

Charlestown Community Path - Barry Field Connector Project

Notice of Intent

Charlestown, MA

April 2021

Prepared by:

FDS

Boston, MA

Prepared for:

Massachusetts Port Authority Boston, Massachusetts

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WPA Notice of Intent

- > NOI Form
- > NOI Fee Transmittal Form
- ➤ Copy of Check
- Supplemental Narrative
- > Appendices

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WPA Form 3 - Notice of Intent

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

Provided by MassDEP: MassDEP File Number Document Transaction Number **Boston**

City/Town

Important:

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



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

Α

•	Project Location (Note: electronic filers will click on button to locate project site):				
	reet / 41 Medford St	reet	Charlestown, MA	02129	
a. Street Addı	ress		b. City/Town	c. Zip Code	
Latitude an	nd Longitude:		42.379504N d. Latitude	71.052141W e. Longitude	
NΙΛ					
NA f Assessors M	Map/Plat Number		0202732000 / 020 g. Parcel /Lot Number	02733000	
Applicant:	viapri lat i vuilibei		g. Farcer/Lot Number		
• • •			DaDruin		
Peter a. First Name			DeBruin b. Last Name		
			D. Last Name		
c. Organization	setts Port Authority				
=		1			
d. Street Add	orside Drive, Suite 200)			
East Bosto		MA		02128	
e. City/Town	111	f. St		02126 g. Zip Code	
-	502			• .	
647 560 00	100		ebruin@massport.c	OH	
Rick / Ryar a. First Name	nber i. Fax Nur wner (required if differ	rent from applicant):	McCullough / W		
h. Phone Nun Property ov Rick / Ryar a. First Name Commonw c. Organization	i. Fax Nur wner (required if differ n ealth of MA (MassDO	rent from applicant):	Check if n McCullough / W b. Last Name (Boston Parks and		
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b. State Fee Paid

a. Total Fee Paid

c. City/Town Fee Paid



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rov	ided by MassDEP:
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A. General Information (continued)

ь.	General Project Description:	
	The Barry Field Connector project is being construction signalized crosswalk across Chelsea St. and an opelevel and a ramp/stair structure to accommodate the for accessible, safe access; and painting new striping the striping results of the strip	ening in the bridge rail; installing a deck at street e elevation change from the street to Barry Field
7a.	Project Type Checklist: (Limited Project Types see	Section A. 7b.)
	1. Single Family Home	2. Residential Subdivision
	3. Commercial/Industrial	4. Dock/Pier
	5. Utilities	6. Coastal engineering Structure
	7. Agriculture (e.g., cranberries, forestry)	8. Transportation
	9. 🛛 Other	
7b.		2.24 (coastal) or 310 CMR 10.53 (inland)? ed project applies to this project. (See 310 CMR olete list and description of limited project types) 0 CMR 10.24(7)(a) through (c) a Ecological Restoration Limited Project (310
	Project Checklist and Signed Certification.	
8.	Property recorded at the Registry of Deeds for:	
	Suffolk	
	a. County	b. Certificate # (if registered land) 143 / Pending
	45961 / Pending c. Book	d. Page Number
В.	Buffer Zone & Resource Area Impa	acts (temporary & permanent)
1. 2.	 ☑ Buffer Zone Only – Check if the project is locate Vegetated Wetland, Inland Bank, or Coastal Re Inland Resource Areas (see 310 CMR 10.54-10 Coastal Resource Areas). 	ed only in the Buffer Zone of a Bordering source Area.
	Check all that apply below. Attach narrative and any	

standards requiring consideration of alternative project design or location.



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	December 1 Towns of the Month of
	Document Transaction Number
	Deates
	Boston
	City/Town
	Oity, 10th

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

ļ	Resour	ce 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
•	с. 🗌	Land Under Waterbodies and	1. square feet	2. square feet
		Waterways	3. cubic yards dredged	
]	Resour	ce Area	Size of Proposed Alteration	Proposed Replacement (if any)
•	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
1	f. 🗌	Riverfront Area	1. Name of Waterway (if available) - spec	ify coastal or inland
	2.	Width of Riverfront Area (check one):	
		25 ft Designated De	nsely Developed Areas only	
		☐ 100 ft New agricultu	ral projects only	
		200 ft All other proje	ects	
	3.]	Total area of Riverfront Area	a on the site of the proposed projec	
	3. Total area of Riverfront Area on the site of the proposed project:			
	4. Proposed alteration of the Riverfront Area:			
	a. to	otal square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
	5. l	Has an alternatives analysis	been done and is it attached to thi	s NOI? Yes No
	6. \	Was the lot where the activity	ty is proposed created prior to Augu	ust 1, 1996?
3.	☐ Coa	astal Resource Areas: (See	310 CMR 10.25-10.35)	

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

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



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

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

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

4.

5.

	,	, ,	
Resource Area		Size of Proposed Alteration	Proposed Replacement (if any)
а. 🗌	Designated Port Areas	Indicate size under Land Und	ler the Ocean, below
b. 🗌	Land Under the Ocean	1. square feet	_
		2. cubic yards dredged	_
c. 🗌	Barrier Beach	Indicate size under Coastal Be	eaches and/or Coastal Dunes below
d. 🗌	Coastal Beaches	1. square feet	2. cubic yards beach nourishment
е. 🗌	Coastal Dunes	1. square feet	2. cubic yards dune nourishment
		Size of Proposed Alteration	Proposed Replacement (if any)
f. 🗌	Coastal Banks	1. linear feet	_
g. 🗌	Rocky Intertidal Shores	1. square feet	_
h. 🗌	Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. 🗌	Land Under Salt Ponds	1. square feet	_
		2. cubic yards dredged	_
j. 🗌	Land Containing Shellfish	1. square feet	_
k. 🗌	Fish Runs		nks, inland Bank, Land Under the der Waterbodies and Waterways,
		1. cubic yards dredged	_
I	Land Subject to Coastal Storm Flowage	1. square feet	_
If the p		f restoring or enhancing a wetland tered in Section B.2.b or B.3.h ab	
a. squar	re feet of BVW	b. square feet o	f Salt Marsh
☐ Project Involves Stream Crossings			
a. numb	per of new stream crossings	b. number of rep	placement stream crossings



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C. Other Applicable Standards and Requirements This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists - Required Actions (310 CMR 10.11). Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review 1. Is any portion of the proposed project located in Estimated Habitat of Rare Wildlife as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the Massachusetts Natural Heritage Atlas or go to http://maps.massgis.state.ma.us/PRI_EST HAB/viewer.htm. If yes, include proof of mailing or hand delivery of NOI to: a. Yes No **Natural Heritage and Endangered Species Program Division of Fisheries and Wildlife** 1 Rabbit Hill Road 2017 Westborough, MA 01581 b. Date of map If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); OR complete Section C.2.f, if applicable. If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below). c. Submit Supplemental Information for Endangered Species Review* 1. Percentage/acreage of property to be altered: (a) within wetland Resource Area percentage/acreage (b) outside Resource Area percentage/acreage 2. Assessor's Map or right-of-way plan of site 2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ** (a) 🛛 Project description (including description of impacts outside of wetland resource area & buffer zone)

Photographs representative of the site

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^{*} Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/maendangered-species-act-mesa-regulatory-review).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

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



3.

Massachusetts Department of Environmental ProtectionBureau of Resource Protection - Wetlands

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

Make	<u>a-project-review</u>).	ele at https://www.mass.gov/how-to/how-to-file-for-sachusetts - NHESP" and <i>mail to NHESP</i> at	
Project	Projects altering 10 or more acres of land, also submit:		
(d)	Vegetation cover type map of site		
(e)	Project plans showing Priority & Estima	ted Habitat boundaries	
(f) OF	R Check One of the Following		
1. 🗌	https://www.mass.gov/service-details/ex	MESA exemption applies. (See 321 CMR 10.14, cemptions-from-review-for-projectsactivities-in-to NHESP if the project is within estimated 10.59.)	
2. 🗌	Separate MESA review ongoing.	a. NHESP Tracking # b. Date submitted to NHESP	
3. 🗌	Separate MESA review completed. Include copy of NHESP "no Take" deter Permit with approved plan.	mination or valid Conservation & Management	
For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?			
a. Not a	applicable – project is in inland resource a	area only b. 🗌 Yes 🔀 No	
If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:			
South Shore the Cape &	e - Cohasset to Rhode Island border, and Islands:	North Shore - Hull to New Hampshire border:	
Division of Marine Fisheries - Southeast Marine Fisheries Station Attn: Environmental Reviewer 836 South Rodney French Blvd. New Bedford, MA 02744 Email: dmf.envreview-south@mass.gov Division of Marine Fisheries - North Shore Office Attn: Environmental Reviewer 30 Emerson Avenue Gloucester, MA 01930 Email: dmf.envreview-north@mass.gov			
Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.			
c. 🗌 Is	this an aquaculture project?	d. ☐ Yes ⊠ No	
If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).			

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Ī	Document Transaction Number
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-	City/Town

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

	4.	Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
Online Users: Include your document		a. \square Yes \boxtimes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). Note: electronic filers click on Website.
transaction		b. ACEC
number (provided on your receipt page) with all	5.	Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
supplementary information you		a. 🗌 Yes 🔀 No
submit to the Department.	6.	Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
		a. 🗌 Yes 🗵 No
	7.	Is this project subject to provisions of the MassDEP Stormwater Management Standards?
		 a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if: 1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
		2. A portion of the site constitutes redevelopment
		3. Proprietary BMPs are included in the Stormwater Management System.
		b. No. Check why the project is exempt:
		1. Single-family house
		2. Emergency road repair
		3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.
	D.	Additional Information
		This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).
		Applicants must include the following with this Notice of Intent (NOI). See instructions for details.
		Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.
		1. Substituting 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.)

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.

2.



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D.

D. Ac	D. Additional Information (cont'd)					
3.	3. A 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 ot	her materials submitted with th	is NOI.			
	CHARLESTOWN COMMUNITY PATH BARRY	' FIELD CONNECTOR (COMP	PONENT 1)			
	a. Plan Title	(- /			
	HDR Engineering, Inc.	Roch Larochelle, PE				
	b. Prepared By	c. Signed and Stamped by				
	d. Final Revision Date	Scales are unique and ident	ified on each sheet.			
	d. Final Revision Date	e. Scale				
	f. Additional Plan or Document Title	g.	Date			
5.	If there is more than one property owner, p listed on this form.	please attach a list of these pro	perty owners not			
6.	Attach proof of mailing for Natural Heritage	e and Endangered Species Pro	gram, if needed.			
7.	Attach proof of mailing for Massachusetts	Division of Marine Fisheries, if	needed.			
8. 🗵	8. Attach NOI Wetland Fee Transmittal Form					
9. 🗵	Attach Stormwater Report, if needed.					
E Fo	20					
E. Fee	25					
1.	☐ Fee Exempt: No filing fee shall be assessed					
	of the Commonwealth, federally recognize		, municipal housing			
	authority, or the Massachusetts Bay Trans	portation Authority.				
App	licants must submit the following information (in	n addition to pages 1 and 2 of t	the NOI Wetland			
	Transmittal Form) to confirm fee payment:	radamen te pagee i ana z e				
	6130	4/19/21				
2. Mu	unicipal Check Number	3. Check date				
	6129	4/19/21				
	ate Check Number	5. Check date				
	HDR, Inc. 6. Payor name on check: First Name HDR Engineering, Inc. 7. Payor name on check: Last Name					
o. Pa	IYOT HATHE OH CHECK. FIIST NAITIE	r. Fayor name on check: Last	INAITIE			

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F. Signatures and Submittal Requirements

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

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

Peter DeBruin	Digitally signed by Peter DeBruin Date: 2021.04.21 09:03:55 -04'00'	April 21, 2921	
1. Signature of Applicant		2. Date	
3. Signature of Property Owner	(if different)	4. Date	
5. Signature of Representative	(if any)	6. Date	

For Conservation Commission:

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

For MassDEP:

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

Other:

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



WPA Form 3 - Notice of Intent

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

rov	rided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Boston City/Town

F. Signatures and Submittal Requirements

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

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

1. Signature of Applicant Rick McCullough Digitally signed by Rick McCullough Date: 2021.04.23 13:30:21-0400'	2. Date
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	6. Date

For Conservation Commission:

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

For MassDEP:

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

Other:

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



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1. Signature of Applicant

3. Signature of Property Owner (if different)

yon Woods BPRI

4 23 202

5. Signature of Representative (if any)

6. Date

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Other

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

1. Signature of Applicant	2. Date		
3. Signature of Property Owner (if di	4. Date		
Stolfi Stalenhoef, Dawn	Digitally signed by Stolfi Stalenhoef, Dawn Date: 2021.04.23 07:31:47 -04'00'		
5. Signature of Representative (if an	y)	6. Date	

For Conservation Commission:

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

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Other:

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



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

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

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





Α.	Applicant Information				
1.	Location of Project:				
	Chelsea Street / 41 Medford Street	Charlestown			
	a. Street Address	b. City/Town			
	0256130 / 0256129	\$487.50 / \$237.50			
	c. Check number	d. Fee amount			
2.	Applicant Mailing Address:				
	Peter	DeBruin			
	a. First Name	b. Last Name			
	Massachusetts Port Authority				
	c. Organization				
	One Harborside Drive, Suite 200S				
	d. Mailing Address				
	East Boston	MA	02128		
	e. City/Town	f. State	g. Zip Code		
	617-568-3583	pdebruin@massport.com			
	h. Phone Number i. Fax Number	j. Email Address			
3.	Property Owner (if different):				
	Rick / Ryan	McCullough / Woods			
	a. First Name	b. Last Name			
	Commonwealth of MA (MassDOT) / City of Boston (Boston Parks and Recreation Department)				
	c. Organization				
	185 Kneeland Street / 1010 Massachi	usetts Avenue, 3rd Floor			
	d. Mailing Address				
	Boston / Boston	MA	02111 / 02118		
	e. City/Town	f. State	g. Zip Code		
	(857)368-6100 /	rick.mccullough@state.ma.us /			

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

B. Fees

(617) 635-4989

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

ryan.woods@boston.gov

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

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

i. Fax Number

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

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

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

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



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

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

B. Fees (continued)			
Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2 WPA Fee	1	\$500	\$500
City of Boston Title 14 Section 450 Fee	-		\$487.50
	Step 5/Te	otal Project Fee:	
	Step 6	/Fee Payments:	
	Total Project Fee:		a. Total Fee from Step 5
	State share	State share of filing Fee:	237.50 b. 1/2 Total Fee less \$ 12.50
	City/Town share	e of filling Fee:	\$487.50 c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

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

Department of Environmental Protection Box 4062 Boston, MA 02211

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

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



NOI Narrative and Supporting Information



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Appendices

Appendix A: Figures

Figure 1 - USGS Locus Map

Figure 2 - FEMA Map

Figure 3 - Environmental Constraints Map

Appendix B: Environmental Plans

Appendix C: Photo Log

Appendix D: Abutter Notification

Appendix E: Stormwater Memo and Checklist



List of Acronyms

ACEC Area of Critical Environmental Concern

BCC Boston Conservation Commission

BFE base flood elevation

BMP Best Management Practice

CMR Code of Massachusetts Regulations

CWA Clean Water Act

DPA Designated Port Area

EPA U.S. Environmental Protection Agency

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

FIS Flood Insurance Study

HDR Engineering, Inc.

MassDEP Massachusetts Department of Environmental Protection

MassDOT Massachusetts Department of Transportation

MassGIS Massachusetts Office of Geographic Information

Massachusetts Port Authority

M.G.L. Massachusetts General Law

NOI Notice of Intent

NHESP Massachusetts Natural Heritage and Endangered Species Program

ORW Outstanding Resource Waters

SFHA special flood hazard area

sf square feet

Supplement Regional Supplement to the Corps of Engineers Wetland Delineation Manual:

Northcentral and Northeast Region, Version 2.0

USACE U.S. Army Corps of Engineers

WPA Massachusetts Wetlands Protection Act

WQS Massachusetts Surface Water Quality Standards



1 Project Description

This Notice of Intent (NOI) is filed pursuant to the Massachusetts Wetlands Protection Act (WPA, M.G.L. Chapter 131, Section 40) and its implementing regulations (310 CMR 10.00) for proposed activities associated with the Charlestown Community Path – Barry Field Connector Project (Project). The proposed Project will be conducted partially within the Buffer Zone to Coastal Bank as defined by reference to the existing bulkhead wall along the Little Mystic Channel, and not within any other protected resources. The project is consistent with the Boston Conservation Commission's (BCC's) goals for projects located with the Buffer Zone to restore or maintain a strip of continuous, undisturbed or restored vegetative cover through the removal of the bituminous concrete slab and replacing with loam and turf seed. Additionally, the project will enhance public access to the waterfront by providing a more direct route for pedestrians and bicyclists traveling along the Harborwalk.

This Project is being constructed by Massport as a community benefit in accordance with Massport's agreement to lease the 2.2 acre "Moran Annex" parcel from the City of Boston. The Barry Field Connector will greatly improve safety and the pedestrian experience in a busy area adjacent to maritime industrial and other commercial uses. The Connector will provide a more direct route for pedestrians and bicyclists travelling to and from the Charlestown Navy Yard portion of the Harborwalk to the Little Mystic River section of the Harborwalk. This will be accomplished by reducing the number of street crossings pedestrians need to navigate along this route and by reducing the distance users travel along Chelsea Street itself.

The Project is located on Chelsea Street, a City of Boston public way, and on Massachusetts Department of Transportation (MassDOT) property adjacent to Chelsea Street under the Tobin Bridge (Site), as shown in Appendix A, Figure 1. Site photographs are provided in Appendix C. The Project will provide stairs and sidewalk connection from Chelsea Street to the Barry Field public pathway. The Project includes the installation of a signalized crosswalk from 16th Street across Chelsea Street. To make the Chelsea Street connection, an opening will be made in the existing Chelsea Street guard rail in order to allow pass-thru from the crosswalk for pedestrians. The guard rail will be modified to maintain structural integrity and incorporate bollards for crash protection. A street level deck will be designed to provide a safe waiting space. To accommodate the elevation change from Chelsea Street down to Barry Field, a cement concrete ramp/stair structure will be designed within the same footprint as the existing impervious bituminous concrete slab. The remaining portion of the existing paved slab beneath the Tobin Bridge will be replaced with loam and seed. This "connector system" will attach to the existing retaining wall and roadway barrier on Chelsea Street and provide seamless, accessible, safe and direct access to Barry Field and the Harborwalk. No impacts to resource areas are expected and the Project will reduce the overall area of impervious surface in the Buffer Zone.

Minor activities proposed within the Buffer Zone that do not meet the requirements of 310 CMR 10.02(2)(b)(1) and (2) are subject to preconstruction review. The Wetland



Protection Act (WPA) provides Massport with the option of filing a Determination of Applicability or a Notice of Intent to satisfy the requirement of preconstruction review. To avoid project delay, Massport has filed this NOI to allow full review of Project activities by the BCC. The Project activities could be permitted simply as minor activities in the Buffer Zone with appropriate conditions to insure adequate protections of the adjacent resources. Alternatively, Massport could permit the Project activities as a "roadway" Limited Project pursuant to 310 CMR 10.24(7)(c)(1).

Under the WPA, installation of the signalized crosswalk, the painting of new striping along the shoulders of the Chelsea Bridge to reduce the travel lane width, and removal of a portion of the impervious bituminous concrete slab and loaming/reseeding constitute minor exempt activities pursuant to 310 CMR 10.02(2)(b).

1.1 Project Plans

Environmental Plans depicting the Project limits of work and adjacent resource areas are included with this NOI in Appendix B.

2 Resource Area Description

The site is located on disturbed/previously developed lands and is mapped as Udorthents, and nearby soils are mapped as Urban Land. The resource areas in the vicinity of the Project are shown in Appendix A, Figure 3 - Environmental Constraints Map and are regulated under Federal, State and Local regulatory programs include:

- Section 404 of the Clean Water Act (CWA) which is administered by the USACE,
- · Section 401 of the CWA which is overseen by the MassDEP, and
- Massachusetts WPA and 310 CMR 10.00, which is administered by the Boston Conservation Commission or (upon appeal) by MassDEP.

The prominent resource area in the vicinity of the Project is the open water of the Little Mystic River Channel, which is Land Under the Ocean and Designated Port Area. Tidal flats are mapped within the channel near the project area. The channel is contained by a vertical bulkhead wall which establishes the location for mean high water (MHW), the high tide line (HTL), and WPA jurisdictional Coastal Bank. These resources were delineated using the bulkhead wall's surveyed location and any necessary regulatory envelopes, including the WPA jurisdictional Buffer Zone generated in reference to that surveyed boundary. To the north of the Little Mystic Channel, land areas are denoted as within the FEMA mapped 1% annual chance flood zone (100-year flood), and therefore constitute WPA jurisdictional Land Subject to Coastal Storm Flowage. There is no work proposed in Land Subject to Coastal Storm Flowage, Land Under the Ocean or the Coastal Bank.

The overall Project area is approximately 40,300 square feet which includes 21,000 square feet for the general site work area, 7,300 square feet for temporary access area, and 12,000 square feet (counting the full roadway) for the striping work on the bridge. Of



the 40,300 square feet that comprise the overall Project area, only approximately 8,000 square feet will be located within the Buffer Zone to WPA jurisdictional Coastal Bank. The distance between Project activities in Buffer Zone and Coastal Bank varies between 25 feet and 78 feet depending upon the activity (restoration of vegetation, constructing the path etc.) and location.

3 Construction

Construction access for the Project will be through the existing MassDOT access gate on Medford Street and via an existing paved surface drive. No disturbance is planned for Barry Field or vegetated areas of the park. During construction, the Boston Parks Department will establish a perimeter to allow continued use of Barry Field and the Harborwalk path.

3.1 Construction Sequencing

Construction sequencing for this Project is designed to minimize disturbance to the surrounding area and will be implemented as follows: appropriate sediment and erosion controls will be installed (see Section 3.2); the existing impervious bituminous concrete slab will be removed; soil will be excavated to prepare the subgrade and split sleeve will be installed on the existing sanitary sewer force main for protective purposes; helical piles will be drilled; a portion of the existing Chelsea Street retaining wall will be demolished; the connectivity system foundation will be constructed along with the walls, stairs and ramps; the cement concrete walkway from the Harborwalk will be constructed; and Project limits will be restored with loam and seed. Once lawn seed groundcover is established, erosion controls will be removed.

3.2 Erosion and Sedimentation Control

Appropriate erosion and sediment controls are shown on the environmental permitting plans (Attachment B) and will be installed before construction operations are conducted. The Project Contractor will be responsible for implementing, inspecting, and maintaining all of the erosion and sediment control measures during the construction phase. The Erosion and Sedimentation Control measures will include stormwater pollution prevention measures that the Contractor must implement, at a minimum, to eliminate or significantly minimize the amount of pollutants carried by stormwater runoff during construction activities. These control measures must be installed before the start of land disturbing construction activities. Erosion and sediment control practices will be included for all construction activities where demolition, excavation, stripping, filling, grading, or earth movement takes place. The temporary erosion and sediment control measures may be removed once all areas are stabilized and the work has been completed.

The erosion control and sedimentation measures include:

 Filter Tubes and/or Silt Fence: Filter tubes are to be installed along the construction perimeter where a paved surface prevents the proper installation of



- silt fence. Otherwise, silt fence or a combination of silt fence and filter tubes are to be used where stakes can be properly driven into the ground.
- ii. Catch Basin/Inlet Protection: Silt sacks will be installed at all catch basins within the Project Site and the Project perimeter to capture and dispose of any sediments before reaching the stormwater system.
- iii. Stabilized Construction Entrance/Exit: All construction entrances/exits will have a stabilized crushed stone pad underlaid with filter fabric (wheel wash) to prevent vehicles from tracking sediment off-site.
- iv. Dust Control: Dust will be controlled on an as-needed basis, by watering down the work areas.
- v. Soil Stockpiling: Soil that is to be stockpiled will be done so in a dry and stable area at a slope of no greater than 2:1. The stockpile will be surrounded with either filter tubes or silt fence.

The Contractor will be required to inspect erosion and sediment control devices on regular basis. The inspector will prepare an Inspection/Maintenance Report that is kept by the Contractor. The Contractor is responsible to maintain all control measures in good working order; if repairs are found to be necessary, they must be initiated immediately. Any material removed from an erosion and sediment control measure must be properly disposed of.

4 Alternatives Analyses

4.1 No Build Scenario

The no-build scenario does not fulfill the overall Project purpose of providing the community with safe, accessible, and direct access from Chelsea Street to Barry Field and the Harborwalk, and therefore is not a feasible alternative.

4.2 Build Scenario

The Project has been designed to minimize impacts to the greatest extent possible. Project activities qualify as a Limited Project or are minor exempt activities exclusively within the Buffer Zone or are located outside of the Buffer Zone. Although consideration was given to the feasibility of alternative build scenarios, the proposed Project is ultimately the only feasible option to accomplish the Project objectives within the physical constraints of the Project Site and based upon the locations of sidewalk connections and the existing Harborwalk path.



5 Project Impacts

The Project was designed to avoid impacts to the greatest extent possible and provides improved conditions by decreasing impervious surface and replaces some of those areas with lawn turf. The proposed work involves only minor activities in Buffer Zone and is not expected to result in any impacts to resource areas. All work will take place within the footprint of existing disturbed areas. The existing bituminous concrete slab under the Tobin Bridge will be removed and replaced with the cement concrete connectivity system and 4" loam and seed such that total impervious area will be reduced. Existing drainage conditions, which involve sheet flow from the paved slab to Barry Field and shallow concentrated flow leading to an existing catch basin located approximately 80 feet to the southwest of the Project's connection with the Harborwalk, will remain. The drainage from the catch basin connects to City of Boston Water and Sewer Commission closed drainage system. Please see Appendix E for a Stormwater Memorandum and Checklist.

5.1 Resource Areas Impacts

The proposed Project is not located within any resource area and consequently is not anticipated to result in impacts to any resource area. Appropriate construction sequencing, erosion and sedimentation control measures and post-construction mitigative measures are in place to avoid impacts.

5.2 Rare Species

A review of Massachusetts Office of Geographic Information (MassGIS) online data mapping indicates that the Project area is not located within Estimated Habitat of Rare Wildlife and Priority Habitat of Rare Species.

5.3 Outstanding Resource Waters

A review of MassGIS online data mapping indicates that the Project area is not located within any Outstanding Resource Waters (ORWs), as defined in the Massachusetts Surface Water Quality Standards (WQS), 314 CMR 4.00 (WQS).

5.4 Areas of Critical Environmental Concern

A review of MassGIS online data mapping indicates that the Project area is not located within an Area of Critical Environmental Concern (ACEC).

5.5 Project Mitigation Measures

The Project activities will occur in paved or previously disturbed areas. Post-construction mitigative measures will be employed to restore any minor temporary impacts to the Project Site that may occur during construction. All disturbed areas will be restored with loam and seed.



6 Protection of the Interests of the WPA

As described in 310 CMR 10.01(2), the purpose of the WPA is to protect the following eight interests of the Act:

- Protection of public and private water supply: The Project will not have any impact on public or private water supplies.
- ii. Protection of groundwater supply: The Project will not have any impact on groundwater.
- iii. Flood control: This Project is not located within the FEMA 100 or 500-year flood zone but is noted as an area of minimal flood hazard (Zone X) layer. Zone X are areas of minimal flood hazard which are outside the special flood hazard area and higher than the elevation of the 0.2-percent-annual-chance flood [500 year]. The Project will not cause any increase in flood velocity or stage or restrict flows. Therefore, the proposed Project as described will not result in impacts to the storage of flood flows.
- iv. Storm damage prevention: The Project will not impact the ability to provide value for storm damage prevention.
- v. Prevention of pollution: The Project is not anticipated to impact any resource areas that currently provide value for prevention of pollution or contaminant attenuation. Best Management Practices (BMPs), will be employed during the construction to minimize the potential for adverse impacts on the water quality of the Little Mystic Channel. Reducing area of impervious surface and gaining vegetated surface will be beneficial for pollution attenuation.
- vi. Protection of land containing shellfish: The Project will not have any impact on land containing shellfish.
- vii. Protection of fisheries: The Project will not have any impact on the protection of fisheries.
- viii. Protection of wildlife habitat: The Project will not have any impact on wildlife habitat.

7 Performance Standards

The regulations at 310 CMR 10.25 - 10.35 do not establish general performance standards for Buffer Zone to Coastal Bank.

7.1 Minor or Limited Project Activities in Buffer Zone

Minor activities proposed within the Buffer Zone which do not meet the requirements of 310 CMR 10.02(2)(b)(1) and (2) are subject to preconstruction review. The WPA provides Massport with the option of filing a Determination of Applicability or a Notice



of Intent to satisfy the requirement of preconstruction review. To avoid project delay, Massport has filed this NOI to allow full review of Project activities by BCC. BCC has the authority to permit the identified Project activities within the Buffer Zone by conditioning them in accordance with the construction sequencing, erosion and sedimentation control and mitigation measures described in the sections above and any other conditions that BCC deems appropriate for protection of adjacent resource areas. Alternatively, BCC also has the authority to permit proposed activities as a limited project pursuant to 310 CMR 10.24(7)(a) through (c), where, as here, the proposed activities will not have an adverse effect on specified habitat sites of Rare Species. In determining whether to exercise its discretion to approve limited projects, BCC can consider the following as provided by 310 CMR 10.24(7): "the magnitude of the alteration and the significance of the project to the interests identified in M.G.L. c. 131, § 40, the availability of reasonable alternatives to the proposed activity, and the extent to which adverse impacts are minimized and the extent to which mitigation measures including replication or restoration are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40. Adverse effects to be minimized include without limitation any adverse impacts on the relevant interests of M.G.L. c. 131, § 40..." If BCC finds that Project activities should be permitted as a Limited Project, 310 CMR 10.24(7)(c)(1) covers activities associated with: Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders, correcting substandard intersections, and improving drainage systems.

The following Project activities can be permitted as minor Buffer Zone activities conditioned to be protective of the adjacent resource areas, or as a roadway Limited Project: the opening in the guard rail to allow pass-thru from the crosswalk for pedestrians; the street level deck to provide a safe waiting space; and the cement concrete ramp/stair structure within the same footprint as the existing impervious bituminous concrete slab to accommodate the elevation change from Chelsea Street down to Barry Field which will attach to the existing retaining wall and guard rail. In satisfaction of the Limited Project performance standards and as provided in the paragraphs above and the appendices, the proposed activities are exclusively within Buffer Zone; will not have an adverse effect on specified habitat sites of Rare Species; involve minimal alteration given existing conditions; will result in no impacts to the interests protected by the WPA; are without reasonable alternatives; and appropriate erosion and sedimentation controls and mitigation measures will be taken to restore any construction-related disturbance.

7.2 Minor Exempt Activities in Buffer Zone

Pursuant to 310 CMR 10.02(2)(b)(1), minor activities within the Buffer Zone are not subject to regulation under the WPA "provided that the work is performed: solely within the buffer zone...in a manner so as to reduce the potential for any adverse impacts to the resource area during construction, and with post-construction measures implemented to stabilize any disturbed areas. Factors to consider when measuring the potential for adverse impacts to resource areas include the extent of the work, the proximity to the resource area, the need for erosion controls, and the



measures employed to prevent adverse impacts to resource areas during and following the work."

The following minor exempt activities and associated performance standards, as described in 310 CMR 10.02(2)(b)(2), apply to this Project:

- f. The conversion of impervious to vegetated surfaces, provided erosion and sedimentation controls are implemented during construction;
- o. Installation, repair, replacement or removal of signs, signals, sign and signal posts and associated supports, braces, anchors, and foundations along existing paved roadways and their shoulders, provided that work is conducted as far from resource areas as practicable, and is located a minimum of ten feet from a resource area, any excess soil is removed from the project location, and any disturbed soils are stabilized as appropriate;
- p. Pavement repair, resurfacing, and reclamation of existing roadways within the right-of-way configuration provided that the roadway and shoulders are not widened, no staging or stockpiling of materials, all disturbed road shoulders are stabilized within 72 hours of completion of the resurfacing or reclamation, and no work on the drainage system is performed, other than adjustments and/or repairs to respective structures within the roadway;

The following Project activities fall within the minor exempt activity category: removal of a portion of the bituminous concrete slab and loaming/reseeding and the installation of a signalized crosswalk from 16th Street across Chelsea Street. The following Project activity is exempt because it is occurring outside the buffer zone and is therefore not subject to WPA jurisdiction: the painting of new striping along the shoulders of the Chelsea Bridge in the central portion of the bridge. In satisfaction of the minor exempt activity performance standards and as provided in the paragraphs above and the appendices, the proposed activities are exclusively within the Buffer Zone; the employment of appropriate erosion and sedimentation controls will minimize the potential for adverse impacts to nearby resources; mitigation measures will be employed to restore any construction-related disturbance; and the signalized crosswalk will be more than 10 feet from Coastal Bank.

8 Conclusion

The Barry Field Connector Project at Charlestown's Barry Field (Chelsea and 16th Streets) will be constructed by Massport as a community benefit in accordance with Massport's agreement to lease the 2.2 acre "Moran Annex" parcel from the City of Boston. The Barry Field Connector will greatly improve the pedestrian experience and safety in a busy area adjacent to maritime industrial uses. The Connector will provide a more direct route for pedestrians and bicyclists travelling to and from the Charlestown Navy Yard portion of the Harborwalk to the Little Mystic River section of the Harborwalk. This will be accomplished by reducing the number of street

crossings pedestrians need to navigate along this route and by reducing the distance users travel along Chelsea Street itself.

As described above, the proposed Project meets the performance standards for Limited Projects and minor exempt status related to the Project activities in Buffer Zone, as detailed above. Therefore, Massport respectfully requests the Boston Conservation Commission to issue an Order of Conditions approving the work described in this NOI and appendices and find that activities described in the NOI satisfy the appropriate performance standards.

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Appendix A: Figures

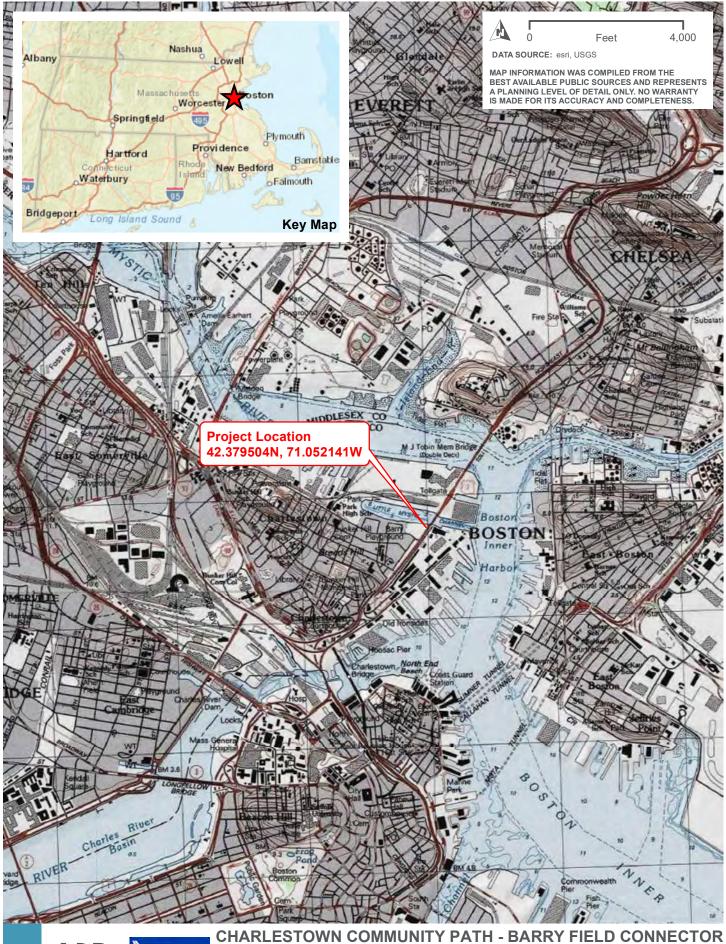
Figure 1 – USGS Locus Map

Figure 2 – FEMA Map

Figure 3 – Environmental Constraints Map

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HOR massport

CHARLESTOWN COMMUNITY PATH - BARRY FIELD CONNECTOR WPA NOTICE OF INTENT













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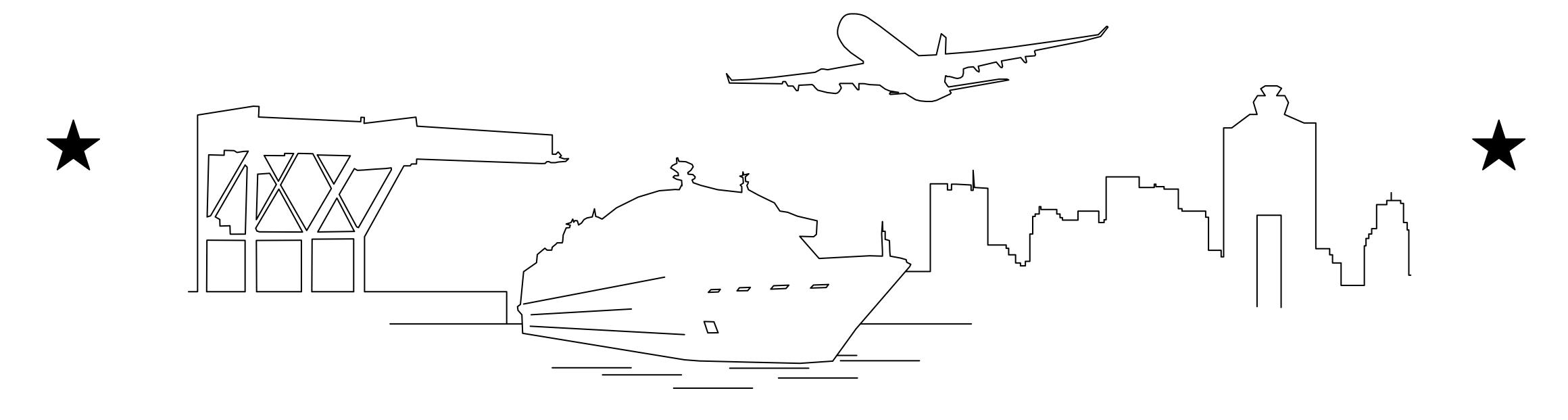
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Appendix B: Environmental Plans

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MASSACHUSETTS PORT AUTHORITY





MASSACHUSETTS PORT AUTHORITY

CAPITAL PROGRAMS DEPARTMENT ONE HARBORSIDE DRIVE, SUITE 209S EAST BOSTON, MASSACHUSETTS 02128 CHARLESTOWN COMMUNITY PATH BARRY FIELD CONNECTOR (COMPONENT 1) CHARLESTOWN, MASSACHUSETTS MPA PROJECT NO. M666-C1 APRIL 16, 2021

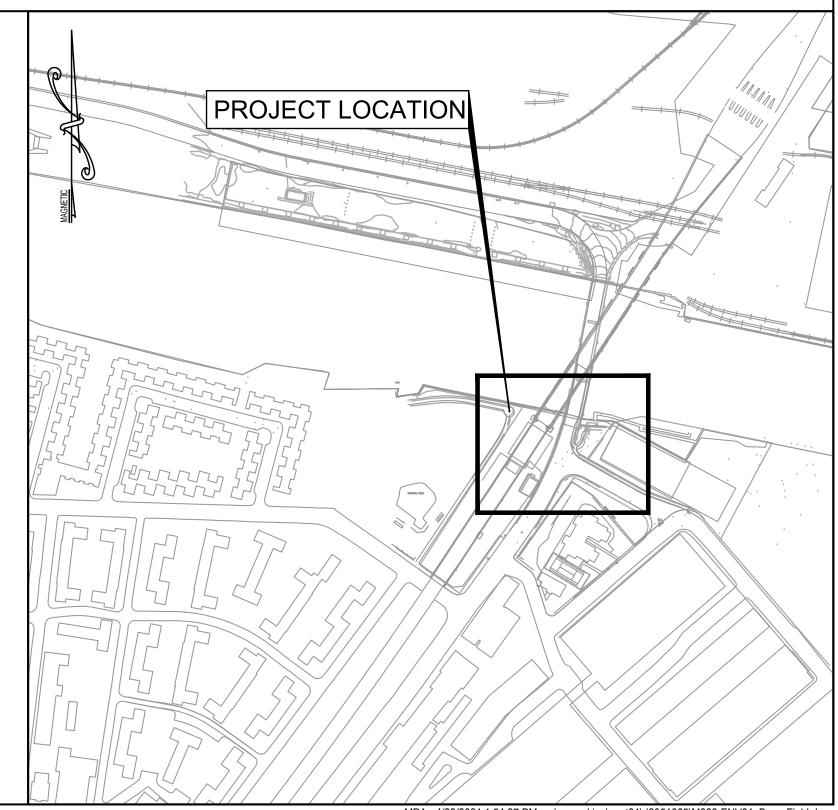




LIST OF DRAWINGS:

SHEET NUMBER			DRAWING NAME		SHEET TITLE
	1	-	ENV-01	-	TITLE SHEET
	2	-	ENV-02	-	GENERAL NOTES, LEGENDS AND ABBREVIATION
	3	-	ENV-03	-	KEY PLAN
	4	-	ENV-04	-	PLAN AND PROFILE
	5	-	ENV-05	-	WPA EXEMPT ACTIVITIES PLAN
	6	_	ENV-06	_	DETAILS

ENVIRONMENTAL PLANS



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ABBREVIATIONS ABANDONED SLOPED GRANITE CURB **ADJUST** SHLDR **SHOULDER** BOLLARD SANITARY SEWER STD STANDARD BURIED LIGHT BASELINE TELEPHONE BY OTHERS TO BE ABANDONED BURIED TEL. TD TRENCH DRAIN BOSTON WATER/SEWER TRAFFIC SIGNAL COMMISSION BOSTON WATER WORKS WATER GATE VALVE CB/CBN CATCH BASIN UNDERDRAIN CEM CEMENT VERTICAL GRANITE CURB CIT CHANGE IN TYPE CLF CHAIN LINK FENCE CEMENT LINED DUCTILE IRON CO CLEANOUT COMM **TELECOMMUNICATIONS** CONC CONCRETE CU COPPER PIPE DRAIN INLET DUCTILE IRON PIPE ELECTRIC HAND HOLE **EXISTING EXIST** F&C FRAME AND COVER F&G FRAME AND GATE FORCE MAIN FΜ FIRE PROTECTION GAS VALVE GATE POST HOT BITUMINOUS PAVEMENT HANDHOLE HOT MIX ASPHALT STREET FURNITURE LEGEND JUNCTION BOX **EXISTING** <u>PROPOSED</u> LIGHT POLE SIGN POST 0 MEET AND MATCH HYDRANT MAST ARM MAILBOX MASS. PORT AUTHORITY 0 FIRE ALARM BOX MONITORING WELL WHEELCHAIR RAMP NOT IN CONTRACT UTILITY POLE OVERHEAD WIRES LIGHT POLE **PEDESTRIAN** PROPOSED TYPICAL LEGEND POLYVINYL CHLORIDE **EXISTING PROPOSED** PAVEMENT PROPERTY LINE REINFORCED CONCRETE SETBACK REMOVE & DISPOSE **EASEMENT** REMOVE & RESET CURB REMOVE & STACK WETLAND LINE REMOVE & TRANSPORT SPOT ELEVATION ×11.13 X11.13 REM REMOVE X11.13 TOC 11.03 BOC X11.13 TOC 11.03 BOC TOP & BOTTOM RETAIN/ITEM TO REMAIN OF CURB RAILROAD - - - 15 - - -_ _ _ 15 _ _ _ _ CONTOUR

PAINTED ARROW

GENERAL NOTES

GENERAL

- 1. THE CONTRACTOR SHALL NOTIFY "DIG-SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WITHIN THE PROJECT AREA.
- 2. ALL EXISTING FEATURES WHICH ARE "TO REMAIN" AND WHICH ARE DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE, INCLUDING BUT NOT LIMITED TO EXISTING CURB, SIDEWALK, ROADWAY LIGHTING, CATENARY POLES, BOUNDS OR PROPERTY MARKERS, HYDRANTS AND UTILITIES.
- 3. EXCAVATIONS SHALL BE PROTECTED AT THE END OF EACH WORK PERIOD. A STEEL PLATE OR DECKING SHALL BE TEMPORARILY PLACED IN ACCORDANCE WITH TRENCH EXCAVATION REQUIREMENTS OVER ALL EXCAVATIONS WHEN NOT ACTIVELY IN USE.
- 4. THE CONTRACTOR SHALL EMPLOY DUST CONTROL MEASURES IN ACCORDANCE WITH THE CONTRACTOR'S SITE SPECIFIC HEALTH AND SAFETY PLAN.
- 5. ALL SITE FEATURES WHICH ARE TO BE DISPOSED OF, INCLUDING EXISTING PAVEMENT AND CONCRETE, SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- 6. THE CONTRACTOR SHALL REMOVE ALL PAVEMENT, GRASSED AREAS, GRANITE CURB, AND OTHER EXISTING FEATURES NOT DESIGNATED TO REMAIN WITHIN THE PROPOSED RECONSTRUCTION AREA.

EXISTING CONDITIONS

PAVEMENT MARKING LEGEND

4" SOLID WHITE LANE LINE

10' MARK - 20' SKIP

2' MARK - 4' SKIP

8" SOLID WHITE CHANNELIZATION LINE

2-4" YELLOW CENTER LINES, 4" GAP

12" LONGITUDINAL LINES, 2' O.C.)

(UNLESS OTHERWISE SHOWN)

- - DYCL - 4" DOTTED YELLOW CENTER LINES, 4" GAP

2' MARK - 4' SKIP

8" SOLID YELLOW CHANNELIZATION LINE

WHITE STOP LINE (12" UNLESS OTHERWISE SPECIFIED)

WHITE - CROSS WALK (12" LINES, 10' O.C.,

8" SOLID YELLOW CHANNELIZATION (6" O.C. @45°)

SWEL 4" SOLID WHITE EDGE LINE

SYEL 4" SOLID YELLOW EDGE LINE

_____ BWLL ____ 4" BROKEN WHITE LANE LINE

_ _ DWLL _ _ 4" DOTTED WHITE LANE LINE

____SWCHL

- 1. THE HORIZONTAL DATUM IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) AS DETERMINED WITH RESPECT TO THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (MAINLAND ZONE).
- 2. ELEVATIONS SHOWN HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 3. DUE TO ONGOING CONCURRENT CONSTRUCTION AND DEMOLITION CONTRACTS BEING EXECUTED BY THE AUTHORITY AND MASSDOT AND OTHERS, EXISTING CONDITIONS MAY VARY FROM WHAT IS SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE EXISTING CONDITIONS WITHIN THE PROJECT AREA AND NOTIFY THE ENGINEER OF DISCREPANCIES WHICH ARE FOUND.
- 4. EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN COMPILED FROM INFORMATION RECEIVED FROM THE VARIOUS UTILITY COMPANIES; FROM DESIGN AND AS-BUILT PLANS BY MASSPORT AND MWRA, BWSC GIS AND BY MASSPORT SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES BETWEEN ACTUAL EXISTING CONDITIONS AND INFORMATION SHOWN ON THE PLAN TO THE ENGINEER, PRIOR TO PROCEEDING WITH CONSTRUCTION.

UTILITIES SYMBOLS

	OTILITIES ST	INIDOL	<u> </u>
EXISTING			PROPOSED
— G —	GAS	— G —	- GAS
—SAN—	SEWER	SAN	- SEWER
——STM——	STORM PIPE	STM	-STORM PIPE
W	WATER	— w —	- WATER
— т —	TELEPHONE/COMMUNICATION	— т —	- TELEPHONE/COMMUNICATION
— Е —	ELECTRICAL	— Е —	- ELECTRICAL
—	OVERHEAD WIRE	—он—	- OVERHEAD WIRE
	DRAIN MANHOLE		DRAIN MANHOLE
E	ELECTRIC MANHOLE	E	ELECTRIC MANHOLE
	TELEPHONE MANHOLE	©	TELEPHONE MANHOLE
S	SEWER MANHOLE	S	SEWER MANHOLE
	PLUG OR CAP		PLUG OR CAP
	VALVE	\bowtie	GATE VALVE
	UNKNOWN MANHOLE	GV■	GATE VALVE
igoplus	BORING HOLE / TEST PIT	W∨■	WATER VALVE
(MW) ()	MONITORING WELL	AC ■	MANUAL AIR RELEASE VALVE
45°	WATER SHUT OFF VALVE	щ	TEE
			VERT. OR HORZ. BEND
	CATCH BASIN		CATCH BASIN
	RAILĪROAD TRACKS		CATCH BASIN SILT SACK
			STORMWATER TREATMENT SYSTE

CO ● CLEANOUT



EAST BOSTON, MASSACHUSETTS 02128

CHARLESTOWN COMMUNITY PATH COMPONENT 1 BARRY FIELD CONNECTOR

MPA CONTRACT NO.:

M666 - C1
PROJECT SUBMISSION PHASE

REGISTRATION STAMP:



LOCATION CODE:



EY PLAN SITE 2:

			" 43"	<u> </u>
REVISION				
REV NO.:	DATE:	DESCRIPTION:		ВҮ

PRIMARY:

HDR ENGINEERING, INC. 99 HIGH STREET, SUITE 2300 BOSTON, MA 02110-2378 (617) 357-7700 www.hdrinc.com

CONSULTANT:

PROJECT NUMBER AND TITLE:

M666-C1

CHARLESTOWN
COMMUNITY PATH IMPROVEMENTS
BARRY FIELD CONNECTION
(COMPONENT 1)

SHEET TITLE:

GENERAL NOTES, LEGENDS & ABBREVIATIONS

DISCIPLINE:

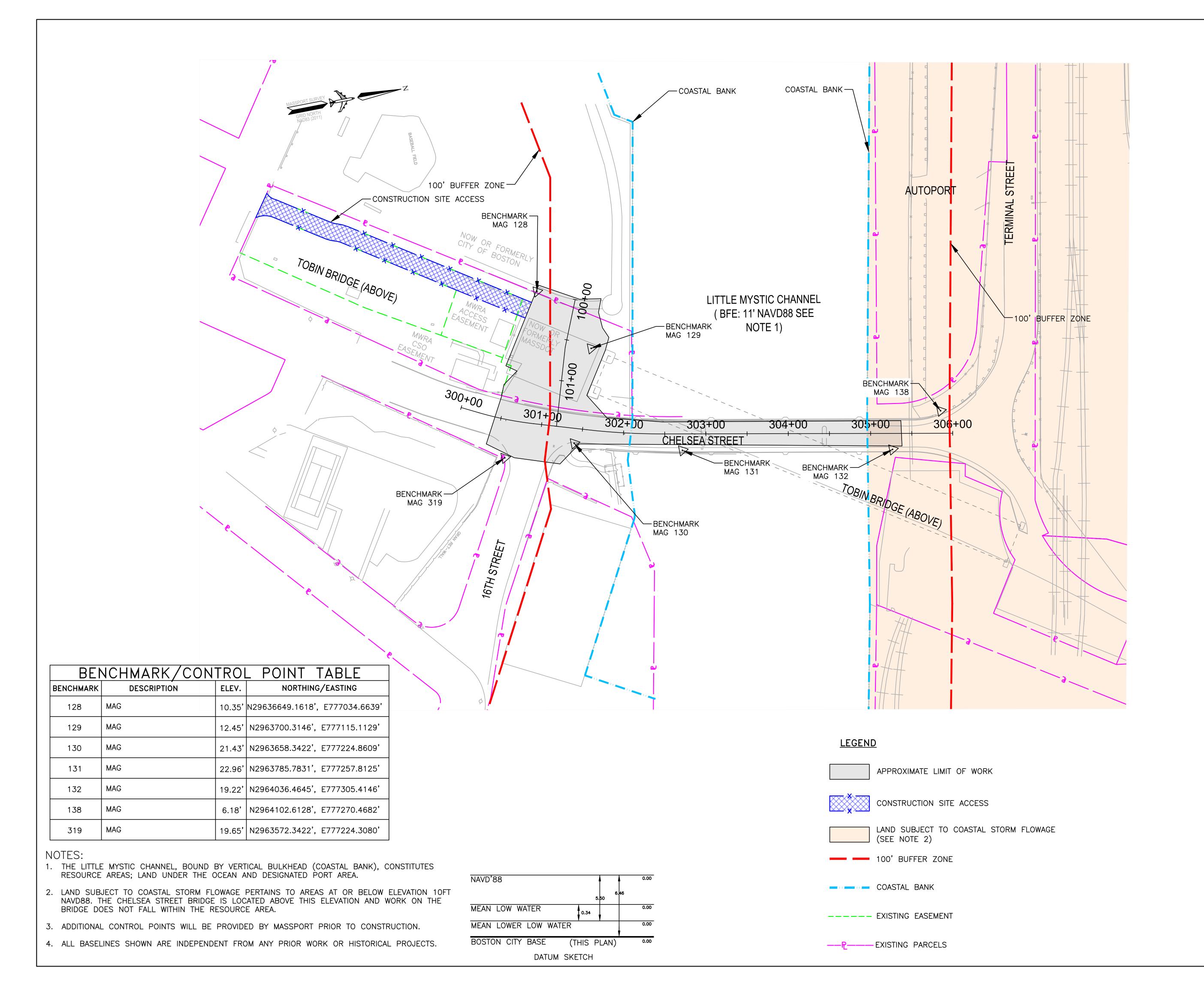
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WA RDL F

FNV-02

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EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION: CHARLESTOWN COMMUNITY PATH -COMPONENT 1 BARRY FIELD CONNECTOR

MPA CONTRACT NO.: LOCATION CODE: M666 - C1

PROJECT SUBMISSION PHASE:

REGISTRATION STAMP:



KEY PLAN SITE 1:

REV NO.: DATE: DESCRIPTION:

KEY PLAN SITE 2:

HOS

HDR ENGINEERING, INC. 99 HIGH STREET, SUITE 2300 BOSTON, MA 02110-2378 (617) 357-7700 www.hdrinc.com

CONSULTANT:

PROJECT NUMBER AND TITLE:

M666-C1

CHARLESTOWN COMMUNITY PATH IMPROVEMENTS BARRY FIELD CONNECTION (COMPONENT 1)

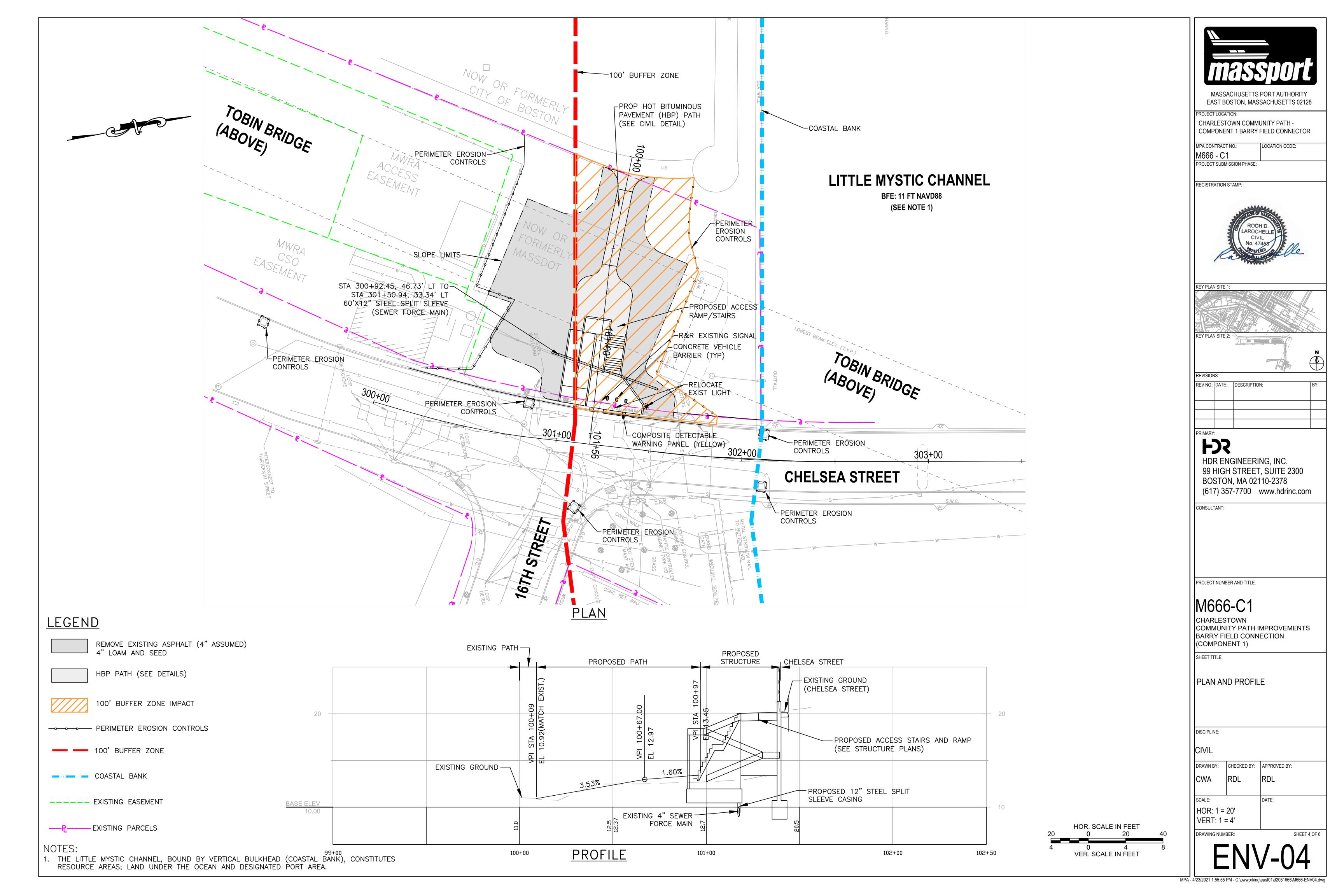
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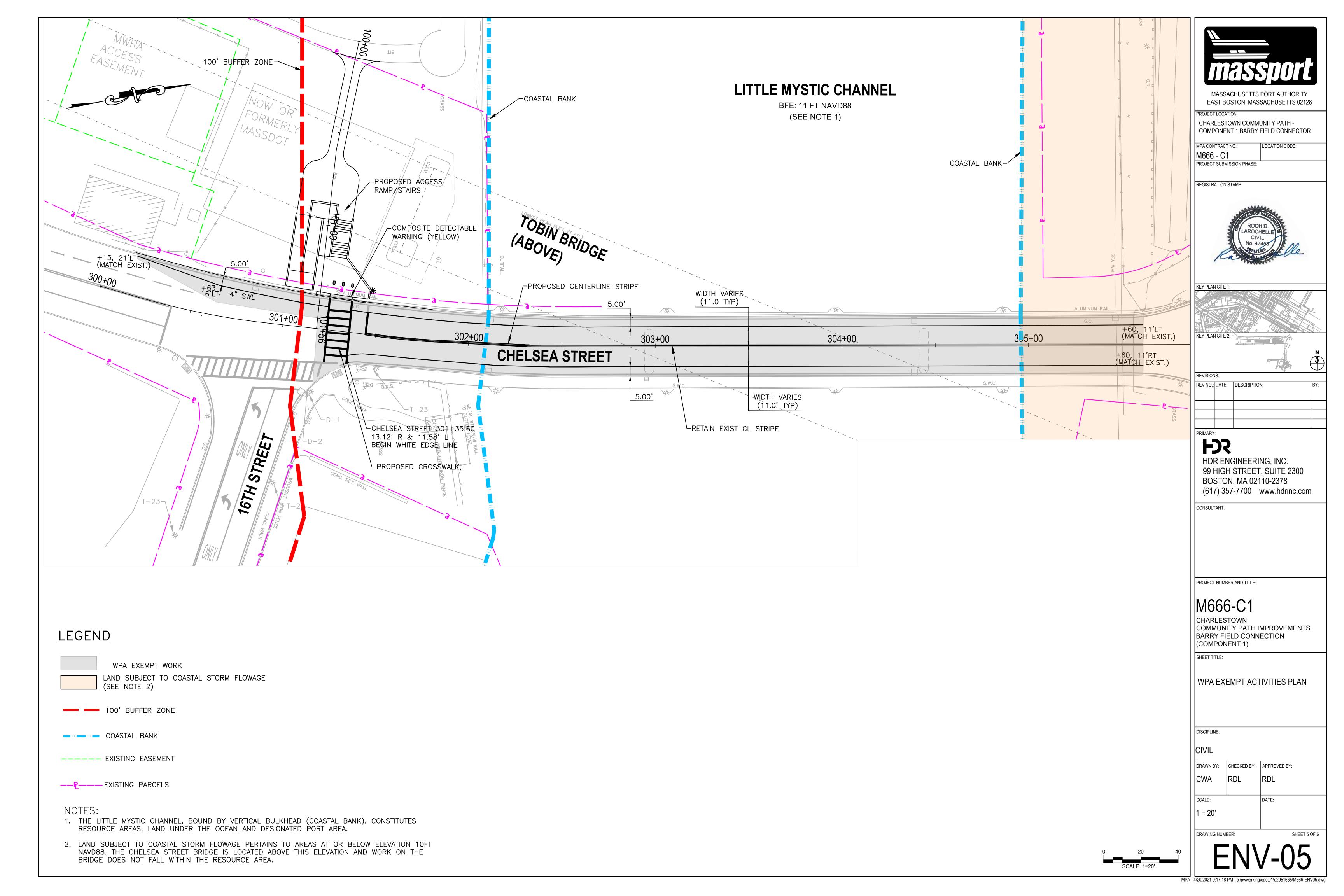
KEY PLAN

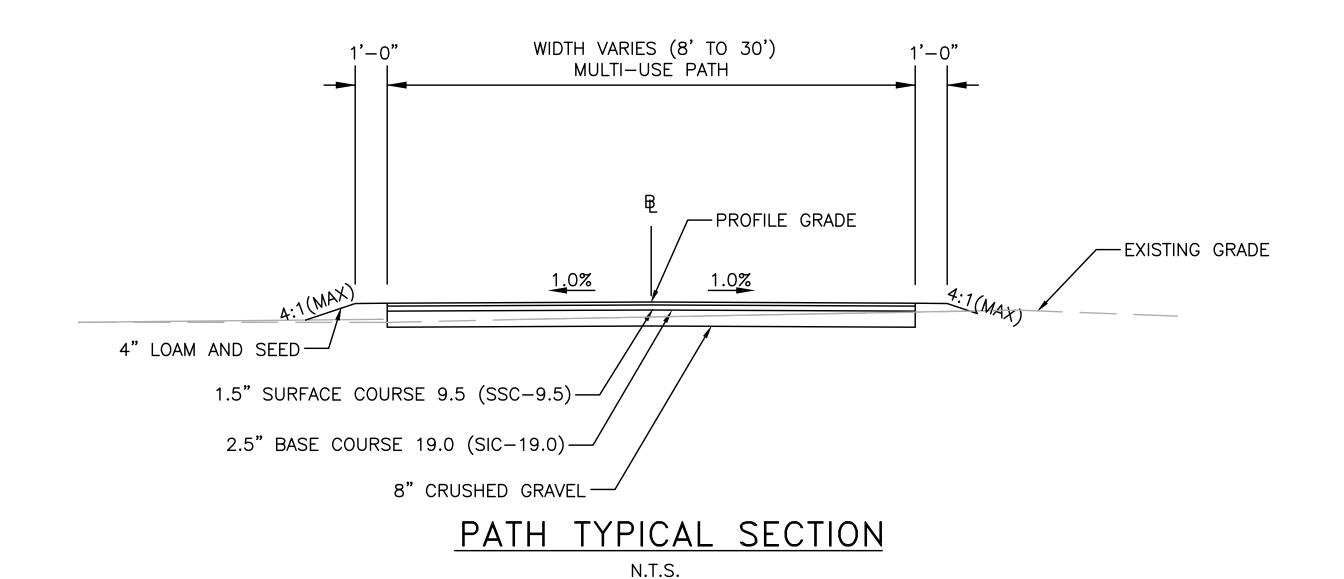
DISCIPLINE:

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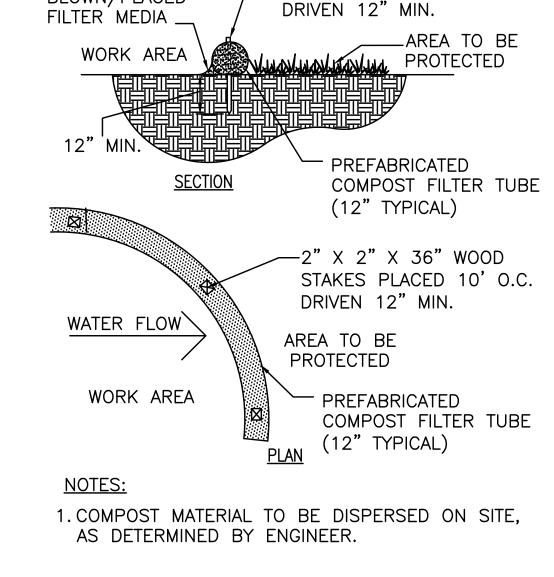


 $\mathsf{A} \blacktriangleleft$ 2"X2"X4' WOOD STAKE 2"X2"X4' WOOD STAKE (SEE NOTES)— (SEE NOTES) FILTER FABRIC-COMPOST FILTER — <u> 1</u>0'-0" MAXIMUM TUBE (SEE DETAIL FILTER FABRICH THIS SHEET) LEXISTING GRADE □ _ EXISTING GRADE (SEE NOTES) (TYP.) SECTION A-A

- FABRIC TO BE UV RESISTANT POLYPROPYLENE WITH A MINIMUM WEIGHT OF 2.5 OZ./S.Y.
- FABRIC TO BE ATTACHED TO STAKES WITH STAPLES. 3. USE SILT FENCE AND COMPOST FILTER TUBES WHERE INDICATED OR AS DIRECTED BY THE ENGINEER.
- 4. INSTALL COMPOST FILTER TUBES PER DETAIL THIS SHEET.
- 5. A MINIMUM OF (2) WOOD OR METAL STAKES PER HAYBALE. DRIVE STAKES A MINIMUM OF 12" INTO
- 6. REMOVE SILT FENCE AND COMPOST FILTER TUBE AT THE DIRECTION OF THE OWNER.

COMPOST FILTER TUBES AND SILT FENCE FOR EROSION CONTROL

NOT TO SCALE

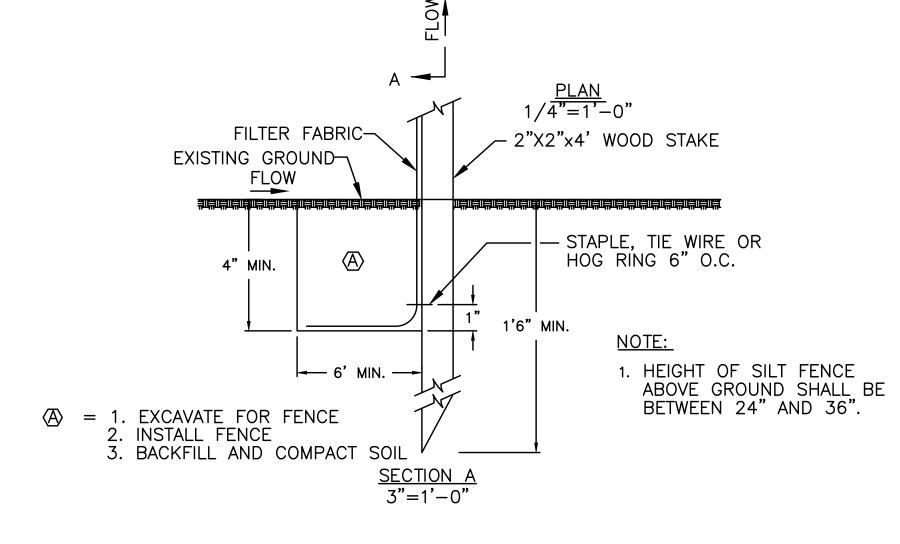


BLOWN/PLACED

___ 2" X 2" X 36" WOOD

STAKES PLACED 10' O.C.

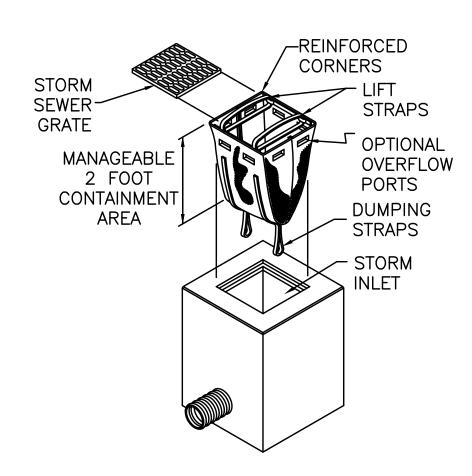
COMPOST FILTER TUBE NOT TO SCALE



FILTER FABRIC-

_STAKE

SILT FENCE NOT TO SCALE



	SAG	CK SPECIFICATIO	NS	
MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV RFDS-B	MARV HFDS-SO
GRAB TENSILE	ASTM	kN (LBS)	1\78 (400)/x	1.62 (365) x
STRENGTH	D 4632		1\40 (315)	0.89 (200)
GRAB TENSILE	ASTM	%	1√5 x 1≸	24 x 10
ELONGATION	D 4632			
PUNCTURE	ASTM	kN (LBS)	0.6\(\frac{1}{50}\)	0.40 (90)
STRENGTH	D 4833		\	
MULLEN BURST	ASTM	kPa (PSI)	5506 (800)	3097 (450)
STRENGTH	D 3786		/\	
TRAPEZOID TEAR	ASTM	kN (LBS)	0.67/(150) x	0.51 (115) x
STRENGTH	D 4533		0.7/3 (1)65)	0.33 (75)
UV RESISTENCE	ASTM D 4355	%	/ 90 \	90
APPARENT	ASTM	Mm (US	9.425 (40)	0.425 (40)
OPENING SIZE	D 4751	STD SIEVE)	\	
FLOW RATE	ASTM	1/MIN/M ²	/2852 (70)\	5907 (145)
	D 4491	(GAL/MIN/FT ²)	\	
PERMITTIVITY	ASTM D 4491	SEC-1	0.90	2.1

SACK (BLACK) HFDS-SO HI-FLOW SACK (SAFETY ORANGE) NOTE: THE CURB SACK WILL BE MANUFACTURED FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE MANUFACTURER'S SPECIFICATIONS: *NOTE: SACKS CAN BE ORDERED WITH OUR OPTIONAL OIL ABSORBENT PILLOWS

RFDS-B REGULAR FLOW

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 AND
- HAY BALES HAVE BEEN REMOVED. 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.



NOT TO SCALE



Appendix C: Photo Log

FDS

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PHOTOGRAPHIC LOG

Site Location: Charlestown Community Path – Barry Field Connector in Boston, MA

Project No. 10257415

Photo No. Date: 11/2020

Direction Photo Taken:

North Up

Description:

Photo depicting Project location from an aerial perspective. Project extends beneath the Tobin Bridge.



Photo No.

Date: 11/2020

Direction Photo Taken: Looking West

Description:

Photo depicting existing conditions of the project site.





PHOTOGRAPHIC LOG

Site Location: Charlestown Community Path – Barry Field Connector in Boston, MA

Project No. 10257415

Photo No.

Date: 11/2020

Direction Photo Taken: Looking West

Description:

Photo taken from 16th Street looking across Chelsea Street at the proposed location for pedestrian access.



Photo No.

Date: 12/2020

Direction Photo Taken: Looking North

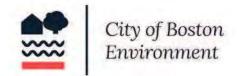
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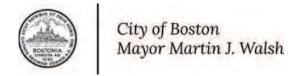
Photo looking at project construction access point off Medford Street.



Appendix D: Abutter Notification

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AFFIDAVIT OF SERVICE FOR ABUTTER NOTIFICATION

Under the Massachusetts Wetlands Protection Act and Boston Wetlands Ordinance

I, Dawn Stolfi Stalenhoef ,	hereby certify under pains and penalties of perjury that that at least						
one week prior to the public hearing, I will give notice to abutters in compliance with the second							
paragraph of Massachusetts (General Laws Chapter 131, section 40, and the DEP Guide to Abutter						
Notification dated April 8, 199	4, in connection with the following matter:						
A Notice of Intent	was filed under the Massachusetts Wetlands Protection Act						
	etlands Ordinance by the Massachusetts Port Authority (Massport) for						
Charlestown Community Path - E	Ţ						
located at Chelsea Street a	nd 41 Medford Street, Charlestown, MA 02129						
The Abutter Notification For,	the list of abutters to whom it was given, and their addresses are						
attached to this Affidavit of So	ervice.						
Stolfi Stalenhoef, Digitally signed by Stolfi	4/04/04						
Dawn Stalenhoef, Dawn Date: 2021.04.21 12:52:27 -04'00'	4/21/21						
Name	Date						

All Abutters identified within 300' of both project property lines (Source: City of Boston Assessing Department - Abutter Mailing List Generator)

CITY OF BOSTON PARCEL ID # 0202733000 (41 MEDFORD ST BOSTON MA 02129)

PID	OWNER	ADDRESSEE	MLG_ADDRESS	MLG_CITYSTATE	MLG_ZIPCODE	LOC_ADDRESS	LOC_CITY	LOC_ZIPCODE
200156000	CITY OF BOSTON	CITY OF BOSTON	COREY	CHARLESTOWN MA	2129	COREY ST	CHARLESTOWN	2129
202699000	COMMWLTH OF MASS	COMMWLTH OF MASS	DECATUR	CHARLESTOWN MA	2129	DECATUR ST	CHARLESTOWN	2129
202732000	COMMWLTH OF MASS	COMMWLTH OF MASS	CHELSEA	CHARLESTOWN MA	2129	CHELSEA ST	CHARLESTOWN	2129
202733000	CITY OF BOSTON	CITY OF BOSTON	41 MEDFORD	CHARLESTOWN MA	2129	41 MEDFORD ST	CHARLESTOWN	2129
202734000	CO OPERATIVES OF CHARLES	CO OPERATIVES OF CHARLES	89 MEDFORD ST	CHARLESTOWN MA	2129	MEDFORD ST	CHARLESTOWN	2129
202735000	CITY OF BOSTON	CITY OF BOSTON	ONE CITY HALL SQUARE	BOSTON MA	2201	MEDFORD ST	CHARLESTOWN	2129
202745000	CO-OPERATIVES OF CHARLES	CO-OPERATIVES OF CHARLES	89 MEDFORD ST	CHARLESTOWN MA	2129	MEDFORD ST	CHARLESTOWN	2129
203510005	CHARLESTOWN ROPEWALK LLC	CHARLESTOWN ROPEWALK LLC	30 GREEN LODGE ST	CANTON MA	2021	97 FIFTH ST	CHARLESTOWN	2129
203510010	ARE-79-96 CHARLESTOWN NAVY	ARE-79-96 CHARLESTOWN NAVY	PO BOX 847	CARLSBAD CA	92018	96 THIRTEENTH ST	CHARLESTOWN	2129
203510050	BOSTON REDEVELOPMENT AUTH	BOSTON REDEVELOPMENT AUTH	1 CITY HALL PL 9TH FL	BOSTON MA	2201	FIFTH AV	CHARLESTOWN	2129
203510075	CAPTAINS QUARTERS	CAPTAINS QUARTERS	20 PICKERING ST 2ND FLR	NEEDHAM MA	2492	FIFTH AV	CHARLESTOWN	2129
203510090	BUILDING P ASSOCS LESSEE	BUILDING P ASSOCS LESSEE	20 PICKERING ST 2ND FLR	NEEDHAM MA	2492	5 THIRTEENTH ST	CHARLESTOWN	2129

COMMONWEALTH OF MA (MASSDOT) PARCEL ID # 0202732000 (CHELSEA ST BOSTON MA 02129)

PID	OWNER	ADDRESSEE	MLG_ADDRESS	MLG_CITYSTATE	MLG_ZIPCO	LOC_ADDRESS	LOC_CITY	LOC_ZIPCODE
200156000 DUP	CITY OF BOSTON	CITY OF BOSTON	COREY	CHARLESTOWN MA	2129	COREY ST	CHARLESTOWN	2129
202699000 DUP	COMMWLTH OF MASS	COMMWLTH OF MASS	DECATUR	CHARLESTOWN MA	2129	DECATUR ST	CHARLESTOWN	2129
202732000 DUP	COMMWLTH OF MASS	COMMWLTH OF MASS	CHELSEA	CHARLESTOWN MA	2129	CHELSEA ST	CHARLESTOWN	2129
202733000 DUP	CITY OF BOSTON	CITY OF BOSTON	41 MEDFORD	CHARLESTOWN MA	2129	41 MEDFORD ST	CHARLESTOWN	2129
203510000	BOSTON REDEVELOPMENT AUTH	BOSTON REDEVELOPMENT AUTH	1 CITY HALL PL 9TH FL	BOSTON MA	2201	FIFTH ST	CHARLESTOWN	2129
203510030	VELJI REALTY LLC	VELJI REALTY LLC	4 CORN POINT RD	MARBLEHEAD MA	1945	31 FIFTH ST	CHARLESTOWN	2129
203510005 DUP	CHARLESTOWN ROPEWALK LLC	CHARLESTOWN ROPEWALK LLC	30 GREEN LODGE ST	CANTON MA	2021	97 FIFTH ST	CHARLESTOWN	2129
203510010 DUP	ARE-79-96 CHARLESTOWN NAVY	ARE-79-96 CHARLESTOWN NAVY	PO BOX 847	CARLSBAD CA	92018	96 THIRTEENTH ST	CHARLESTOWN	2129
203510020	BUILDING 62 CORP	BUILDING 62 CORP	MGH-149 13TH ST GEN ACC	CHARLESTOWN MA	2129	62 THIRTEENTH ST	CHARLESTOWN	2129
203510050 DUP	BOSTON REDEVELOPMENT AUTH	BOSTON REDEVELOPMENT AUTH	1 CITY HALL PL 9TH FL	BOSTON MA	2201	FIFTH AV	CHARLESTOWN	2129
203510075 DUP	CAPTAINS QUARTERS	CAPTAINS QUARTERS	20 PICKERING ST 2ND FLR	NEEDHAM MA	2492	FIFTH AV	CHARLESTOWN	2129
203510090 DUP	BUILDING P ASSOCS LESSEE	BUILDING P ASSOCS LESSEE	20 PICKERING ST 2ND FLR	NEEDHAM MA	2492	5 THIRTEENTH ST	CHARLESTOWN	2129
203510100	GENERAL HOSPITAL CORP	GENERAL HOSPITAL CORP	PO BOX 6240	BOSTON MA	2114	THIRTEENTH ST	CHARLESTOWN	2129

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 Massachusetts Port Authority (Massport) 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 Chelsea Street and 41 Medford Street, Charlestown, MA 02129.
- C. The project involves The Barry Field Connector project is being constructed as a community benefit. It includes adding a signalized crosswalk across Chelsea St. and an opening in the bridge rail; installing a deck at street level and a ramp/stair structure to accommodate the elevation change from the street to Barry Field for accessible, safe access; and painting new striping along the shoulders of the Chelsea Bridge.
- 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 Peter De Bruin, Massachusetts Port Authority, One Harborside Drive, Suite 200, East Boston, MA 02128, (617)568-3583, between the hours of 9:00am and 5:00pm, Monday through Friday.
- 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.

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

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

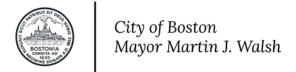
- A. The Massachusetts Port Authority (Massport) ha presentado una solicitud a la Comisión de Conservación de Boston pidiendo permiso para modificar una zona sujeta a protección en virtud de la Ley de protección de los humedales (Leyes generales, capítulo 131, sección 40) y la Ordenanza sobre los humedales de Boston.
- B. La dirección del lote donde se propone la actividad es Chelsea Street and 41 Medford Street, Charlestown, MA 02129.
- C. El proyecto consiste en The Barry Field Connector project is being constructed as a community benefit. It includes adding a signalized crosswalk across Chelsea St. and an opening in the bridge rail; installing a deck at street level and a ramp/stair structure to accommodate the elevation change from the street to Barry Field for accessible, safe access; and painting new striping along the shoulders of the Chelsea Bridge.
- D. Se pueden obtener copias del Aviso de Intención comunicándose con la Comisión de Conservación de Boston en CC@boston.gov.
- E. Las copias de la notificación de intención pueden obtenerse en Peter De Bruin, Massachusetts Port Authority, One Harborside Drive, Suite 200, East Boston, MA 02128, (617)568-3583, entre las 9:00am and 5:00pm, Monday through Friday.
- F. De acuerdo con el Decreto Ejecutivo de le Mancomunidad de Massachusetts que suspende ciertas disposiciones de la Ley de reuniones abiertas, la audiencia pública se llevará a cabo virtualmente en https://zoom.us/j/6864582044. Si no puede acceder a Internet, puede llamar al 1-929-205-6099, ingresar ID de reunión 686 458 2044 # y usar # como su ID de participante.
- G. La información relativa a la fecha y hora de la audiencia pública puede solicitarse a la **Comisión de Conservación de Boston** por correo electrónico a **CC@boston.gov** o llamando al **(617) 635-4416** entre las **9 AM y las 5 PM, de**

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

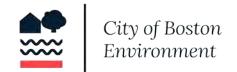
NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en www.boston.gov/public-notices y en el Ayuntamiento de Boston con no menos de cuarenta y ocho (48) horas de antelación. Si desea formular comentarios, puede asistir a la audiencia pública o enviarlos por escrito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

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





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





City of Boston Mayor Martin J. Walsh

波士顿湿地保护委员会 项目邻近住户通知

根据《马萨诸塞州湿地保护法》、《马萨诸塞州普通法》第 131 章第 40 节以及《波士顿湿地条例》的规定,我们特此向您,即向波士顿湿地保护委员会提出申请的项目的邻近住户,发出以下通知。

- A. The Massachusetts Port Authority (Massport) 已向波士顿湿地保护委员会提出申请,请求批准改建一块受《湿地保护法》 (《普通法》第131 章第40 节)和《波士顿湿地条例》保护的地块。
- B. 拟开展改建活动的地块地址为: Chelsea Street and 41 Medford Street, Charlestown, MA 02129。
- C. 该项目涉及以下建设内容: The Barry Field Connector project is being constructed as a community benefit. It includes adding a signalized crosswalk across Chelsea St. and an opening in the bridge rail; installing a deck at street level and a ramp/ stair structure to accommodate the elevation change from the street to Barry Field for accessible, safe access; and painting new striping along the shoulders of the Chelsea Bridge.
- D. 可通過聯繫波士頓保護委員會取得意向通知書的副本,電子郵件是 CC@boston.gov。
- E. 您可于Peter De Bruin, Massachusetts Port Authority, One Harborside Drive, Suite 200, East Boston, MA 02128, (617)568-3583, between the hours of 9:00am to 5:00pm, Monday through Friday 处获取意向通知的副本。
- F. 根據《馬薩諸塞州行政命令》(暫緩執行《公開會議法》聽證會將在網上 https://zoom.us/j/6864582044 進行。如果無法上互聯網 (Internet),則可致電 1-929-205-6099,輸入會議編號(ID) 686 458 2044#,然後使用#作為您參與的編號(ID.)
- G. 您可于**周一至周五上午9点到下午5点**联系**波士顿湿地保护委员会**,咨询公开听证会举行的日期和时间,邮箱地址: **CC@boston.gov**,电话: (617) 635-4416。
- 注:公开听证会的通知(包括其举行日期、时间和地点)将提前至少五天在《波士顿先驱报》上予以公布。
- 注:公开听证会的通知(包括其举行日期、时间和地点)将提前至少四十八(48)小时发布在以下网页之上以及波士顿市政厅内:www.boston.gov/public-notices。如果您想提出意见或建议,您可以参加该公开听证会或将书面形式的意见或建议发送至 CC@boston.gov 或邮寄至以下地址:Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201。
- 注:您也可以联系波士顿湿地保护委员会或环境保护部东北地区办公室,咨询有关此项申请或《湿地保护法》的更多信息。如要联系环境保护部,请致电:东北地区:(978)694-3200。
- 注:如果您准备参加该公开听证会并需要口译服务,则请在听证会举行前一天中午 12 点前通过以下电子邮箱地址告知工作人员: CC@boston.gov。



BABEL NOTICE

English:

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

Spanish:

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

Haitian Creole:

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

Traditional Chinese:

非常重要!這份文件或是申請表格包含關於您的權利,責任,和/或福利的重要信息。請您務必完全理解 這份文件或申請表格的全部信息,這對我們來說十分重要。我們會免費給您提供翻譯服務。如果您有需要 請聯糸我們的郵箱 cc@boston.gov 電話# 617-635-3850..

Vietnamese:

QUAN TRỌNG! Tài liệu hoặc đơn yêu cầu này chứa **thông tin quan trọng** về các quyền, trách nhiệm và/hoặc lợi ích của bạn. Việc bạn hiểu rõ thông tin trong tài liệu và/hoặc đơn yêu cầu này rất quan trọng, và chúng tôi sẽ cung cấp thông tin bằng ngôn ngữ bạn muốn mà không tính phí. Nếu quý vị cần những dịch vụ này, vui lòng liên lạc với chúng tôi theo địa chỉ **cc@boston.gov** hoặc số điện thoại 617-635-3850.

Simplified Chinese:

非常重要!这份文件或是申请表格包含关于您的权利,责任,和/或福利的重要信息。请您务必完全理解这份文件或申请表格的全部信息,这对我们来说十分重要。我们会免费给您提供翻译服务。如果您有需要请联糸我们的邮箱 <u>cc@boston.gov</u> 电话# 617-635-3850.

CITY of BOSTON

Cape Verdean Creole:

INPURTANTI! Es dukumentu ó aplikason ten <u>informason inpurtanti</u> sobri bu direitus, rasponsabilidadis i/ó benefisius. Ê krusial ki bu intendi informason na es dukumentu i/ó aplikason ó nu ta da informason na língua di bu preferênsia sen ninhun kustu pa bó. Si bu prisiza del, kontata-nu na <u>cc@boston.gov</u> ó 617-635-3850.

Arabic:

مهم! يحتوي هذا المستند أو التطبيق على معلومات مهمة حول حقوقك ومسؤولياتك أو فوائدك. من الأهمية أن تفهم المعلومات الواردة في هذا المستند أو التطبيق. سوف نقدم المعلومات بلغتك المفضلة دون أي تكلفة عليك. إذا كنت في حاجة إليها، يرجى الاتصال بنا على cc@boston.gov أو.635-635-617

Russian:

ВАЖНО! В этом документе или заявлении содержится **важная информация** о ваших правах, обязанностях и/или льготах. Для нас очень важно, чтобы вы понимали приведенную в этом документе и/или заявлении информацию, и мы готовы бесплатно предоставить вам информацию на предпочитаемом вами языке. Если Вам они нужны, просьба связаться с нами по адресу электронной почты <u>cc@boston.gov</u>, либо по телефону 617-635-3850. Portuguese:

IMPORTANTE! Este documento ou aplicativo contém <u>Informações importantes</u> sobre os seus direitos, responsabilidades e/ou benefícios. É importante que você compreenda as informações contidas neste documento e/ou aplicativo, e nós iremos fornecer as informações em seu idioma de preferência sem nenhum custo para você. Se precisar deles, fale conosco: <u>cc@boston.gov</u> ou 617-635-3850.

French:

IMPORTANT! Ce document ou cette demande contient des <u>informations importantes</u> concernant vos droits, responsabilités et/ou avantages. Il est essentiel que vous compreniez les informations contenues dans ce document et/ou cette demande, que nous pouvons vous communiquer gratuitement dans la langue de votre choix. Si vous en avez besoin, veuillez nous contacter à <u>cc@boston.gov</u> ou au 617-635-3850.









Appendix E: Stormwater Memo and Checklist

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Charlestown Community Path Barry Field Connector Project M666 WPA Notice of Intent Stormwater Memorandum

The Charlestown Community Path Barry Field Connector Project M666 is a Redevelopment Project as defined in 310 CMR 10.04 Redevelopment (b) as a project that constitutes "development, rehabilitation, expansion and phased projects on previously developed sites provided the redevelopment results in no net increase in impervious area." This project involves constructing a cement concrete stair and ramp system, the "connector system", to allow for connectivity for pedestrians and bicyclists from the Harbor Walk at Barry Field to the elevated roadway of Chelsea Street and the connector system will be located under the Tobin Bridge. The connector system will attach to the existing retaining wall and roadway barrier on Chelsea Street and provide a seamless transition from the proposed structure to the existing wall and sidewalk. The project will construct the cement concrete stair and ramp connector system within the same footprint as an existing impervious bituminous concrete slab and replace the remaining portion of the paved slab with loam and seed thereby reducing the total impervious area within the Redevelopment Project limits.

The construction sequence for the project will be prosecuted to minimize disturbance to the surrounding area, including Barry Field, the Harbor Walk, and Chelsea Street. The project will install appropriate sediment and erosion controls, remove the existing impervious bituminous concrete slab, excavate soil to prepare appropriate subgrade and install split sleeve on existing sanitary sewer force main, drill helical piles, selectively demolish existing Chelsea Street retaining wall, construct connectivity system foundation, walls, and stairs and ramps, construct cement concrete walkway from Harbor Walk and restore project limits with loam and seed. Once loam and seed are established, and project accepted, erosion controls will be removed.

The Redevelopment Project will reduce existing impervious area. The existing bituminous concrete slab under the Tobin Bridge will be removed and replaced with the cement concrete connectivity system and 4" loam and seed. Existing drainage conditions will be perpetuated which involve sheet flow from the paved slab to Barry Field, shallow concentrated flow leading to an existing catch basin located approximately 80 feet to the southwest of the project's connection with the Harbor Walk. The drainage from the catch basin connects to City of Boston Water and Sewer Commission closed drainage system.

This memorandum addresses the stormwater standards as described in 310 CMR 10.05(6)(k)-(q) as a requirement of the Notice of Intent and demonstrates to the greatest extent practicable, compliance with Massachusetts Department of Environmental Protection (DEP) Stormwater Management Policy.

Standard 1 - Stormwater Discharges

"No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth".

No new untreated stormwater outfalls or discharges are proposed for the project. This project meets the standard.

Standard 2 - Stormwater Discharge Rates

"Stormwater management systems must be designed so that the post-development peak discharge rates do not exceed pre-development peak discharge rates."

The Redevelopment Project will have a net decrease in impervious area. Post-construction peak runoff rates will be **less than** the pre-construction runoff rates. Post-construction runoff volume will be **less than** the pre-construction runoff volume. This project meets the standard.

<u>Table 1 – Peak Flow and Volume Comparison</u>

	PRE-DEVEL	OPMENT	POST-DEVI	ELOPMENT	DEL	TA
Return Period	Peak Flow	Volume	Peak Flow	Volume	Peak Flow	Volume
(years)	(cfs)	(ac-ft)	(cfs)	(cf)	(cfs)	(cf)
Design Point EX-CB_SW – 12-inch Storm Sewer Pipe						
2 Year	1.08	3,251	0.88	2,691	-0.20	-560
10 Year	1.93	5,757	1.68	5,021	-0.25	-736
25 Year	2.48	7,460	2.22	6,639	-0.26	-821

Note: The groundcover analysis used to determine the stormwater peak flow and runoff volumes did not take into account the surface cover provided by the Tobin Bridge over the project area and the associated stormwater runoff collected by the bridge scupper system. This decision was intentional to analyze a potential future condition whereby the bridge alignment has shifted away from the project area limits allowing the project site area to receive all of the rainfall. The Tobin Bridge, which is elevated over the project area, receives a large percentage of the rainfall compared to the project site located under the bridge. In current conditions most runoff will be received by the Tobin Bridge and not reach the cement concrete connector system.

Standard 3 - Groundwater Recharge

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

The Redevelopment Project will have a net decrease in impervious area. As a result, this project will increase groundwater recharge. No new recharge BMP are required.

Standard 4 - 80% Total Suspended Solids Removal

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

The project is a Redevelopment Project. As a project intended to replace a portion of an existing impervious surface, no new stormwater management systems are proposed. The existing catch basin at Barry Field will continue to be utilized for managing stormwater runoff.

Standard 5 - Discharge from Areas with Higher Pollutant Loads

"For land uses with higher pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMP's determined by the Department to but suitable for such uses as provided in the Massachusetts Stormwater Handbook."

This project site is not considered a land use with higher potential pollutant loads as defined in 310 CMR 10.04.

Standard 6 - Discharge to Critical Areas

"Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharge near or to any other critical area, require the use of specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook."

This project is not located in an area that discharges to a Wellhead Protection Zone II or Interim Wellhead Protection Area of a public water supply.

Standard 7 - Redevelopment Sites

"A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standard 4, 5 and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions."

The project is a Redevelopment Project. It constitutes a replacement of a bituminous concrete slab with a cement concrete stair and ramp system and loam and seed within the same existing footprint. The project will reduce net impervious area. Existing stormwater conditions will be perpetuated. As a result, there are no practicable measures required to be implemented to meet the stormwater management standards. The project meets the standard.

Standard 8 - Erosion and Sedimentation Control

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

The project is a Redevelopment Project. It constitutes a replacement of a bituminous concrete slab with a cement concrete stair and ramp system and loam and seed within the same existing footprint. Appropriate erosion and sediment controls are shown on the permitting plans and will be provided before construction operations are conducted. All disturbed areas will be restored with loam and seed. Existing catch basins within the immediate limits of work and immediately downstream of the work will have silt sacks installed. Compost filter tubes will be employed as appropriate to contain sedimentation from construction work activities.

Standard 9 - Operation & Maintenance Plan

"A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed."

As a project intended to replace an existing bituminous concrete slab with a cement concrete stair and ramp system and loam and seed within the same existing footprint, no new water management system will be created that would require any long-term operation and maintenance plan. The facility will be owned by City of Boston and maintained by City of Boston including snow and ice management.

Standard 10 – Prohibition of Illicit Discharges

"All illicit discharges to the stormwater management system are prohibited."

There is no stormwater management system on the project site that would receive any Illicit discharges. The project meets the standard. An illicit discharge statement is not provided in the stormwater report materials.



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. This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

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

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

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

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

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



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.

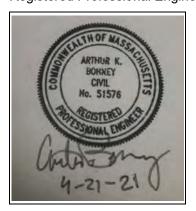
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the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



Auto Dunny

Arthur Bonney 04 21 2021

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)

env	rironmentally sensitive design and LID Techniques were considered during the planning and design of 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):
Sta	ndard 1: No New Untreated Discharges
\boxtimes	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

Cnecklist (continued)
Standard 2: Peak Rate Attenuation
 Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding. Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
□ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.
Standard 3: Recharge
☐ Soil Analysis provided.
Required Recharge Volume calculation provided.
Required Recharge volume reduced through use of the LID site Design Credits.
☐ Sizing the infiltration, BMPs is based on the following method: Check the method used.
☐ Static ☐ Simple Dynamic ☐ Dynamic Field¹
Runoff from all impervious areas at the site discharging to the infiltration BMP.
Runoff from all impervious areas at the site is <i>not</i> 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 <i>only</i> to the maximum extent practicable for the following reason:
☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
☐ Solid Waste Landfill pursuant to 310 CMR 19.000
Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
☐ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

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



Checklist for Stormwater Report

Cł	necklist (continued)
Sta	andard 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.
Sta	indard 4: Water Quality
The • • • • • • • • • • • • • • • • • • •	e 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 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

necklist (continued)
ndard 4: Water Quality (continued)
The BMP is sized (and calculations provided) based on:
☐ The ½" or 1" Water Quality Volume or
☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.
ndard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)
The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report. The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted <i>prior</i>
to the discharge of stormwater to the post-construction stormwater BMPs.
The NPDES Multi-Sector General Permit does <i>not</i> 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 <i>not</i> 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.
ndard 6: Critical Areas
The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
Critical areas and BMPs are identified in the Stormwater Report.



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands Program

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 tracticable 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 	•d
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 for a 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 structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.	und t

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.

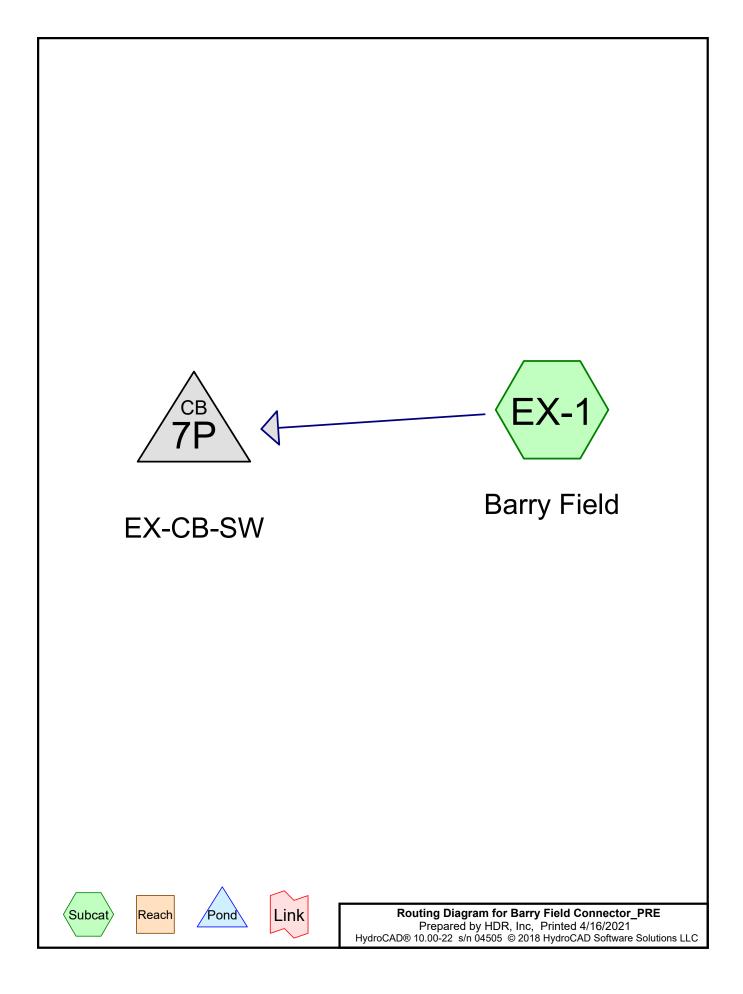


Massachusetts Department of Environmental ProtectionBureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

	ndard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control ntinued)
	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 <i>not</i> been included in the Stormwater Report but will be submitted <i>before</i> land disturbance begins.
	The project is <i>not</i> 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.
Sta	ndard 9: Operation and Maintenance Plan
\boxtimes	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.
Sta	ndard 10: Prohibition of Illicit Discharges
	The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
	An Illicit Discharge Compliance Statement is attached;
\boxtimes	NO Illicit Discharge Compliance Statement is attached but will be submitted <i>prior to</i> the discharge of any stormwater to post-construction BMPs.



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Area Listing (all nodes)

A	rea CN	Description
(sc	q-ft)	(subcatchment-numbers)
16,	846 74	>75% Grass cover, Good, HSG C (EX-1)
8,	515 98	Impervious Pavement and Path (EX-1)
25,	361 82	TOTAL AREA

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Pipe Listing (all nodes)

Line#	Node	In-Invert	Out-Invert	Length	Slope	n	Diam/Width	Height	Inside-Fill
	Number	(feet)	(feet)	(feet)	(ft/ft)		(inches)	(inches)	(inches)
1	7P	5.53	5.03	50.0	0.0100	0.012	12.0	0.0	0.0

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Barry Field Connector Project M666 Type III 24-hr 2-Year Rainfall=3.20" Printed 4/16/2021

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-1: Barry Field Runoff Area=25,361 sf 33.58% Impervious Runoff Depth=1.54"

Tc=5.0 min CN=82 Runoff=1.08 cfs 3,251 cf

Pond 7P: EX-CB-SW Peak Elev=6.07' Inflow=1.08 cfs 3,251 cf

Outflow=1.08 cfs 3,251 cf

Total Runoff Area = 25,361 sf Runoff Volume = 3,251 cf Average Runoff Depth = 1.54" 66.42% Pervious = 16,846 sf 33.58% Impervious = 8,515 sf

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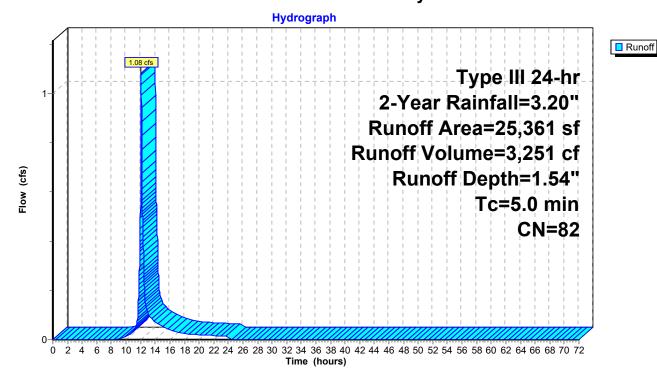
Summary for Subcatchment EX-1: Barry Field

Runoff = 1.08 cfs @ 12.08 hrs, Volume= 3,251 cf, Depth= 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Type III 24-hr 2-Year Rainfall=3.20"

_	A	rea (sf)	CN	Description							
*		8,515	98	Impervious Pavement and Path							
_		16,846	74	-75% Grass cover, Good, HSG C							
		25,361	82	Weighted Average							
		16,846	(66.42% Pei	l e e e e e e e e e e e e e e e e e e e						
		8,515	;	33.58% Imp	pervious Ar	ea					
	Tc Length Slope Velocity Capacity			Velocity	Capacity	Description					
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Boodipaon					
	5.0	,	, ,	,	, ,	Direct Entry, Direct					

Subcatchment EX-1: Barry Field



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Summary for Pond 7P: EX-CB-SW

[57] Hint: Peaked at 6.07' (Flood elevation advised)

Inflow Area = 25,361 sf, 33.58% Impervious, Inflow Depth = 1.54" for 2-Year event

Inflow 1.08 cfs @ 12.08 hrs, Volume= 3,251 cf

Outflow 1.08 cfs @ 12.08 hrs, Volume= 3,251 cf, Atten= 0%, Lag= 0.0 min

1.08 cfs @ 12.08 hrs, Volume= Primary 3.251 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Peak Elev= 6.07' @ 12.08 hrs

Device Routing Invert Outlet Devices #1 Primary 9.53' 1.5" x 1.5" Horiz. Orifice/Grate C= 0.600 in 24.0" x 24.0" Grate (0% open area) Limited to weir flow at low heads 12.0" Round RCP Round 12" #2 **Primary** 5.53'

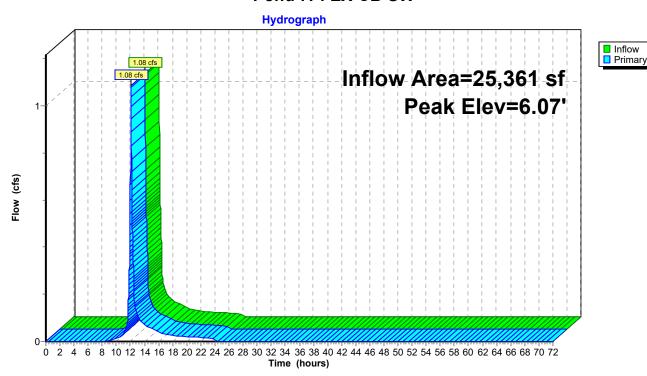
L= 50.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 5.53' / 5.03' S= 0.0100 '/' Cc= 0.900

n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.08 cfs @ 12.08 hrs HW=6.07' (Free Discharge)

-1=Orifice/Grate (Controls 0.00 cfs)

-2=RCP Round 12" (Barrel Controls 1.08 cfs @ 3.62 fps)



Barry Field Connector_PRE Prepared by HDR, Inc

Barry Field Connector Project M666 Type III 24-hr 10-Year Rainfall=4.60" Printed 4/16/2021

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentEX-1: Barry Field Runoff Area=25,361 sf 33.58% Impervious Runoff Depth=2.72"

Tc=5.0 min CN=82 Runoff=1.93 cfs 5,757 cf

Pond 7P: EX-CB-SW Peak Elev=6.30' Inflow=1.93 cfs 5,757 cf

Outflow=1.93 cfs 5,757 cf

Total Runoff Area = 25,361 sf Runoff Volume = 5,757 cf Average Runoff Depth = 2.72" 66.42% Pervious = 16,846 sf 33.58% Impervious = 8,515 sf

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Summary for Subcatchment EX-1: Barry Field

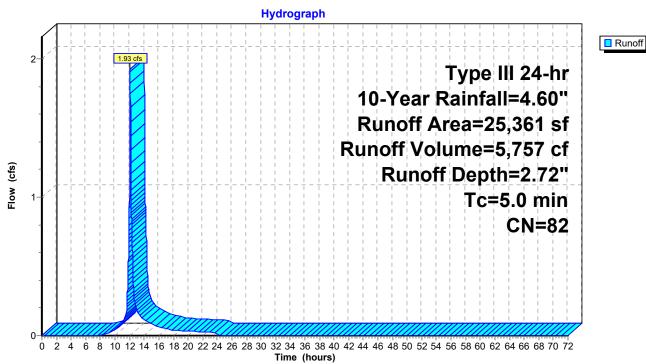
Runoff 1.93 cfs @ 12.07 hrs, Volume= 5,757 cf, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Type III 24-hr 10-Year Rainfall=4.60"

_	Α	rea (sf)	CN	Description						
*		8,515	98	Impervious	Pavement	and Path				
_		16,846	74	>75% Gras	r ⁷ 5% Grass cover, Good, HSG C					
		25,361	82	Veighted Average						
		16,846		66.42% Pervious Area						
		8,515		33.58% Imp	pervious Ar	rea				
	Tc (min)	Length (feet)	Slope (ft/ft)	,	Capacity (cfs)	Description				
-	5.0	(.001)	(1011)	(,000)	(0.0)	Direct Entry, Direct				

Direct Entry, Direct

Subcatchment EX-1: Barry Field



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Summary for Pond 7P: EX-CB-SW

[57] Hint: Peaked at 6.30' (Flood elevation advised)

Inflow Area = 25,361 sf, 33.58% Impervious, Inflow Depth = 2.72" for 10-Year event

Inflow = 1.93 cfs @ 12.07 hrs, Volume= 5,757 cf

Outflow = 1.93 cfs @ 12.07 hrs, Volume= 5,757 cf, Atten= 0%, Lag= 0.0 min

Primary = 1.93 cfs @ 12.07 hrs, Volume= 5,757 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

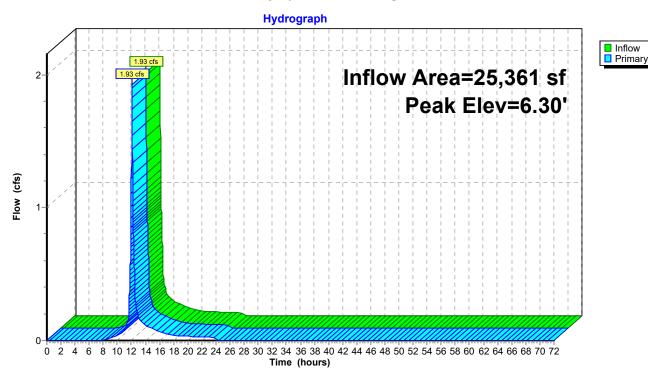
Peak Elev= 6.30' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	9.53'	1.5" x 1.5" Horiz. Orifice/Grate C= 0.600 in 24.0" x 24.0" Grate (0% open area)
			Limited to weir flow at low heads
#2	Primary	5.53'	12.0" Round RCP_Round 12" L= 50.0' RCP, sq.cut end projecting, Ke= 0.500
			Inlet / Outlet Invert= 5.53' / 5.03' S= 0.0100 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.92 cfs @ 12.07 hrs HW=6.30' (Free Discharge)

1=Orifice/Grate (Controls 0.00 cfs)

—2=RCP_Round 12" (Barrel Controls 1.92 cfs @ 4.07 fps)



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Barry Field Connector Project M666 Type III 24-hr 25-Year Rainfall=5.50" Printed 4/16/2021

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EX-1: Barry Field Runoff Area=25,361 sf 33.58% Impervious Runoff Depth=3.53"

Tc=5.0 min CN=82 Runoff=2.48 cfs 7,460 cf

Pond 7P: EX-CB-SW Peak Elev=6.46' Inflow=2.48 cfs 7,460 cf

Outflow=2.48 cfs 7,460 cf

Total Runoff Area = 25,361 sf Runoff Volume = 7,460 cf Average Runoff Depth = 3.53" 66.42% Pervious = 16,846 sf 33.58% Impervious = 8,515 sf

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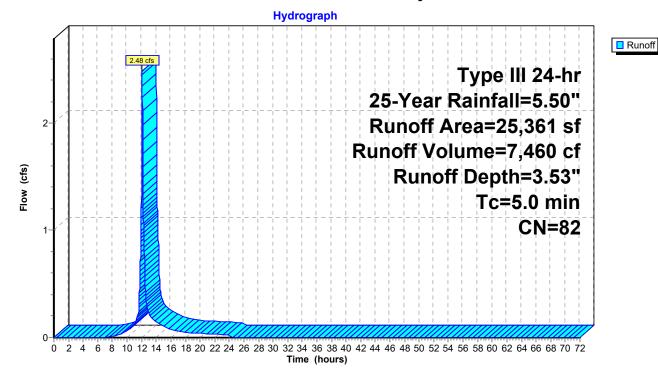
Summary for Subcatchment EX-1: Barry Field

Runoff = 2.48 cfs @ 12.07 hrs, Volume= 7,460 cf, Depth= 3.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=5.50"

	Α	rea (sf)	CN	Description							
*		8,515	98	mpervious Pavement and Path							
_		16,846	74	>75% Gras	r ⁷ 5% Grass cover, Good, HSG C						
		25,361	82	Weighted A	Veighted Average						
		16,846		66.42% Pei	a e e e e e e e e e e e e e e e e e e e						
		8,515		33.58% Imp	pervious Ar	rea					
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
	5.0					Direct Entry, Direct					

Subcatchment EX-1: Barry Field



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Summary for Pond 7P: EX-CB-SW

[57] Hint: Peaked at 6.46' (Flood elevation advised)

Inflow Area = 25,361 sf, 33.58% Impervious, Inflow Depth = 3.53" for 25-Year event

Inflow = 2.48 cfs @ 12.07 hrs, Volume= 7,460 cf

Outflow = 2.48 cfs @ 12.07 hrs, Volume= 7,460 cf, Atten= 0%, Lag= 0.0 min

Primary = 2.48 cfs @ 12.07 hrs, Volume= 7,460 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

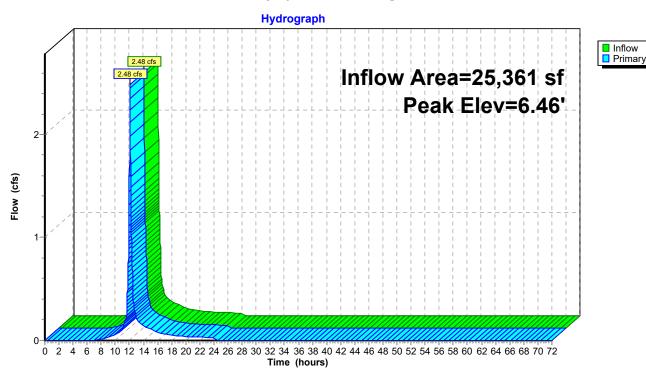
Peak Elev= 6.46' @ 12.07 hrs

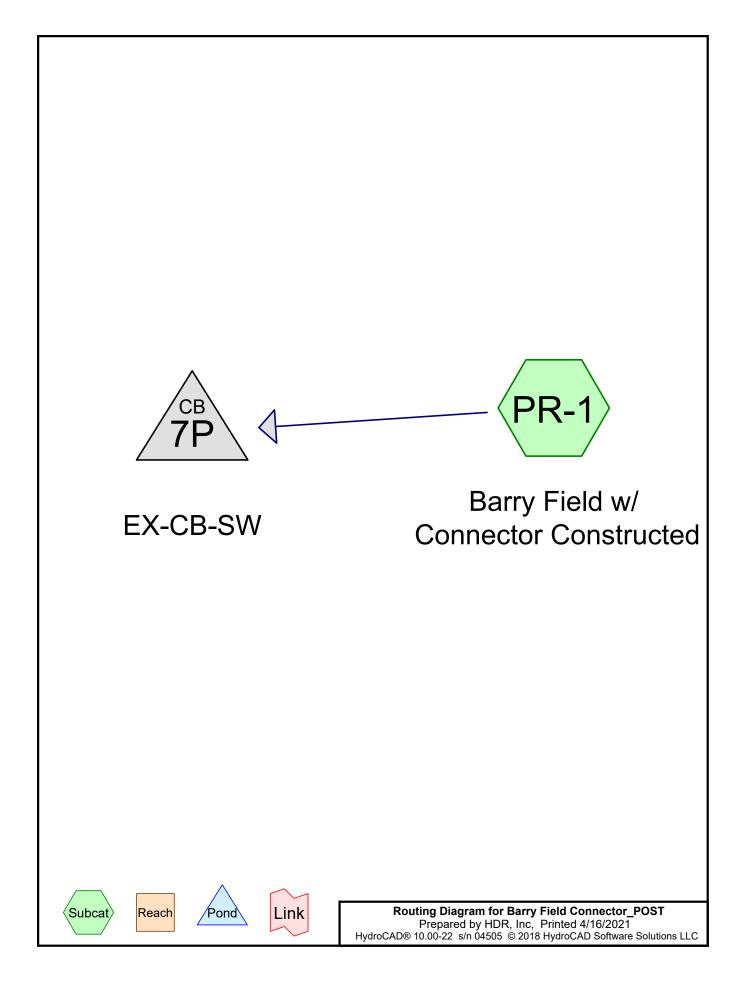
Device	Routing	Invert	Outlet Devices
#1	Primary	9.53'	1.5" x 1.5" Horiz. Orifice/Grate C= 0.600 in 24.0" x 24.0" Grate (0% open area)
			Limited to weir flow at low heads
#2	Primary	5.53'	12.0" Round RCP_Round 12"
			L= 50.0' RCP, sq.cut end projecting, Ke= 0.500
			Inlet / Outlet Invert= 5.53' / 5.03' S= 0.0100 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.48 cfs @ 12.07 hrs HW=6.45' (Free Discharge)

1=Orifice/Grate (Controls 0.00 cfs)

—2=RCP_Round 12" (Inlet Controls 2.48 cfs @ 3.27 fps)





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Area Listing (all nodes)

Area	CN	Description
(sq-ft)		(subcatchment-numbers)
4,671	98	BArry Field Connector and Existing Path (PR-1)
4,473	74	Barry Field (PR-1)
9,120	74	North Project Area (PR-1)
7,098	74	South Project Area (PR-1)
25,362	78	TOTAL AREA

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Pipe Listing (all nodes)

Line#	Node	In-Invert	Out-Invert	Length	Slope	n	Diam/Width	Height	Inside-Fill
	Number	(feet)	(feet)	(feet)	(ft/ft)		(inches)	(inches)	(inches)
1	7P	5.53	5.03	50.0	0.0100	0.012	12.0	0.0	0.0

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Barry Field Connector Project M666 Type III 24-hr 2-Year Rainfall=3.20" Printed 4/16/2021

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPR-1: Barry Field w/ Runoff Area=25,362 sf 18.42% Impervious Runoff Depth=1.27"

Tc=5.0 min CN=78 Runoff=0.88 cfs 2,691 cf

Pond 7P: EX-CB-SW Peak Elev=6.01' Inflow=0.88 cfs 2,691 cf

Outflow=0.88 cfs 2,691 cf

Total Runoff Area = 25,362 sf Runoff Volume = 2,691 cf Average Runoff Depth = 1.27" 81.58% Pervious = 20,691 sf 18.42% Impervious = 4,671 sf

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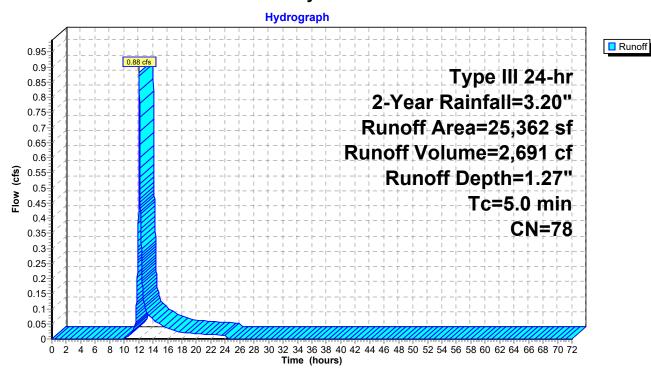
Summary for Subcatchment PR-1: Barry Field w/ Connector Constructed

Runoff = 0.88 cfs @ 12.08 hrs, Volume= 2,691 cf, Depth= 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Type III 24-hr 2-Year Rainfall=3.20"

	Α	rea (sf)	CN I	Description			
*	•	4,671	98 I	BArry Field	Connector	and Existing Path	
*	:	4,473	74 E	Barry Field		•	
*	•	9,120	74 1	North Proje	ct Area		
*	•	7,098	74	South Proje	ect Area		
_	25,362 78 Weighted Average						
		20,691	8	1			
		4,671	•	18.42% Imp	pervious Ar	rea	
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
_	5.0			, /	, ,	Direct Entry, Direct	

Subcatchment PR-1: Barry Field w/ Connector Constructed



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Summary for Pond 7P: EX-CB-SW

[57] Hint: Peaked at 6.01' (Flood elevation advised)

Inflow Area = 25,362 sf, 18.42% Impervious, Inflow Depth = 1.27" for 2-Year event

Inflow = 0.88 cfs @ 12.08 hrs, Volume= 2,691 cf

Outflow = 0.88 cfs @ 12.08 hrs, Volume= 2,691 cf, Atten= 0%, Lag= 0.0 min

Primary = 0.88 cfs @ 12.08 hrs, Volume= 2,691 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

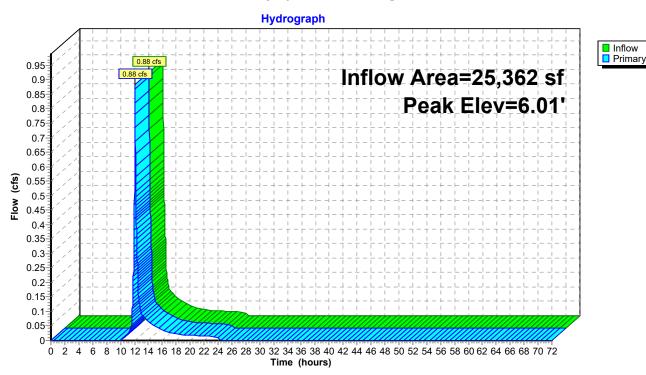
Peak Elev= 6.01' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	9.53'	1.5" x 1.5" Horiz. Orifice/Grate C= 0.600 in 24.0" x 24.0" Grate (0% open area)
			Limited to weir flow at low heads
#2	Primary	5.53'	12.0" Round RCP_Round 12" L= 50.0' RCP, sq.cut end projecting, Ke= 0.500
			Inlet / Outlet Invert= 5.53' / 5.03' S= 0.0100 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.88 cfs @ 12.08 hrs HW=6.01' (Free Discharge)

1=Orifice/Grate (Controls 0.00 cfs)

—2=RCP_Round 12" (Inlet Controls 0.88 cfs @ 2.36 fps)



Barry Field Connector_POST Prepared by HDR, Inc

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPR-1: Barry Field w/ Runoff Area=25,362 sf 18.42% Impervious Runoff Depth=2.38"

Tc=5.0 min CN=78 Runoff=1.68 cfs 5,021 cf

Pond 7P: EX-CB-SW Peak Elev=6.24' Inflow=1.68 cfs 5,021 cf

Outflow=1.68 cfs 5,021 cf

Total Runoff Area = 25,362 sf Runoff Volume = 5,021 cf Average Runoff Depth = 2.38" 81.58% Pervious = 20,691 sf 18.42% Impervious = 4,671 sf

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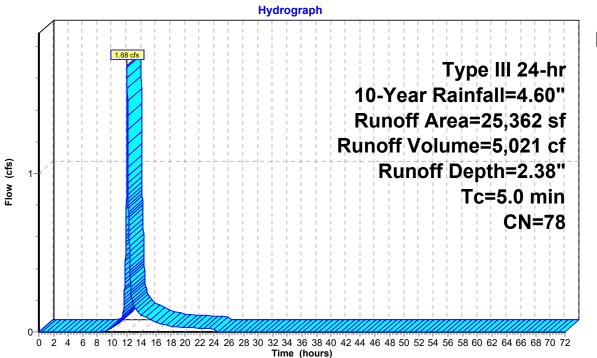
Summary for Subcatchment PR-1: Barry Field w/ Connector Constructed

Runoff = 1.68 cfs @ 12.08 hrs, Volume= 5,021 cf, Depth= 2.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Type III 24-hr 10-Year Rainfall=4.60"

	Α	rea (sf)	CN I	Description			
*	ŧ	4,671	98	BArry Field Connector and Existing Path			
*	t	4,473	74 I	Barry Field			
*	t .	9,120	74 I	North Project Area			
*	ŧ	7,098	74	South Project Area			
_		25,362	78 \	Weighted A	verage		
		20,691	;	31.58% Per	rvious Area	1	
		4,671		18.42% Imp	pervious Ar	ea	
	Tc (min)	Length (feet)	Slope (ft/ft)	,	Capacity (cfs)	Description	
_	5.0	(1001)	(14,14)	(1200)	(0.0)	Direct Entry, Direct	

Subcatchment PR-1: Barry Field w/ Connector Constructed





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Summary for Pond 7P: EX-CB-SW

[57] Hint: Peaked at 6.24' (Flood elevation advised)

Inflow Area = 25,362 sf, 18.42% Impervious, Inflow Depth = 2.38" for 10-Year event Inflow = 1.68 cfs @ 12.08 hrs, Volume= 5,021 cf

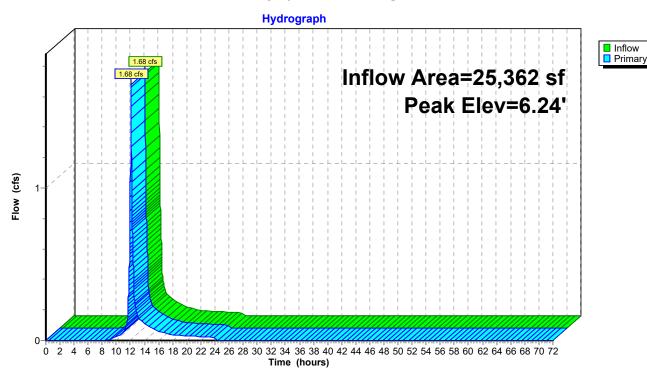
Outflow = 1.68 cfs @ 12.08 hrs, Volume= 5,021 cf, Atten= 0%, Lag= 0.0 min

Primary = 1.68 cfs @ 12.08 hrs, Volume= 5,021 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Peak Elev= 6.24' @ 12.08 hrs

Routing	Invert	Outlet Devices
Primary	9.53'	1.5" x 1.5" Horiz. Orifice/Grate C= 0.600 in 24.0" x 24.0" Grate (0% open area)
		Limited to weir flow at low heads
Primary	5.53'	12.0" Round RCP_Round 12" L= 50.0' RCP, sq.cut end projecting, Ke= 0.500
		Inlet / Outlet Invert= 5.53' / 5.03' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
	Primary	Primary 9.53'

Primary OutFlow Max=1.68 cfs @ 12.08 hrs HW=6.24' (Free Discharge)
—1=Orifice/Grate (Controls 0.00 cfs)
—2=RCP_Round 12" (Barrel Controls 1.68 cfs @ 3.96 fps)



Barry Field Connector_POST Prepared by HDR, Inc

Barry Field Connector Project M666 Type III 24-hr 25-Year Rainfall=5.50" Printed 4/16/2021

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPR-1: Barry Field w/ Runoff Area=25,362 sf 18.42% Impervious Runoff Depth=3.14"

Tc=5.0 min CN=78 Runoff=2.22 cfs 6,639 cf

Pond 7P: EX-CB-SW Peak Elev=6.38' Inflow=2.22 cfs 6,639 cf

Outflow=2.22 cfs 6,639 cf

Total Runoff Area = 25,362 sf Runoff Volume = 6,639 cf Average Runoff Depth = 3.14" 81.58% Pervious = 20,691 sf 18.42% Impervious = 4,671 sf

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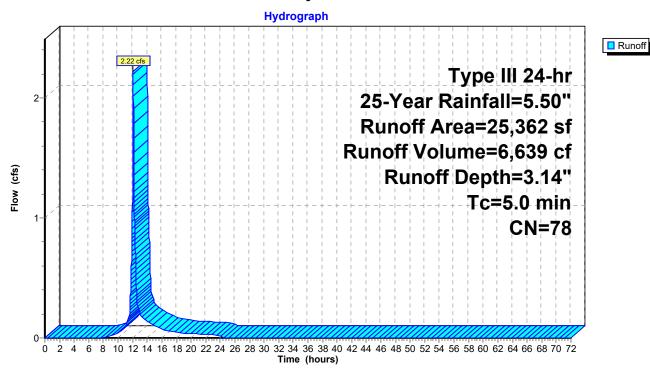
Summary for Subcatchment PR-1: Barry Field w/ Connector Constructed

Runoff = 2.22 cfs @ 12.07 hrs, Volume= 6,639 cf, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=5.50"

	Α	rea (sf)	CN	Description				
*		4,671	98	BArry Field Connector and Existing Path				
*		4,473	74	Barry Field				
*		9,120	74	North Project Area				
*		7,098	74	South Project Area				
		25,362	78	Weighted A	verage			
		20,691		81.58% Pei	rvious Area			
		4,671		18.42% Impervious Area				
	Tc	Length	Slope	,	Capacity	Description		
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
	5.0					Direct Entry, Direct		

Subcatchment PR-1: Barry Field w/ Connector Constructed



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Summary for Pond 7P: EX-CB-SW

[57] Hint: Peaked at 6.38' (Flood elevation advised)

Inflow Area = 25,362 sf, 18.42% Impervious, Inflow Depth = 3.14" for 25-Year event

Inflow = 2.22 cfs @ 12.07 hrs, Volume= 6,639 cf

Outflow = 2.22 cfs @ 12.07 hrs, Volume= 6,639 cf, Atten= 0%, Lag= 0.0 min

Primary = 2.22 cfs @ 12.07 hrs, Volume= 6,639 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Peak Elev= 6.38' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	9.53'	1.5" x 1.5" Horiz. Orifice/Grate C= 0.600 in 24.0" x 24.0" Grate (0% open area)
			Limited to weir flow at low heads
#2	Primary	5.53'	12.0" Round RCP_Round 12" L= 50.0' RCP, sq.cut end projecting, Ke= 0.500
			Inlet / Outlet Invert= 5.53' / 5.03' S= 0.0100 '/' Cc= 0.900
			n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.22 cfs @ 12.07 hrs HW=6.38' (Free Discharge)

1=Orifice/Grate (Controls 0.00 cfs)

—2=RCP_Round 12" (Barrel Controls 2.22 cfs @ 4.19 fps)

