainage system, especially when the drainage system is already at maximum capacity during large rain events. The purpose of the Project is to reduce the frequency of flooding on Morrissey Boulevard and thus reduce the number of the times the road must close for safety purposes. At this time, DCR proposes only work necessary to install the six tide gates along this portion of Morrissey Boulevard. More comprehensive measures are contemplated for the future to further remediate the flooding in this location.

DCR is proposing to install six inline tide gates, manufactured by the company WAPRO, at four locations that will be upstream of four existing outfalls. Each tide gate will be inline and installed upstream of a new drain manhole for maintenance access and will be located within upland area including existing sidewalks and grass areas to avoid permanent or temporary disturbance to the Coastal Beach and Salt Marsh.

The Project will require work within Land Subject to Coastal Storm Flowage (LSCSF) and the 100-foot buffer zone to resource areas regulated by the Wetlands Protection Act (WPA). Resource areas will be protected from impacts during construction through the implementation of an erosion and sedimentation control program. This program includes provisions to minimize areas of disturbance through phasing and sequencing, limit erosion through stabilization, and prevent sediment from leaving the Site by installing structural controls. The Project will not change any drainage patterns or flow of stormwater off the Project Site.

The proposed Project has been designed to fully comply with the MassDEP Stormwater Management Standards.

101 Walnut Street
Watertown, MA 02472
P 617.924.1770

Memorandum

Site Description

The Project Site is an approximately 2,500-foot stretch of roadway on DCR property which straddles the boundary of the Dorchester Bay Basin with the Squantum Channel. The existing roadway provides north and south bound travel via three 12-foot wide travel lanes with 2-foot shoulders on either side. Abutting the outer roadway shoulders is a six-foot wide grassed strip (with an exception along Morrissey Boulevard bridge) and five-foot sidewalk. Concrete and Hot Mix Asphalt sidewalks span the length of the Site. Under current conditions, tidal conditions allow water to back up into the closed drainage system via four outfalls along the Site and surcharge existing manholes and catch basins. Three of these outfalls are found on the Eastern side of Morrissey Boulevard and discharge directly to the Squantum Channel while the fourth, on the Western side of Morrissey Boulevard discharges directly into the Dorchester Bay Basin. Overtopping of the road is also a source of flooding along this segment of Morrissey Boulevard and would not be addressed as part of this effort but is being contemplated for the future.

Surrounding land use includes Malibu Beach to the west, additional beach area to the east, multi-family residential areas to the southwest and northwest, a National Grid facility to the southeast, and yacht club to the North.

Existing Drainage Conditions

Runoff from the existing Site is collected in a closed drainage system through a series of catch basins and manholes and discharges via four outfalls. Stormwater flow and treatment will not be altered by the Project.

Proposed Drainage Conditions

Proposed work includes installation of six inline tide gates at four locations. In addition to these six new inline tide gates four new drain manholes will be installed, upstream of the four outfalls, two of them replacing existing drain manholes and the other two being new additions to the closed drainage system. The inline tide gates will be installed upstream of the drain manholes to provide an access point for maintenance on the tide gates. Proposed drainage patterns are not being altered as part of the Project and no new impervious area is being proposed.

Massachusetts Department of Environmental Protection (MassDEP) – Stormwater Management Standards

As demonstrated below, the proposed Project fully complies with the MassDEP Stormwater Management Standards.

Standard 1: No New Untreated Discharges

The Project has been designed to fully comply with Standard 1. No new untreated discharges are proposed as part of the Project.

101 Walnut Street
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Memorandum

Standard 2: Peak Rate Attenuation

The Project has been designed to fully comply with Standard 2. No increase in impervious area is proposed as part of the Project.

Standard 3: Stormwater Recharge

The Project has been designed to fully comply with Standard 3. No increase in impervious area is proposed as part of the Project.

Standard 4: Water Quality

The Project has been designed to fully comply with Standard 4. No increase in impervious area is proposed as part of the Project.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

The Project use is not listed as a land use with higher potential pollutant loads.

Standard 6: Critical Areas

The project does not discharge to an Outstanding Resource Water (ORW), Coldwater Fisheries or an Area of Critical Environmental Concern (ACEC).

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the Maximum Extent Practicable

Although the Project is classified as a redevelopment, the Project has been designed to fully comply with Standard 7 and all other Standards.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Controls

The stormwater portion of the project will disturb less than 1 acre of land and is therefore not required to obtain coverage under the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit.

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Memorandum

Standard 9: Operation and Maintenance Plan

In compliance with Standard 9, a Post Construction Stormwater Operation and Maintenance (O&M) Plan has been developed for the Project. The O&M Plan is attached. Appropriate erosion and sedimentation controls will be installed during construction.

Standard 10: Prohibition of Illicit Discharges

During construction, the Project contractor will be required to verify there are no illicit connections to the drainage system. If an illicit connection is discovered, the Boston Department of Public Works and Board of Health will be notified to take appropriate action.

No statement is made regarding portions of existing drainage systems not included in the project area.

Attachments: Stormwater Checklist
Operation and Maintenance Plan and Long-Term Pollution Prevention Plan

101 Walnut Street
Watertown, MA 02472
P 617.924.1770

Memorandum

Attachment 1

Stormwater Checklist

■

\\vhb\gbl\proj\Wat-EV\14371.00 DCR Stormwater-Statewide\docs\VARIOUS\Wetland Permitting\Morrissey Boulevard\NOI\Stormwater Memo and Checklist\Morrissey Blvd Stormwater Memo.docx

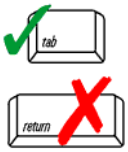
101 Walnut Street
Watertown, MA 02472
P 617.924.1770

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

Checklist for Stormwater Report

A. Introduction

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



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

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.[1] This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8[2]
- Operation and Maintenance Plan required by Standard 9

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

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

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

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

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

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

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.

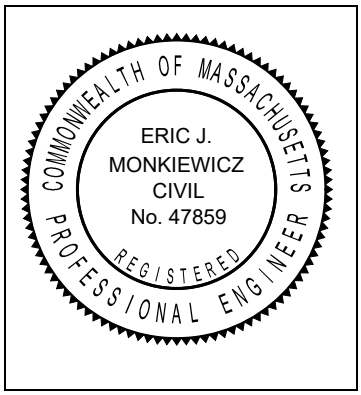
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the 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 Memorandum ~~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



Eric J. Monkiewicz, PE
Digitally signed by Eric J. Monkiewicz, PE
Date: 2020.04.21 19:46:18-04'00'

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

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

Checklist (continued)

Standard 2: Peak Rate Attenuation – *N.A. No increase in impervious area is proposed.*

☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.

☐ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge - *N.A. No increase in impervious area is proposed.*

☐ 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[1]

☐ 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.

Checklist for Stormwater Report

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

Checklist (continued)

Standard 3: Recharge (continued)

☐ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.

☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality - *N.A. No increase in impervious area is proposed.*

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

- Good housekeeping practices;
- Provisions for storing materials and waste products inside or under cover;
- Vehicle washing controls;
- Requirements for routine inspections and maintenance of stormwater BMPs;
- Spill prevention and response plans;
- Provisions for maintenance of lawns, gardens, and other landscaped areas;
- Requirements for storage and use of fertilizers, herbicides, and pesticides;
- Pet waste management provisions;
- Provisions for operation and management of septic systems;
- Provisions for solid waste management;
- Snow disposal and plowing plans relative to Wetland Resource Areas;
- Winter Road Salt and/or Sand Use and Storage restrictions;
- Street sweeping schedules;
- Provisions for prevention of illicit discharges to the stormwater management system;
- Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
- Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
- List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.

☐ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.

☐ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:

- ☐ is within the Zone II or Interim Wellhead Protection Area
- ☐ is near or to other critical areas
- ☐ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
- ☐ involves runoff from land uses with higher potential pollutant loads.

☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.

☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.

Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

☐ The BMP is sized (and calculations provided) based on:

☐ The ½" or 1" Water Quality Volume or Maximum Extent Practicable

☐ 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) – N.A.

☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.

☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted ***prior to*** the discharge of stormwater to the post-construction stormwater BMPs.

☒ The NPDES Multi-Sector General Permit does ***not*** cover the land use.

☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.

☐ All exposure has been eliminated.

☐ All exposure has ***not*** been eliminated and all BMPs selected are on MassDEP LUHPPL list.

☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas – *N.A. The project does not discharge to an Outstanding Resource Water (ORW), Coldwater Fisheries or an Area of Critical Environmental Concern (ACEC)*

☐ 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 Memorandum & NOI.

Checklist for Stormwater Report

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

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.

☐ The project area is owned by MassDOT and will be maintained in accordance with MassDOT's standard Operation and Maintenance Plan for roadway maintenance.

Checklist for Stormwater Report

Checklist (continued)

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;~~ ***included below***

☐ NO Illicit Discharge Compliance Statement is attached but will be submitted ***prior to*** the discharge of any stormwater to post-construction BMPs.

During construction, the Project contractor will be required to verify there are no illicit connections to the drainage system. If an illicit connection is discovered, the Boston Department of Public Works and Board of Health will be notified to take appropriate action.

No statement is made regarding portions of existing drainage systems not included in the project area.

Memorandum

Attachment 2

Operation and Maintenance/Long Term Pollution Prevention Plan

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101 Walnut Street
Watertown, MA 02472
P 617.924.1770

Morrissey Boulevard Tide Gates
Boston, MA

Operation and Maintenance Plan (O&M)
and
Long Term Pollution Prevention Plan (LTPPP)

April 2020

This Stormwater Management System Operation and Maintenance Plan provides for the inspection and maintenance of existing and proposed drainage structures and for measures to prevent pollution associated with the stormwater improvements along Morrissey Boulevard in Boston, MA.

This document has been prepared in accordance with the requirements of the Stormwater Regulations included in the Massachusetts Wetlands Protection Act Regulations (310 CMR 10).

Responsible Party

The Massachusetts Department of Conservation and Recreation (DCR) will be responsible for the maintenance of the roadway facilities and associated stormwater management features, in accordance with their own standards.

Questions or concerns regarding maintenance activities may also be addressed to DCR:

Massachusetts Department of Conservation and Recreation Main Office
251 Causeway Street
Boston, MA 02114
(508) 509-1757

Maintenance Measures

The stormwater management system covered by this Operation and Maintenance Plan consists of the following component:

- Catch Basins
- Deep sump manholes
- WASTOP © Inline Check Valves

Maintenance of this component will be conducted in accordance with DCR standard maintenance practices, as noted in the attached Operation and Maintenance table summarizing the pertinent inspection and maintenance activities.

If inspection indicates the need for major repairs of structural surfaces, the inspector should contact the DCR maintenance supervisor to initiate procedures to effect repairs in accordance with DCR's standard construction practices.

Practices for Long Term Pollution Prevention

In general, long term pollution prevention and related maintenance activities will be conducted consistent with DCR Storm Water Management Plan. Information about the plan are available at the following web-site:

https://www.mass.gov/service-details/dcr-stormwater-management

For the facilities covered by this Operation and Maintenance Plan, long term pollution prevention includes the following measures:

Litter Pick-up
DCR will conduct litter pick-up from the stormwater management facilities in conjunction with routine road maintenance activities.

Routine Inspection and Maintenance of Stormwater Drainage Structures
DCR will conduct inspection and maintenance of the stormwater management practices in accordance with the guidelines discussed above.

Spill Prevention and Response

DCR will implement response procedures for releases of significant materials such as fuels, oils, or chemical materials onto the ground or other areas that could reasonably be expected to discharge to surface or groundwater.

- Reportable quantities will immediately be reported to the applicable Federal, State, and local agencies as required by law.
- Applicable containment and cleanup procedures will be performed immediately. Impacted material collected during the response must be removed promptly and disposed of in accordance with Federal, State, and local requirements. A licensed emergency response contractor may be required to assist in cleanup of releases depending on the amount of the release and the ability of the responsible party to perform the required response.
- Reportable quantities of chemical, fuels, or oils are established under the Clean Water Act and enforced through DEP.

Snow and Ice Management

Snow and Ice Management shall be conducted according to standard DCR practices.

Prohibition of Illicit Discharges

The DEP Stormwater Management Standards prohibit illicit discharges to the storm water management system. Illicit discharges are discharges that do not entirely consist of stormwater, except for certain specified non-stormwater discharges.

Discharges from the following activities are not considered illicit discharges:

firefighting	foundation drains
water line flushing	footing drains
landscape irrigation	individual resident car washing
uncontaminated groundwater	flows from riparian habitats and wetlands
potable water sources	dechlorinated water from swimming pools
water used to clean residential buildings without detergents	water used for street washing
	air conditioning condensation

There are no known or proposed illicit connections associated with this project. If a potential illicit discharge to the facilities covered by this plan is detected (e.g., dry weather flows at any pipe outlet, evidence of contamination of surface water discharge by non-stormwater sources), the applicable parties shall be notified for assistance in determining the nature and source of the discharge, and for resolution through an applicable IDDE program.

Appendix: Best Management Practices: Operation & Maintenance Measures

Best Management Practice	Inspect	Clean	Rehabilitation/ Repair
Deep Sump Manholes	Biannual	Annual	ANI
WASTOP © Inline Check Valve- Fasteners, Seal, Marine Growth, Membrane*	Biannual	ANI	ANI
Catch Basins/Ancillary Piping- Parkways	Annual	Annual	ANI

ANI= As needed based on inspection
*Refer to WaStop Installation Maintenance and Product Guarantee for additional details on maintenance

Attachment D
Photographic Log

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 1 | **Date:** 3/17/20

Description:
View looking south at Wetland 1.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 2 | **Date:** 3/17/20

Description:
View looking north at Wetland 1 and Morrissey Boulevard bridge over Dorchester Bay Basin.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 3 | **Date:** 1/24/20

Description:
View looking south at Location 1. Tide gate proposed upland near center of image.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 4 | **Date:** 3/17/20

Description:
View of outfall at Location 2, looking west toward Morrissey Boulevard.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 5 | **Date:** 3/17/20

Description:
View looking north at Wetland 2.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 6 | **Date:** 1/24/20

Description:
View looking south at Location 2. Tide gate proposed in sidewalk on right side of image.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 7 | **Date:** 3/17/20

Description:
View looking north at Wetland 3. Buried outfall at Location 3 is visible in bottom left.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 8 | **Date:** 3/17/20

Description:
View looking south at Wetland 3. Buried outfall at Location 3 is visible in bottom right.

Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 9 | **Date:** 1/24/20

Description:
View looking south at Location 3. Tide gate proposed in sidewalk shoulder in center of photograph.

Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR | **Site Location:** Morrissey Blvd., Dorchester, MA | **Project No**: 14371.00

Photo No.: 10 | **Date:** 3/17/20

Description:
View looking south of Wetland 4.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR	**Site Location:** Morrissey Blvd., Dorchester, MA	**Project No**: 14371.00

Photo No.: 11 **Date:** 3/17/20

Description:

View looking west of Wetland 4, toward Morrissey Boulevard.

vhb Engineers | Scientists | Planners | Designers

Photographic Log

Client Name: DCR	**Site Location:** Morrissey Blvd., Dorchester, MA	**Project No**: 14371.00

Photo No.: 12 **Date:** 1/24/20

Description:

View looking northwest at Location 4 and Wetland 4. Tide gate is proposed in grass strip between bituminous sidewalk and roadway, near parked truck in left side of photograph.

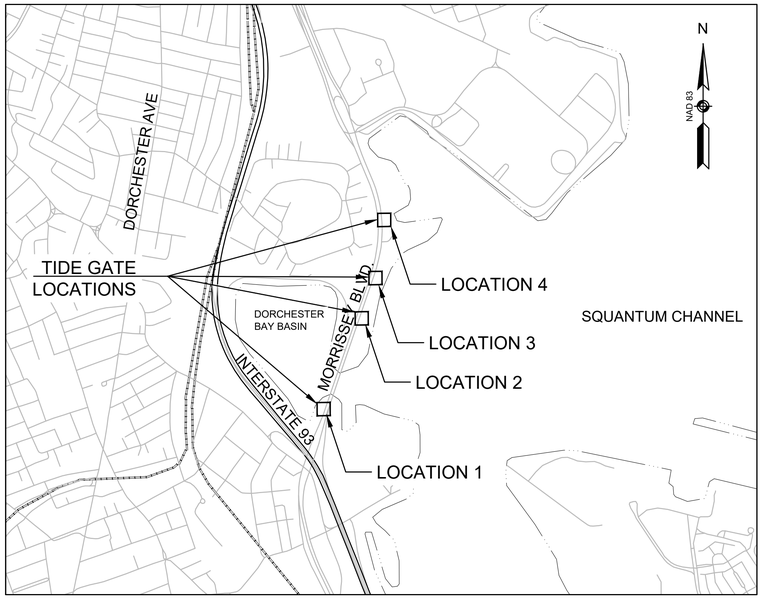
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BOULEVARD TIDE GATES
IN THE CITY OF BOSTON
MASSACHUSETTS
SUFFOLK COUNTY

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

DCR CONTRACT NO. XXX-XXXX-XXX

INDEX



0 1000 2000 3000 4000

SCALE: 1" = 1000'

CHARLES D. BAKER, GOVERNOR

KARYN E. POLITO, LT. GOVERNOR

KATHLEEN A. THEOHARIDES, SECRETARY,
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

JIM MONTGOMERY, COMMISSIONER,
DEPARTMENT OF CONSERVATION & RECREATION

PATRICE KISH, ACTING CHIEF,
DEPARTMENT OF CONSERVATION & RECREATION

REV.	DATE	DESCRIPTION	BY

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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER: JCB
CHECKED: EJM
DRAWN: MBB
CHECKED: EJM

TITLE SHEET & INDEX

CONT. XXX-XXXX-XXX
ACC.

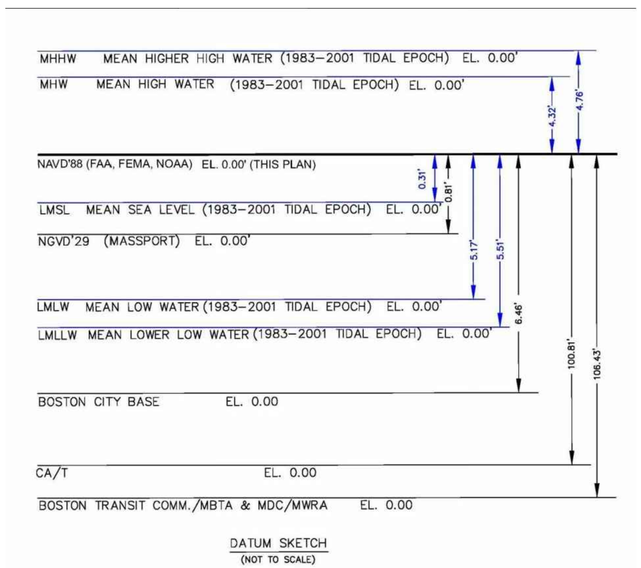
SCALE: AS NOTED
DATE: 04/10/2020

SHEET NO.
COV
1 OF 12

14371.00-COV.DWG Plotted on 21-May-2020 10:10 PM

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
○	○	FENCE GATE POST
◔ BHL #	◔ BHL #	BORING HOLE
◪ TP #	◪ TP #	TEST PIT
	⚲	DRY HYDRANT
	B ●	BOLLARD
■ MHB	■ MHB	MASSACHUSETTS HIGHWAY BOUND
▫ MON		MONUMENT
▫ SB		STONE BOUND
■ TB		TOWN OR CITY BOUND
△		TRAVERSE OR TRIANGULATION STATION
○		BUSH
•SIZE & TYPE		TREE
○		STUMP
⸙		SWAMP / MARSH
◘ WF–X–XXX		WETLAND FLAG
—100— —99—		CONTOURS (ON-THE-GROUND SURVEY DATA)
12" RCP D		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
x x		CHAIN LINK OR METAL FENCE
▫ ▫		WOOD FENCE
		TREE LINE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		100 FT WETLAND BUFFER
		25 FT WATERFRONT AREA
		TOWN OR CITY BOUNDARY LINE
		LINEAR SEDIMENT BARRIER
		BENCHMARK
		SIGN / SIGNPOST
		BUILDING
		TURBIDITY BARRIER
		BANK
		LOW WATER LINE
	>	INLINE TIDE GATE



DATUM SKETCH
(NOT TO SCALE)

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX	APPROXIMATE
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BZ	BUFFER ZONE
CONC	CONCRETE
CONT	CONTINUOUS CONTRACT
DI	DUCTILE IRON
DIA	DIAMETER
DYL	DASHED YELLOW LINE
E	EAST
ELEV (or EL)	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
GAR	GARAGE
GRAV	GRAVEL
HMA	HOT MIX ASPHALT
HYD	HYDRANT
LOW	LIMIT OF WORK
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
NAVD	NORTH AMERICAN VERTICAL DATUM
N	NORTH
NBZ	NO BUILD ZONE
NTZ	NO TOUCH ZONE
NO	NUMBER
PAVE	PAVEMENT
PROJ	PROJECT
PROP	PROPOSED
RB	REBAR
R	RADIUS
RD	ROAD
REM	REMOVE
RET	RETAIN
REV	REVISION
ROW	RIGHT OF WAY
RT	RIGHT
TEMP	TEMPORARY
TYP	TYPICAL
VAR	VARIES
WET	WETLAND
WF	WETLAND FLAG
X-SECT	CROSS SECTION

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND GRADES IN THE FIELD BEFORE COMMENCING WORK AND PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. TREES AND SHRUBS WITHIN THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER UNLESS NOTED ON THE CONSTRUCTION DOCUMENTS.
3. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
4. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
5. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
6. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
7. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
8. CONTRACTOR SHALL NOTIFY THE CITY OF BOSTOM TO MARK ALL CITY OWNED WATER, SEWER, AND DRAINAGE UTILITIES PRIOR TO PERFORMING ANY EXCAVATION OR GRADING ACTIVITIES.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
10. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6 INCHES LOAM AND SEED.
11. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
12. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
13. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA NOT ALREADY KNOWN TO THE PROJECT ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES , BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
14. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
15. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
16. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
17. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

EXISTING CONDITIONS INFORMATION

1. THE EXISTING CONDITIONS SURVEY IS A MERGED DATASET COMPRISED OF FIELD SURVEY AND WETLAND DELINEATION DATA. FIELD SURVEY WAS CONDUCTED BY VHB OF WATERTOWN, MA IN MARCH 2020. WETLAND DELINEATION WAS PERFORMED BY VHB ON MARCH 16, 2020.
2. HORIZONTAL DATUM IS BASED ON MASS. GRID SYSTEM, NAD 1983 (2011) EPOCH 2010.00 U.S. SURVEY FOOT. ELEVATIONS SHOWN ON THIS PLAN REFER TO NAVD OF 1988, GEIOD 12B AND WERE GENERATED USING GPS MEANS.BENCHMARKS WERE SET AT EACH SITE AND ARE SHOWN ON PLAN.
3. MEAN LOW WATER (MLW), WITH REFERENCE TO NAVD88 IS AT ELEVATION -5.16 FEET PER DATUM OF NOAA STATION 8443970 LOCATED IN BOSTON, MA
4. MEAN HIGH WATER (MHW), WITH REFERENCE TO NAVD88 IS AT ELEVATION 4.3 FEET PER DATUM OF NOAA STATION 8443970 LOCATED IN BOSTON, MA

UTILITIES

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.

LAYOUT AND MATERIALS

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF WALL, AND CENTERLINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
3. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
4. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
5. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

EROSION CONTROL

1. CONTRACTOR SHALL NOTIFY THE CONSERVATION AGENT ASSIGNED TO THE PROJECT BY THE CONSERVATION COMMISSION AT LEAST TWO BUSINESS DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION SO ALL EROSION CONTROLS CAN BE INSPECTED AND APPROVED.
2. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
3. CONTRACTOR SHALL PROTECT ALL TREES AS SHOWN ON THE PLANS. ANY CLEARING, CUTTING, OR LIMBING NOT SHOWN ON PLANS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM THE TOWNS.
4. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
5. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
6. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

DIVERSION AND CONTROL OF WATER

1. CONTRACTOR SHALL MONITOR WEATHER PATTERNS AND IMPLEMENT NECESSARY MEASURES TO MANAGE STORMWATER FLOWING FROM THE OUTFALL TO THE OCEAN DURING CONSTRUCTION.

DOCUMENT USE

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER: JBB
CHECKED: EJM
DRAWN: MBB
CHECKED: EJM

NOTES, LEGEND & ABBREVIATIONS

CONT. XXX-XXXX-XXX
ACC.

SCALE: NTS
DATE: 4/10/2020

SHEET NO.
LEG
2 OF 12

14371.00-LEG.DWG Plotted on 21-May-2020 10:34 PM

NAD 83

N

DRAINAGE STRUCTURE DATA					
NO.	TYPE	RIM ELEV.	INV. IN	INV. OUT	REMARKS
1	DMH	10.18	*	*	DEEP SUMP 5-FOOT DMH

*MATCH EXISTING

WF#1–101
WF#1–102
WF#1–103
WF#1–104
WF#1–105
WF#1–106
WF#1–107
WF#1–108
WF#1–109ENDOPE

EBB
FLOW

LIMIT OF SALT MARSH

APPROX. TOP OF COASTAL BANK LINE CORRESPONDS TO THE APPROX. HIGH TIDE LINE (ELEV 6.6')

LIMIT OF 25-FOOT WATERFRONT AREA

PROP EROSION CONTROL

PROP WASTOP 30- INCH TIDE GATE

PROP LOAM AND SEED

REM 6-FEET EXIST PIPE

PROP LOW

A

A'

BENCHMARK: #1501 SET
TOP EAST SIDE OF
METAL SIGN REMNANTS
EL=13.82'

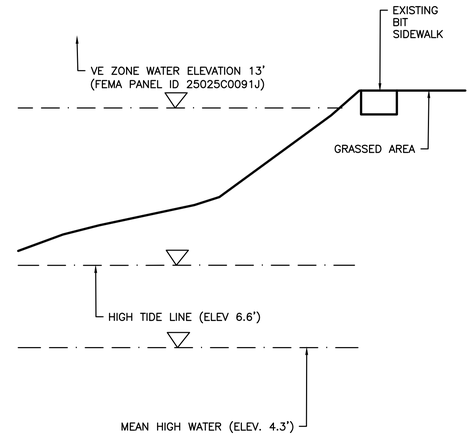
CB
RIM=13.04'

DMH
RIM=13.87'
INV=9.7' 12"RCP
INV=2.0' 30"RCP
INV=2.0' 30"RCP

MORRISSEY BOULEVARD
(PUBLIC – VARIABLE WIDTH)

LAND SUBJECT TO COASTAL STORM FLOWAGE

LIMIT OF 100-FT BUFFER ZONE



Profile A - A'

HOR: 1"=10' VERT: 1"=5' Source: VHB

NOTES:
1. MEAN LOW WATER IS AT ELEVATION –5.6 FEET NAVD88

0 10 25 50
SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

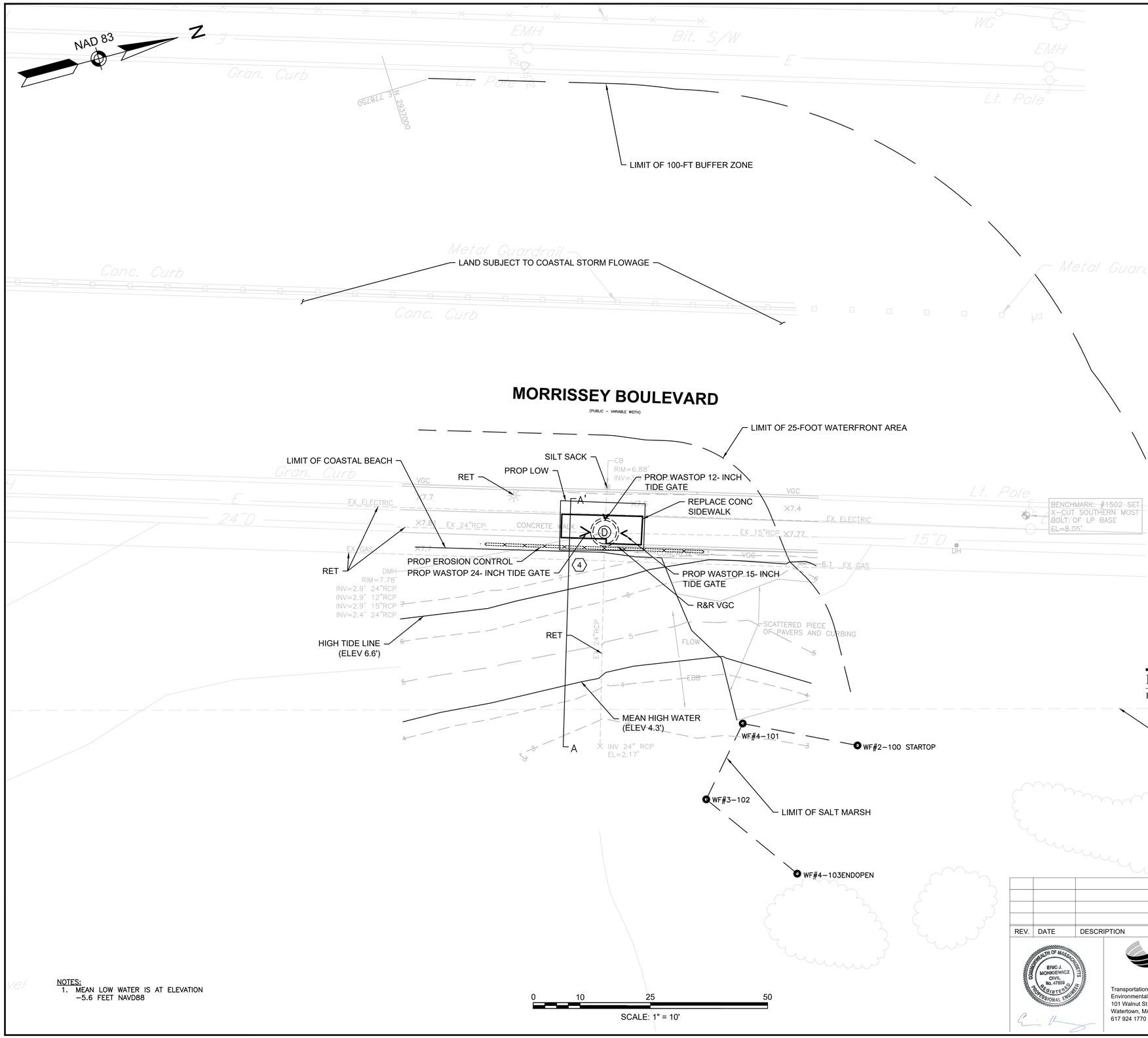
DESIGNER: JCB
CHECKED: EJM
DRAWN: MBB
CHECKED: EJM

CONSTRUCTION PLAN - LOCATION 1

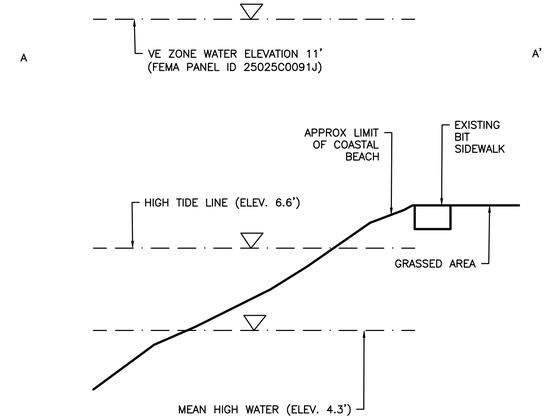
CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
C-01
3 OF 12



DRAINAGE STRUCTURE DATA					
NO.	TYPE	RIM ELEV.	INV. IN	INV. OUT	REMARKS
4	DMH	7.78	EX 2.90 EX 2.90 EX 2.90	2.40	DEEP SUMP 5-FT DMH



Profile A - A'

HOR: 1"=10' VERT: 1"=5' Source: VHB

NOTES:
1. MEAN LOW WATER IS AT ELEVATION –5.6 FEET NAVD88

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER: JCB
CHECKED: EJM
DRAWN: MBB
CHECKED: EJM

CONSTRUCTION PLAN - LOCATION 2

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
C-02
4 OF 12

14371 00-GEN.DWG Plotted on 22-May-2020 10:30 AM

NAD 83 N

DRAINAGE STRUCTURE DATA					
NO.	TYPE	RIM ELEV.	INV. IN	INV. OUT	REMARKS
3	DMH	8.50	EX 0.60	0.59	DEEP SUMP

LIMIT OF 100-FT BUFFER ZONE

LAND SUBJECT TO COASTAL STORM FLOWAGE

BENCHMARK: #1503 SET X-CUT EASTERN MOST BOLT OF LP BASE EL=7.83'

MORRISSEY BOULEVARD
(PUBLIC – VARIABLE WIDTH)

LIMIT OF 25-FOOT WATERFRONT AREA

PROP WASTOP 18-INCH TIDE GATE

RET

PROP LOW

PROP EROSION CONTROL

APPROX TOP OF COASTAL BANK

PROP LOAM AND SEED

RET DMH
RIM=8.89'
WATER=2.8'
INV=0.9' 15"RCP (REC)
INV=3.9' 12"RCP
INV=0.7' 15"RCP (REC)
INV=0.6' 18"RCP
DEBRIS=0.6'

AREA OF 2'x2' 1'TALL GRANITE BLOCKS USED AS RIP-RAP

HIGH TIDE LINE (ELEV 6.6')

RET

LIMIT OF SALT MARSH

WF#3–100STARTOPE
WF#3–101
WF#3–102
WF#3–103
WF#3–104ENDOPEN
WF#3–201
WF#3–202
WF#3–200STARTOPE
WF#3–203
WF#3–204
WF#3–205
WF#3–206
WF#3–207END

LIMIT OF SALT MARSH

MEAN HIGH WATER (ELEV 4.3')

INV 18" RCP EL=0.54'

EX 12"RCP

EX 15"RCP

EX ELECTRIC

EX GAS

GRASS STRIP

CONCRETE WALK

GRASS

WOODED AREA

RIP RAP

FLOW

EBB

VGC

Lt. Pole

EMH

DH

Gran. Curb

12"D

15"D

E

A

A'

VE ZONE WATER ELEVATION 13'
(FEMA PANEL ID 25025C0091J)

EXISTING CONC SIDEWALK

APPROX TOP COASTAL BANK

HIGH TIDE LINE (ELEV. 6.6')

GRASSED AREA

MEAN HIGH WATER (ELEV. 4.3')

MEAN LOW WATER (ELEV. –5.16')

Profile A - A'

HOR: 1"=10' VERT: 1"=5' Source: VHB

NOTES:
1. MEAN LOW WATER IS AT ELEVATION –5.6 FEET NAVD88

0 10 25 50
SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY

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COMMONWEALTH OF MASSACHUSETTS
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MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER: JCB
CHECKED: EJM
DRAWN: MBB
CHECKED: EJM

CONSTRUCTION PLANS - LOCATION 3

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
C-03
5 OF 12

NAD 83 N

DRAINAGE STRUCTURE DATA					
NO.	TYPE	RIM ELEV.	INV. IN	INV. OUT	REMARKS
2	DMH	8.80	*	*	DEEP SUMP

*MATCH EXISTING

LIMIT OF 100-FT BUFFER ZONE

LAND SUBJECT TO COASTAL STORM FLOWAGE

SILT SACK

RET

MORRISSEY BOULEVARD
(PUBLIC – VARIABLE WIDTH)

LIMIT OF 25-FOOT WATERFRONT AREA

PROP WASTOP 15-INCH TIDE GATE

PROP LOW

RET

PROP EROSION CONTROL

RET

REPLACE HMA SIDEWALK

APPROX TOP OF COASTAL BANK

HIGH TIDE LINE (ELEV 6.6')

LIMIT OF SALT MARSH

MEAN HIGH WATER (ELEV 4.3')

WF#4–100STARTOPE
WF#4–101
WF#4–102
WF#4–103
WF#4–104
WF#4–105
WF#4–106
WF#4–107
WF#4–108
WF#4–109
WF#4–110
WF#4–111
WF#4–112
WF#4–113
WF#4–114END

CB RIM=6.6' NO PIPES VISIBLE WATER=4.9' DEBRIS=1.3'

HOLE FILLED WITH WATER NO HEADWALL OUR OUTLET FOUND

LARGE PIECES OF WOOD & CONCRETE BETWEEN DOCKS

WOODED AREA

GRASS STRIP

EX GAS

EX ELECTRIC

EX 15"RCP

EBB

FLOW

0 10 25 50

SCALE: 1" = 10'

VE ZONE WATER ELEVATION 13'
(FEMA PANEL ID 25025C0091J)

EXISTING BIT SIDEWALK

APPROX TOP COASTAL BANK

HIGH TIDE LINE (ELEV. 6.6')

GRASSED AREA

MEAN HIGH WATER (ELEV. 4.3')

MEAN LOW WATER (ELEV. –5.16')

Profile A - A'

HOR: 1"=10' VERT: 1"=5' Source: VHB

N 779250
E 238500

NOTES:
1. MEAN LOW WATER IS AT ELEVATION –5.6 FEET NAVD88

REV.	DATE	DESCRIPTION	BY

ERIC J. MONKIEWICZ CIVIL No. 47859 REGISTERED PROFESSIONAL ENGINEER

vhb
Transportation Land Development
Environmental Services
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Watertown, MA 02472
617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

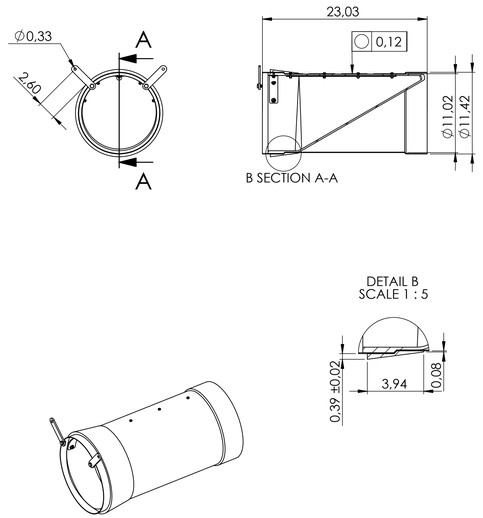
DESIGNER: JCB
CHECKED: EJM
DRAWN: MBB
CHECKED: EJM

CONSTRUCTION PLANS - LOCATION 4

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

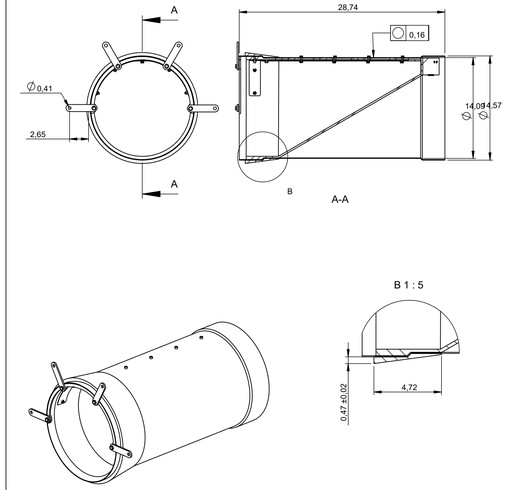
SHEET NO.
C-04
6 OF 12



Designed By: RB	Approved By: RB	Created Date: 2017-09-18	Units: [inch]	General Tolerance: SS-ISO 2768-1 m	Scale: 1:10	
Material: AISI 304 / AISI 316			Comments		Project Number	
Weight [Lbs]: 20.3		Box Volume [ft³]: 1.8	Description: WaStop NPS 12"			
			Article Number: WS290-S		Rev	Sheet: 1 (1)

WASTOP NPS 12-INCH

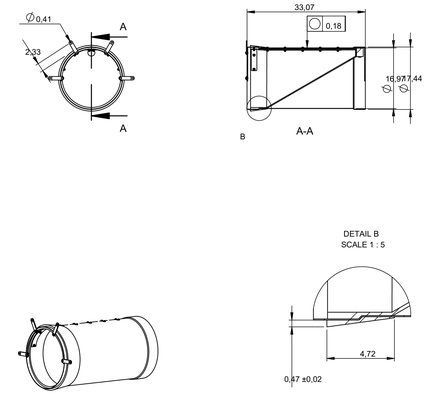
SCALE: N.T.S.



Designed By: RB	Approved By: RB	Created Date: 2017-09-18	Units: [inch]	General Tolerance: SS-ISO 2768-1 m	Scale: 1:10	
Material: AISI 304 / AISI 316			Comments		Project Number	
Weight [Lbs]		Box Volume [ft³]	Description: WaStop NPS 15"			
www.wapro.com			Article Number: WS370-S		Rev: 2017-09-12	Sheet: 1 (1)

WASTOP NPS 15-INCH

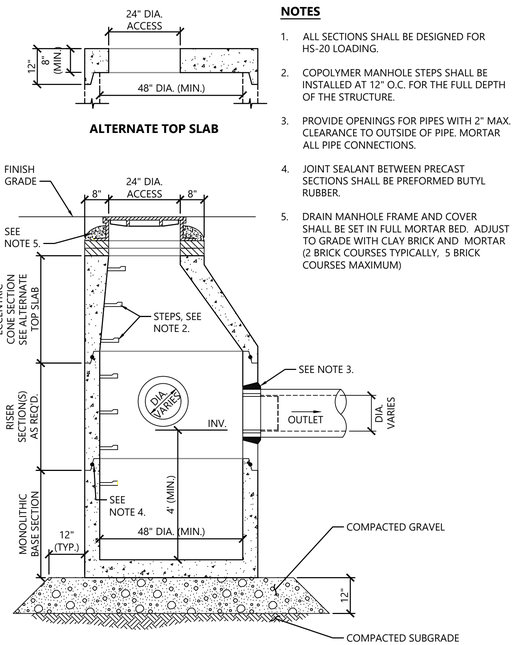
SCALE: N.T.S.



Designed By: RB	Approved By: RB	Created Date: 2017-09-18	Units: [inch]	General Tolerance: SS-ISO 2768-1 m	Scale: 1:20	
Material: AISI 304 / AISI 316			Comments		Project Number	
Weight [Lbs]: 59		Box Volume [ft³]: 5.8	Description: WaStop NPS 18"			
			Article Number: WS440-S		Rev: 2017-09-12	Sheet: 1 (1)

WASTOP NPS 18-INCH

SCALE: N.T.S.

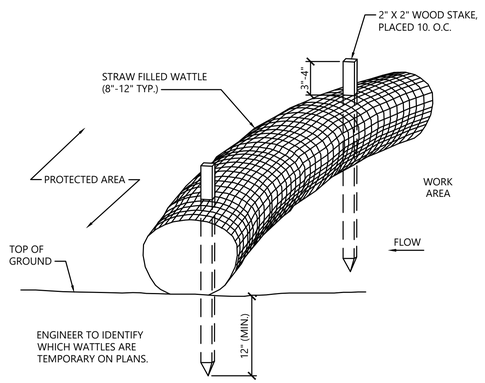


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

DEEP SUMP DRAIN MANHOLE (DMH)

SCALE: N.T.S.



NOTES

1. STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
5. STRAW WATTLE SHALL BE OF NATURAL FIBER NETTING.

STRAW WATTLE - EROSION CONTROL BARRIER

SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
ERIC J. MONKIEWICZ
CIVIL
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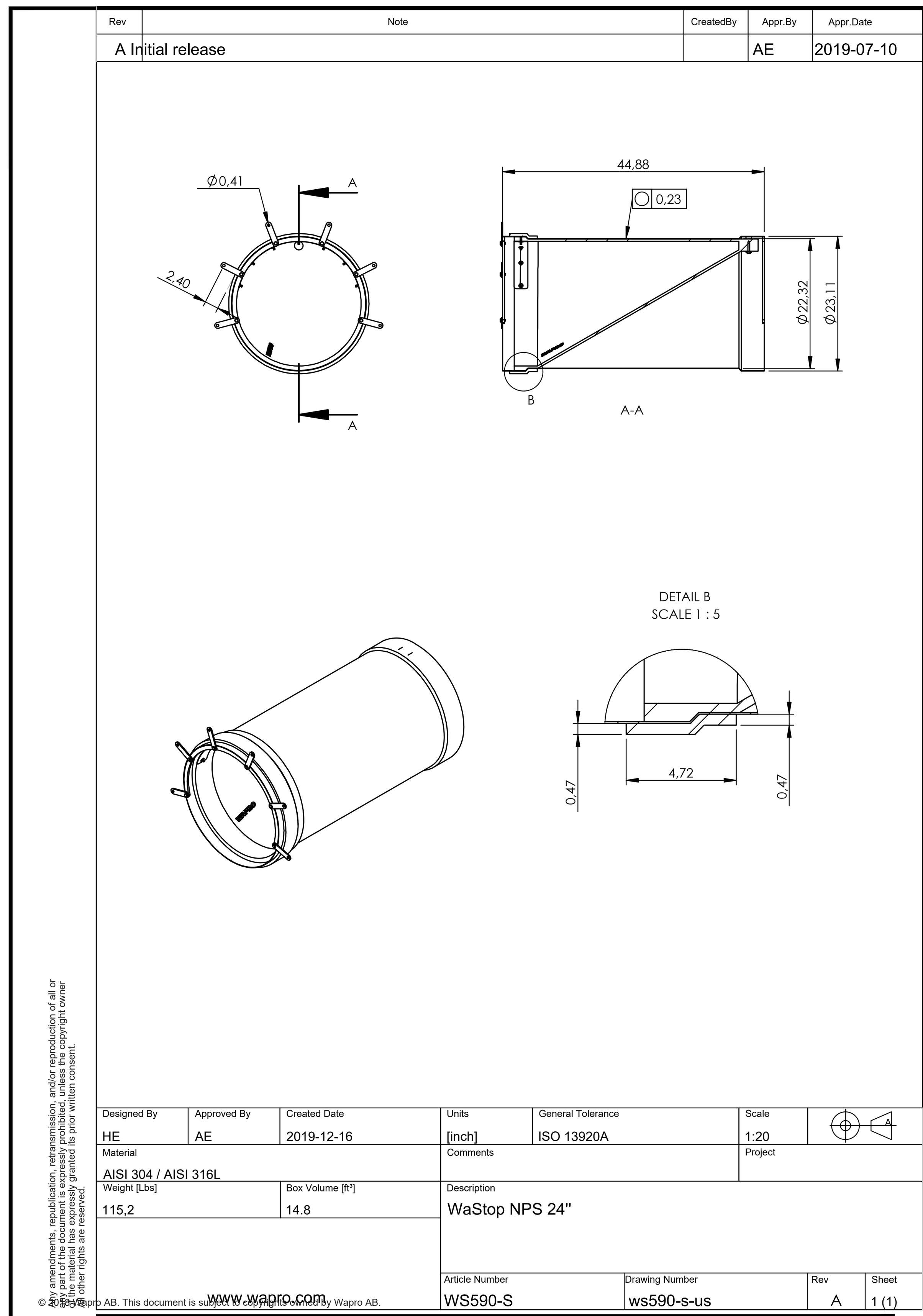
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER: JCB	CONSTRUCTION DETAILS		SHEET NO.
CHECKED: EJM			DET-01
DRAWN: MBB	CONT. XXX-XXXX-XXX	SCALE: NTS	7 OF 12
CHECKED: EJM	ACC.	DATE: 4/10/2020	

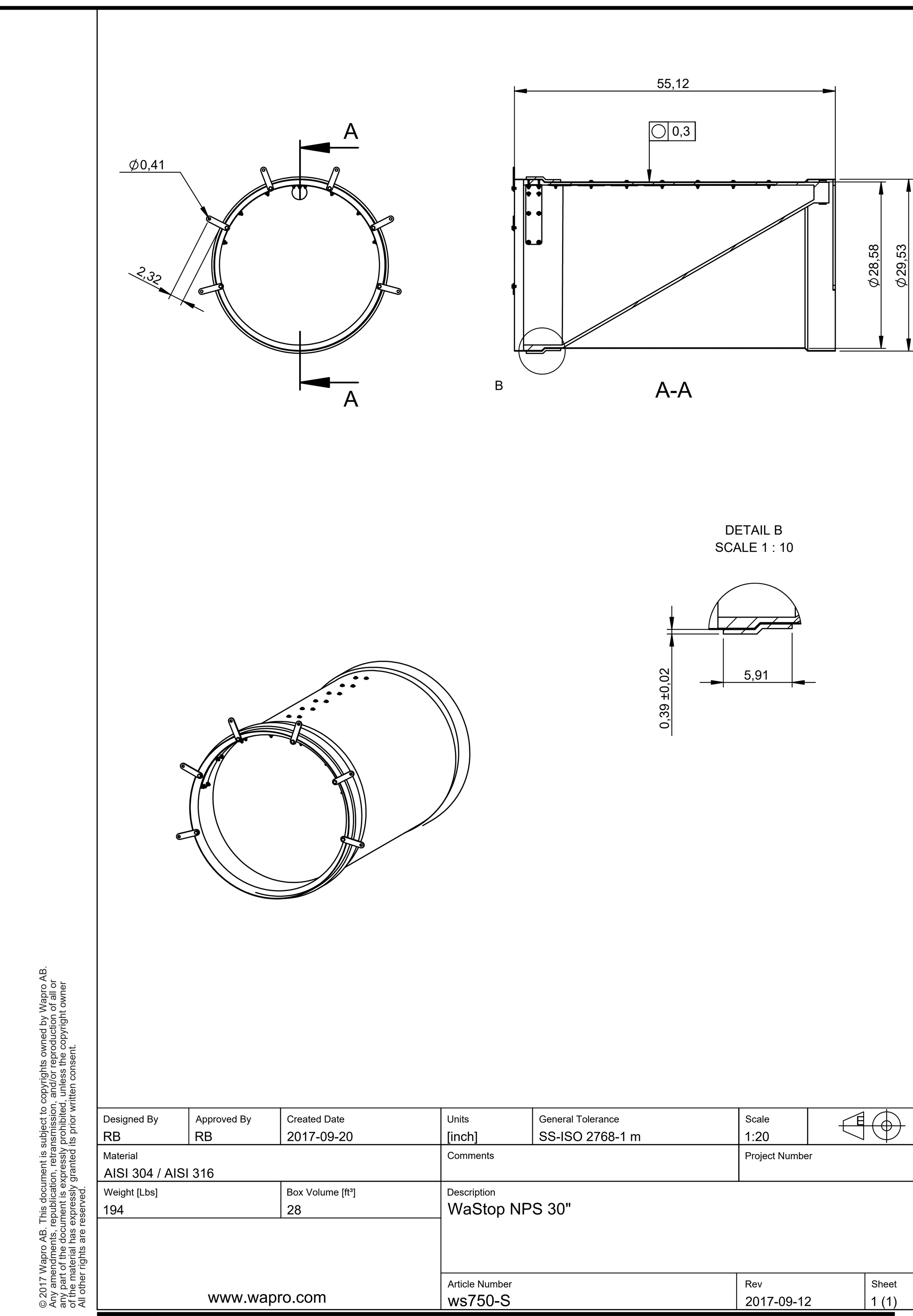
14371.00-DET.DWG Plotted on 21-May-2020 10:11 PM



Rev | Note | CreatedBy | Appr By | Appr Date
A Initial release | AE | 2019-07-10
Ø0,41
44,88
0,23
Ø22,32
Ø23,11
2,40
A-A
DETAIL B
SCALE 1 : 5
4,72
0,47
Designed By: HE
Approved By: AE
Created Date: 2019-12-16
Units: [inch]
General Tolerance: ISO 13920A
Scale: 1:20
Material: AISI 304 / AISI 316L
Weight [Lbs]: 115,2
Box Volume [ft³]: 14.8
Description: WaStop NPS 24"
Article Number: WS590-S
Drawing Number: ws590-s-us
Rev: A
Sheet: 1 (1)
www.wapro.com

WASTOP NPS 24-INCH

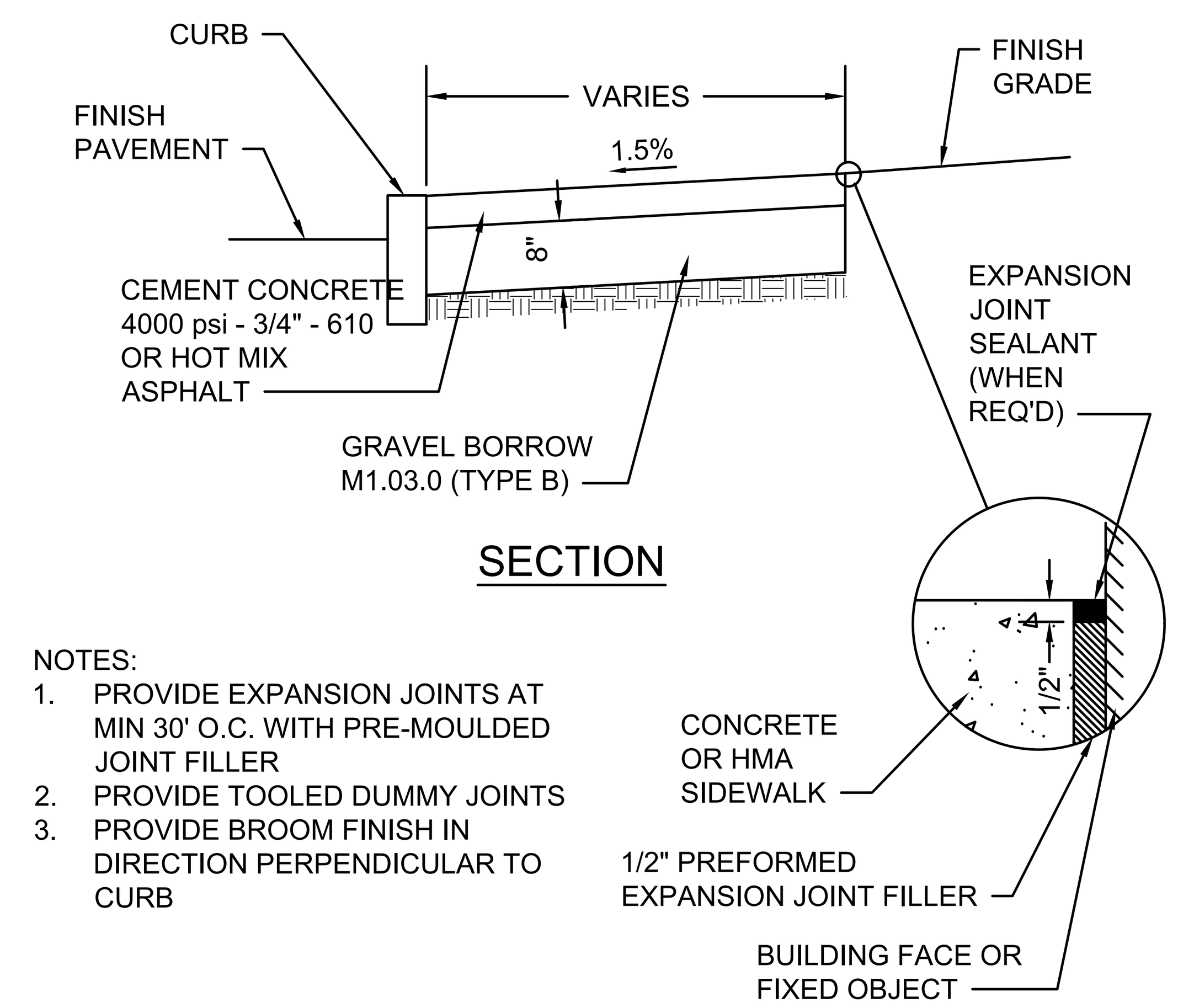
SCALE: N.T.S.



55,12
0,3
Ø0,41
2,32
A
Ø28,58
Ø29,53
A-A
DETAIL B
SCALE 1 : 10
5,91
0,39 ±0,02
Designed By: RB
Approved By: RB
Created Date: 2017-09-20
Units: [inch]
General Tolerance: SS-ISO 2768-1 m
Scale: 1:20
Material: AISI 304 / AISI 316
Weight [Lbs]: 194
Box Volume [ft³]: 28
Description: WaStop NPS 30"
Article Number: ws750-S
Rev: 2017-09-12
Sheet: 1 (1)
www.wapro.com

WASTOP NPS 30-INCH

SCALE: N.T.S.

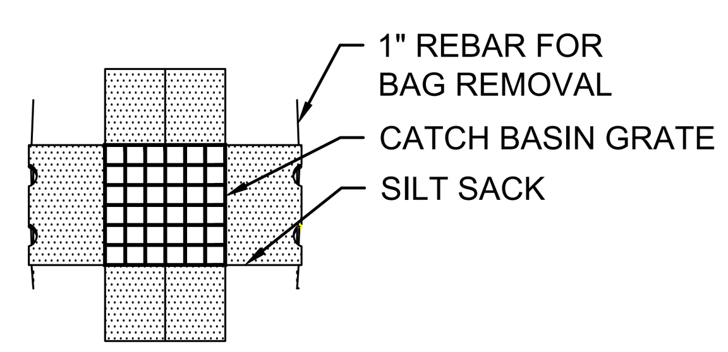


CURB
FINISH PAVEMENT
VARIES
FINISH GRADE
1.5%
8"
CEMENT CONCRETE 4000 psi - 3/4" - 610 OR HOT MIX ASPHALT
GRAVEL BORROW M1.03.0 (TYPE B)
EXPANSION JOINT SEALANT (WHEN REQ'D)
SECTION
CONCRETE OR HMA SIDEWALK
1/2"
1/2" PREFORMED EXPANSION JOINT FILLER
BUILDING FACE OR FIXED OBJECT

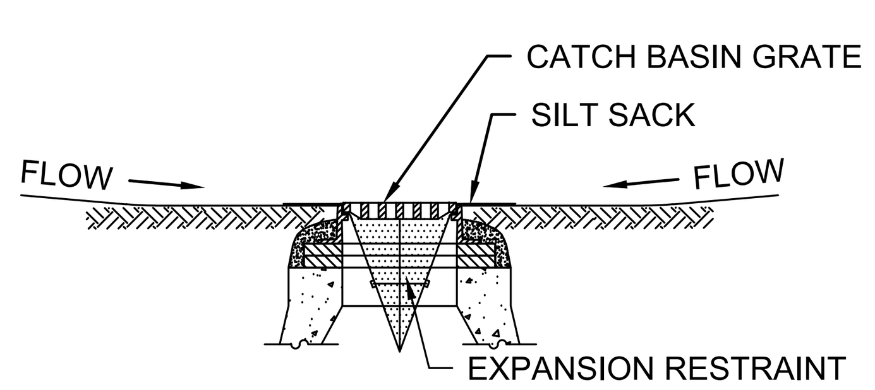
NOTES:
1. PROVIDE EXPANSION JOINTS AT MIN 30' O.C. WITH PRE-MOULDED JOINT FILLER
2. PROVIDE TOOLED DUMMY JOINTS
3. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB

CEMENT CONCRETE OR HMA SIDEWALK

SCALE: N.T.S.



PLAN



SECTION A-A

NOTES:

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILTSACK SEDIMENT TRAP

SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY

ERIC J. MONKIEWICZ CIVIL No. 47859 REGISTERED PROFESSIONAL ENGINEER — COMMONWEALTH OF MASSACHUSETTS

vhb
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER: JCB	CONSTRUCTION DETAILS		SHEET NO.
CHECKED: EJM			DET-02
DRAWN: MBB	CONT. XXX-XXXX-XXX	SCALE: NTS	
CHECKED: EJM	ACC.	DATE: 4/10/2020	8 OF 12

14371.00-DET.DWG Plotted on 21-May-2020 10:12 PM

NAD 83

N

WF#1-101
WF#1-102
WF#1-103
WF#1-104
WF#1-105
WF#1-106
WF#1-107
WF#1-108
WF#1-109ENDOPEN

×6.5
×6.8
×7.0
×7.9

N.E. 778250
2935750

Grass
GRASS
POST
POST

TOP OF BROKEN PIPE
EL=3.12'
TOP OF BROKEN PIPE
EL=4.35'
INV 30" RCP
EL=-0.07'
EX 30"RCP
Headwall

MHO
8"GRANITE SQUARE
EX 30"RCP
WOODED AREA
EX 30"RCP
EX 30"RCP

LK
'ASS STRIP
VGC
EX ELECTRIC
BITUMINOUS WALK
EX 12"RCP
GRASS STRIP
EX ELECTRIC
MAG
VGC
VGC

Begin Metal Guardrail
EMH
Bit. S/W

BENCHMARK: #1501 SET
TOP EAST SIDE OF
METAL SIGN REMNANTS
EL=12.02'

CB
RIM=13.04'

DMH
RIM=13.87'
INV=9.7' 12"RCP
INV=2.0' 30"RCP
INV=2.0' 30"RCP

EX ELECTRIC

MORRISSEY BOULEVARD

(PUBLIC – VARIABLE WIDTH)

Steel Guardrail
Sign
Gran. Curb
EMH
Gran. Curb
12"D
2"Tubing
Lt. Pole
R=13.75
CB
MH
Gran. Curb
CB

0 10 25 50
SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
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REGISTERED PROFESSIONAL LAND SURVEYOR

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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER:
CHECKED:
DRAWN: JEC
CHECKED: RJB

SURVEY - LOCATION 1

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
SV-01
9 OF 12

NAD 83

N

N.E. 778750
2937000

EMH
Bit. S/W
Gran. Curb
Lt. Pole
WG
WCR
CB
R=8.07
Metal Guardrail
Conc. Curb
12"D
15"D
24"D
DH
R=8.89
MH

MORRISSEY BOULEVARD

(PUBLIC - VARIABLE WIDTH)

CB
RIM=6.88'
INV=3.9' 12"RCP

VGC
EX ELECTRIC
EX 15"RCP
CONCRETE WALK
CONCRETE
EX GAS
EX 24"RCP

DMH
RIM=7.78'
INV=2.9' 24"RCP
INV=2.9' 12"RCP
INV=2.9' 15"RCP
INV=2.4' 24"RCP

SCATTERED PIECE
OF PAVERS AND CURBING

INV 24" RCP
EL=2.17'

WF#4-101
WF#2-100 STARTOP
WF#3-102
WF#4-103ENDOPEN

BENCHMARK: #1502 SET
X-CUT SOUTHERN MOST
BOLT OF LP BASE
EL=8.05'

0 10 25 50
SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER:
CHECKED:
DRAWN: JEC
CHECKED: RJB

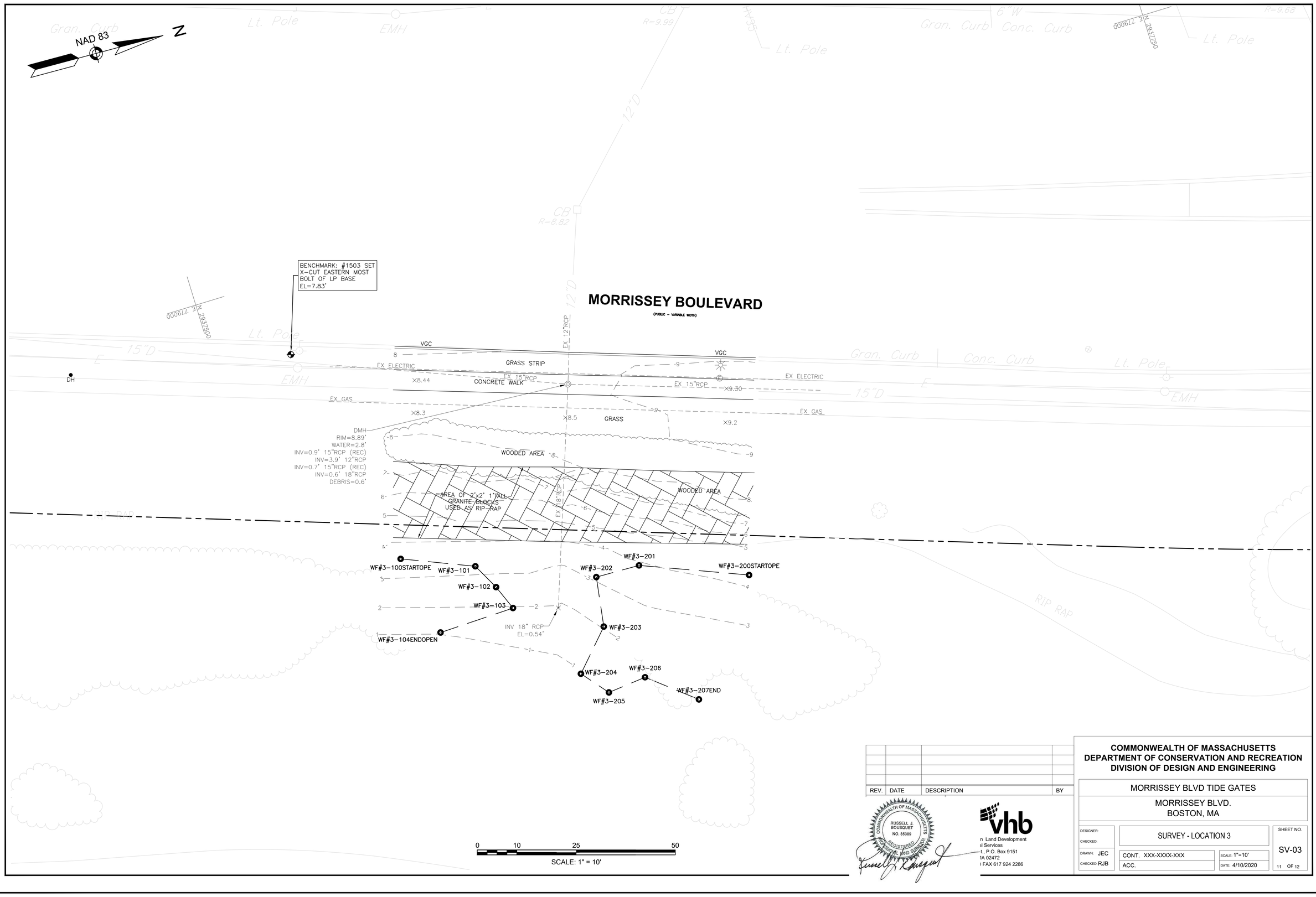
SURVEY - LOCATION 2

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
SV-02
10 OF 12

14371.00-SV-WTITLEBLOCK-SIGNED 5-29-2020.DWG Plotted on 29-May-2020 7:35 AM



REV.	DATE	DESCRIPTION	BY

RUSSELL J. BOUSQUET NO. 35389 COMMONWEALTH OF MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR

vhb
n Land Development
d Services
t., P.O. Box 9151
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER:
CHECKED:
DRAWN: JEC
CHECKED: RJB

SURVEY - LOCATION 3

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
SV-03
11 OF 12

14371.00-SV-WTITLEBLOCK-SIGNED 5-29-2020.DWG Plotted on 29-May-2020 7:35 AM

NAD 83

N

MORRISSEY BOULEVARD

(PUBLIC - VARIABLE WIDTH)

CB
RIM=6.61'
NO PIPES VISIBLE
WATER=4.9'
DEBRIS=1.3'

EX 15"RCP

EX ELECTRIC

CONC QUARTER ROUND

EP CONC QUARTER ROUND EP

GRASS STRIP

BIT WALK

EX GAS

MAG

WF#4-103

WF#4-104

WF#4-105

WF#4-106

WF#4-107

WF#4-108

WF#4-109

WF#4-110

WF#4-111

WF#4-112

WF#4-113

WF#4-114END

WF#4-102

WF#4-100STARTOPE

WF#4-101

WOODED AREA

HOLE FILLED WITH WATER
NO HEADWALL OUR OUTLET FOUND

LARGE PIECES OF
WOOD & CONCRETE
BETWEEN DOCKS

Lt. Pole

EMH

MH
R=8.19

CB
=7.33

Bit.

Grass

Gran. Curb

Sign

GC Grass Strip Bit. S/W

15"D

12"D

20" G

N: 2938500
E: 779250

0 10 25 50

SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED PROFESSIONAL LAND SURVEYOR

vhb

n Land Development
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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF DESIGN AND ENGINEERING

MORRISSEY BLVD TIDE GATES

MORRISSEY BLVD.
BOSTON, MA

DESIGNER:
CHECKED:
DRAWN: JEC
CHECKED: RJB

SURVEY - LOCATION 4

CONT. XXX-XXXX-XXX
ACC.

SCALE: 1"=10'
DATE: 4/10/2020

SHEET NO.
SV-04
12 OF 12