## **RECEIVED**

By Mattie VandenBoom at 2:17 pm, Jun 12, 2024

## NOTICE OF INTENT

# Shore Park Improvements (Exploratory Borings)

85 Shore Drive Worcester, Massachusetts



Applicant:
City of Worcester
Mr. Robert Antonelli, Assistant Commissioner
c/o Cesar Valiente, Project Manager
Department of Public Works and Parks
50 Officer Manny Familia Way
Worcester, MA 01605

Submitted in Compliance with the Massachusetts Wetlands Protection Act and the Worcester Wetlands Protection Ordinance and Worcester Wetlands Protection Regulations

June 12, 2024



Prepared by
Beals and Thomas, Inc.
144 Turnpike Road
Southborough, MA 01772



June 12, 2024

Worcester Conservation Commission c/o Division of Planning & Regulatory Services City Hall Room 404 455 Main Street Worcester, MA 01608

Via: Email to planning@worcesterma.gov

Reference: Notice of Intent

Shore Park Improvements - Exploratory Borings

85 Shore Drive

Worcester, Massachusetts B+T Project No. 2407.09

### Dear Commissioners:

On behalf of the City of Worcester Department of Public Works and Parks (WDPW&P) (the Applicant), Beals and Thomas, Inc. (B+T) respectfully submits this Notice of Intent (NOI) for work within Bank and associated buffer zone. The proposed project includes exploratory borings conducted at Shore Park located at 85 Shore Drive, to support the design of a future pedestrian boardwalk and boat (canoe/kayak) launch along the edge of Indian Lake. This filing is submitted in accordance with the Massachusetts Wetlands Protection Act, MGL, Chapter 131, Section 40 and associated Regulations at 310 CMR 10.00 (collectively referred to as the Act) and the City of Worcester Wetlands Protection Ordinance and Wetlands Protection Regulations (the Ordinance).

As required, enclosed are one original and one copy of the NOI submission package. The following information is included for your review:

Section 1.0: Notice of Intent Forms;

Section 2.0: Project Narrative; Section 3.0: Abutter Information;

Section 4.0: Wetland Boundary Documentation; and

Section 5.0: Plans.

As required, a copy of this filing has been provided to the Central Regional Office of the Department of Environmental Protection (MassDEP). Pursuant to requirements of the Act, abutters within 100 feet of the subject property have been notified via certified mail of mailing concurrent with the date of this submission that this NOI has been filed. The Applicant requests that the Commission waive the requirements of Section 7.2 Fees of the Ordinance as the Applicant is the City of Worcester. It is our understanding that the Commission will publish the notice of the public hearing in the Worcester Telegram and Gazette.

Corporate OfficeRegional Office144 Turnpike Road32 Court Street

Southborough, MA 01772 bealsandthomas.com T 508.366.0560 F 508.366.4391

Worcester Conservation Commission c/o Division of Planning & Regulatory Services June 12, 2024 Page 2

Should you have any questions regarding this matter or require additional information, please contact us at (508) 366-0560. We thank you for your consideration of this Notice of Intent and look forward to meeting with the Commission at the next available public hearing.

Sincerely,

BEALS AND THOMAS, INC.

David J. LaPointe, RLA

Principal

Enclosures

cc: MassDEP Central Regional Office (1 copy via Certified Mail)

Cesar Valiente, Worcester Department of Public Works and Parks, 50 Skyline Drive Worcester, MA 01605 (1 copy via U.S. mail and via email: valientec@worcesterma.gov)



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# Section 1.0 Notice of Intent Forms

Notice of Intent (WPA Form 3)

Wetland Fee Transmittal Form

City of Worcester Local Submission Checklist





# 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

Worcester City/Town

#### Important:

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





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

### A. General Information

	,	ers will click on button to locate p	nojout sito).
	85 Shore Drive	Worcester	01603
	a. Street Address	b. City/Town	c. Zip Code
	Latitude and Langitude	42° 18' 10.6" N	71° 48' 46.7" W
	Latitude and Longitude:	d. Latitude	e. Longitude
	Map 37	37-025-00002	
	f. Assessors Map/Plat Number	g. Parcel /Lot Numb	er
2.	Applicant:		
	Robert	Antonelli, Jr.	
	a. First Name	b. Last Name	
	City of Worcester Department of Pubc. Organization	olic Works and Parks	
	50 Skyline Drive		
	d. Street Address		
	Worcester	MA	01605
	e. City/Town	f. State	g. Zip Code
	(508) 929-1300	ValienteC@worcest	· ·
	h. Phone Number i. Fax Number	j. Email Address	
	a. First Name	b. Last Name	
	c. Organization		
	d. Street Address		
	e. City/Town	f. State	g. Zip Code
	h. Phone Number i. Fax Number	j. Email address	
4.	Representative (if any):		
4.	Representative (if any):  David	LaPointe	
4.	, , , , , , , , , , , , , , , , , , , ,	LaPointe b. Last Name	
4.	David a. First Name		
4.	David		
4.	David a. First Name Beals and Thomas, Inc. c. Company		
4.	David a. First Name Beals and Thomas, Inc.		
4.	David a. First Name Beals and Thomas, Inc. c. Company 144 Turnpike Road d. Street Address	b. Last Name	01772
4.	David a. First Name Beals and Thomas, Inc. c. Company 144 Turnpike Road		01772 g. Zip Code
4.	David a. First Name Beals and Thomas, Inc. c. Company 144 Turnpike Road d. Street Address Southborough e. City/Town	b. Last Name  Massachusetts  f. State	g. Zip Code
4.	David a. First Name Beals and Thomas, Inc. c. Company 144 Turnpike Road d. Street Address Southborough	b. Last Name  Massachusetts  f. State	g. Zip Code
<ol> <li>4.</li> <li>5.</li> </ol>	David a. First Name Beals and Thomas, Inc. c. Company 144 Turnpike Road d. Street Address Southborough e. City/Town 508-366-0560 508-366-439	Massachusetts f. State dlapointe@bealsanc j. Email address	g. Zip Code dthomas.com
	David a. First Name Beals and Thomas, Inc. c. Company 144 Turnpike Road d. Street Address Southborough e. City/Town 508-366-0560 h. Phone Number  508-366-439 i. Fax Number	Massachusetts f. State dlapointe@bealsanc j. Email address	g. Zip Code dthomas.com



# WPA Form 3 – Notice of Intent

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

rovided by MassDEP:			
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	Worcester		
	City/Town		

### A. General Information (continued)

	(			
6.	. General Project Description:			
	Renovation of an existing basketball court and play	ground, sidewalk improvements, and landscaping.		
		g,		
_				
/a.	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: Public Recreation / Park			
7b.				
	2. Limited Project Type			
	If the proposed activity is eligible to be treated as at CMR10.24(8), 310 CMR 10.53(4)), complete and at Project Checklist and Signed Certification.			
8.	Property recorded at the Registry of Deeds for:			
	Worcester			
	a. County	b. Certificate # (if registered land)		
	11283 c. Book	76 d. Page Number		
R				
	B. Buffer Zone & Resource Area Impacts (temporary & permanent)			
1.				
2.	Vegetated Wetland, Inland Bank, or Coastal Re Inland Resource Areas (see 310 CMR 10.54-10 Coastal Resource Areas).			
	Check all that apply below. Attach narrative and any project will meet all performance standards for each standards requiring consideration of alternative project.	of the resource areas altered, including		

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For all projects

affecting other

narrative

area was delineated.

Resource Areas, please attach a

explaining how

the resource

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

## WPA Form 3 – Notice of Intent

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

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

Resource Area Size of Proposed Alteration Proposed Replacement (if any) n/a - no permanent alteration +/-10lf (temporary) а. 🛚 Bank 1. linear feet 2. linear feet b. 🗌 **Bordering Vegetated** 1. square feet 2. square feet Wetland с. П Land Under 1. square feet 2. square feet Waterbodies and Waterways 3. cubic yards dredged Resource Area Size of Proposed Alteration Proposed Replacement (if any) d. 🖂 **Bordering Land** +/-400sf (temporary) n/a - no permanent alteration Subject to Flooding 1. square feet 2. square feet 0 3. cubic feet of flood storage lost 4. cubic feet replaced е. П Isolated Land 1. square feet Subject to Flooding 2. cubic feet of flood storage lost 3. cubic feet replaced f.  $\square$ Riverfront Area 1. Name of Waterway (if available) - specify coastal or inland Width of Riverfront Area (check one): 25 ft. - Designated Densely Developed Areas only 100 ft. - New agricultural projects only 200 ft. - All other projects 3. Total area of Riverfront Area on the site of the proposed project: square feet 4. Proposed alteration of the Riverfront Area: a. total square feet b. square feet within 100 ft. c. square feet between 100 ft. and 200 ft. ☐ Yes ☐ No 5. Has an alternatives analysis been done and is it attached to this NOI? 6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No 3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

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

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rovided by MassDEP:			
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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.

Resou	<u>rce Area</u>	Size of Proposed Alteration	Proposed Replacement (if any)
а. 🗌	Designated Port Areas	Indicate size under Land Unde	r the Ocean, below
b. 🗌	Land Under the Ocean	1. square feet	
		2. cubic yards dredged	
c. 🗌	Barrier Beach	Indicate size under Coastal Bea	ches 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	Indicate size under Coastal Bank Ocean, and/or inland Land Under above	
		1. cubic yards dredged	
I	Land Subject to Coastal Storm Flowage	1. square feet	
Restoration/Enhancement If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the			
square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.			
a. squar	re feet of BVW	b. square feet of S	Salt Marsh
☐ Project Involves Stream Crossings			
a. numb	per of new stream crossings	b. number of repla	acement stream crossings

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Pro۱	vided by MassDEP:
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			Worcester	
			City/Town	
C.	Other Applicable	Standards and F	Requirements	
			on Limited Project. Skip Section C and Limited Project Checklists – Required Actions	
Str	reamlined Massachuset	ts Endangered Spec	ies Act/Wetlands Protection Act Review	
1.	the most recent Estimated	Habitat Map of State-Li ingered Species Progra ritage Atlas or go to	stimated Habitat of Rare Wildlife as indicated on sted Rare Wetland Wildlife published by the m (NHESP)? To view habitat maps, see the iewer.htm.	
	a.  Yes No	yes, include proof of n	nailing or hand delivery of NOI to:	
Via	MassGIS:	Natural Heritage and E Division of Fisheries a	ndangered Species Program	
	May 21, 2024 b. Date of map	1 Rabbit Hill Road Westborough, MA 015		
	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 In	formation for Endangere	ed Species Review*	
	1. Percentage/ac	reage of property to be	altered:	
	(a) within wetland f	Resource Area	percentage/acreage	
	(b) outside Resour	ce Area	percentage/acreage	
	2. Assessor's Ma	p or right-of-way plan of	site	
2.		ing existing and propos	vetland resource areas and areas outside of ed conditions, existing and proposed ed limits of work **	

Photographs representative of the site

(a) 🔲

buffer zone)

Project description (including description of impacts outside of wetland resource area &

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

<sup>\*\*</sup> 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 Protection**Bureau of Resource Protection - Wetlands

# WPA Form 3 - Notice of Intent

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

rov	rided by MassDEP:
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### C. Other Applicable Standards and Requirements (cont'd)

Make	(c) MESA filing fee (fee information available at <a href="http://www.mass.gov/dfwele/dfw/nhesp/regulatory">http://www.mass.gov/dfwele/dfw/nhesp/regulatory</a> review/mesa/mesa fee schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and <i>mail to NHESP</i> at above address			
Project	Projects altering 10 or more acres of land, also submit:			
(d)	(d) Vegetation cover type map of site			
(e)	(e) Project plans showing Priority & Estimated Habitat boundaries			
(f) O	(f) OR Check One of the Following			
1. 🗌	Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10 <a href="http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.">http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.</a> the NOI must still be sent to NHESP if the project is within estimated habitat pursua 310 CMR 10.37 and 10.59.)			
2. 🗌	Separate MESA review ongoing.	a. NHESP Tracking #	b. Date submitted to NHESP	
3.	Separate MESA review completed. Include copy of NHESP "no Take" dete Permit with approved plan.	ermination or valid Conse	rvation & 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	applicable – project is in inland resource	area only b.  Yes	☐ No	
If yes, incl	If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:			
	South Shore - Cohasset to Rhode Island border, and the Cape & Islands:  North Shore - Hull to New Hampshire border:			
Division of Marine Fisheries - Southeast Marine Fisheries Station Attn: Environmental Reviewer 1213 Purchase Street – 3rd Floor New Bedford, MA 02740-6694 Email: <a href="mailto:DMF.EnvReview-South@state.ma.us">Division of Marine Fisheries - North Shore Office Attn: Environmental Reviewer 30 Emerson Avenue Gloucester, MA 01930 Email: <a href="mailto:DMF.EnvReview-North@state.ma.us">DMF.EnvReview-North@state.ma.us</a></a>				

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

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# WPA Form 3 - Notice of Intent

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Provided by MassDEP:

MassDEP File 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.   Yes No  If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). <b>Note:</b> electronic filers click on Website.
transaction number		b. ACEC
(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?
		<ul> <li>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:</li> <li>Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)</li> </ul>
		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: Exploratory Soil testing only
		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.
		<b>Online Users:</b> Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.
		1. Subscription 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.)

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to the boundaries of each affected resource area.

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

2.



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ro۱	Provided by MassDEP:		
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	Document Transaction Number		
	Worcester		
	City/Town		

### D. Additional Information (cont'd)

	3.		source area boundary delineations (MassDEP BVW licability, Order of Resource Area Delineation, etc.), nodology.
	4. 🛛	List the titles and dates for all plans and o	ther materials submitted with this NOI.
	Sh	ore Park Boardwalk Boring Exhibit	
		Plan Title	
	Be	als and Thomas, Inc.	David J. LaPointe, RLA
	b. F	Prepared By	c. Signed and Stamped by
	Jur	ne 10, 2024	varies'
	d. F	inal Revision Date	e. Scale
	f. A	dditional Plan or Document Title	g. Date
	5.		please attach a list of these property owners not
	6. 🗌	Attach proof of mailing for Natural Heritag	e and Endangered Species Program, if needed.
	7.	Attach proof of mailing for Massachusetts	Division of Marine Fisheries, if needed.
	8. 🛮	Attach NOI Wetland Fee Transmittal Forn	n
	9.	Attach Stormwater Report, if needed.	
Ε.	Fees		
	1.		ed for <b>projects of any city</b> , town, county, or district ed Indian tribe housing authority, municipal housing sportation Authority.
	Applica Fee Tra	ants must submit the following information ( ansmittal Form) to confirm fee payment:	in addition to pages 1 and 2 of the NOI Wetland
	2. Munic	ipal Check Number	3. Check date
	4. State	Check Number	5. Check date
	6. Payor	name on check: First Name	7. Payor name on check: Last Name

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## WPA Form 3 - Notice of Intent

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-	Provided by MassDEP:
The Real Property lies	MassDEP File Number
-	Document Transaction Number
	Worcester
3	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.

MACIETA	
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	6. Date

### For Conservation Commission:

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

#### For MassDEP:

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

#### Other:

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

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



### Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

A. Applicant Information

### **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





•	• •			
1. Loc	cation of Project:			
85	Shore Drive		Worcester	
	Street Address		b. City/Town	
N/A	A – Municipal Project		N/A	
	Check number		d. Fee amount	
2. App	plicant Mailing Addre	SS:		
a. F	First Name		b. Last Name	
City	y of Worcester			
	) Drganization			
50	Officer Manny Familia	a Way		
d. M	Mailing Address	Í		
Wo	orcester		MA	01605
e. C	City/Town		f. State	g. Zip Code
(50	08) 929-1300		valientec@worcesterma.gc	V
	Phone Number	i. Fax Number	j. Email Address	
3. Pro	operty Owner (if differ	ent):		
a. F	First Name		b. Last Name	
c. O	Organization			
d. M	Nailing Address			
e. C	City/Town		f. State	g. Zip Code
h. P	Phone Number	i Fax Number	i. Email Address	

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

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

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

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

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

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

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

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



### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

### **NOI Wetland Fee Transmittal Form**

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B. Fees (continued)			
Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
N/A – Municipal Project			_
	Step 5/T	otal Project Fee	:
	Step 6	Fee Payments:	
	Total	Project Fee:	N/A a. Total Fee from Step 5
	State share	of filing Fee:	N/A b. 1/2 Total Fee <b>less \$</b> 12.50
	City/Town shar	e of filling Fee:	N/A c. 1/2 Total Fee <b>plus</b> \$12.50

## C. Submittal Requirements

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

Department of Environmental Protection Box 4062 Boston, MA 02211

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

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

#### **CITY OF WORCESTER CONSERVATION COMMISSION**



c/o Division of Planning & Regulatory Services
City Hall, 455 Main Street, Room 404, Worcester, MA 01608
Office 508-799-1400 x31440 – Fax 508-799-1406

planning@worcesterma.gov

# Submission Requirements for Notices of Intent: Local Ordinance Only

1)Submit three copies (two full size, one reduced) and one digital copy of the following:



\*Per recent filing instructions on the deed must sign). Note: If property is owned by a corporate entity, a party authorized to execute documents as listed on the secretary of State's corporate listing must sign the application (or provide the minutes of a Board meeting, authorizing an alternate party to sign).

- **Certified abutters' list and map** (obtained from City Hall, Room 209; see "Guidance Abutter Notification Requirements" here: <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>).
- A copy of the notice mailed (or to be mailed) to the abutters; see "Guidance Abutter Notification Requirements" here: <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>. <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>. <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>. <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>. <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>. <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>.
- A NOI Fee Transmittal form (available as a fillable PDF form here: <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>).
- ✓E. A Plan of Land (folded 2 full size, 1 reduced). Please see page 4 regarding specific information required to be provided thereon, any items excluded from the plan require the grant of a waiver from the Commission.
- **Hydrology & Stormwater Management Report**. If the project is subject to the provisions of the MassDEP Stormwater Management Standards (310 CMR 10.05(6)(k)-(q)), please provide:
  - One full copy of a Stormwater Report, Stamped by a Professional Engineer, and one digital copy
    - → Note: Stormwater design calculations have recently changed. Calculations shall not be based on TP-40 and shall use NOAA Atlas 14 or Cornell data. Refer to Wetlands Protection Regulations, as modified June 24, 2019, Section 5.3(p) for more information.

### 2) Fee(s):

**A.** Provide the appropriate fee(s) according to the most updated **local** Fee Schedules, as applicable (<a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>).

Please make checks payable to the City of Worcester.

#### 3) How to Submit:

- A. Hardcopies: Mail or submit the above items in person by the Application Filing Deadline date (available here: <a href="http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission">http://www.worcesterma.gov/planning-regulatory/boards/conservation-commission</a>) between 8:30am-2pm to the City of Worcester Division of Planning & Regulatory Services, City Hall, 455 Main Street, Room 404, Worcester, MA 01608.
- **B.** Digital Copy: All applications, plans, and materials must also be submitted as a PDF file to <a href="mailto:planning@worcesterma.gov">prior to or at the time of application submittal to the office. A submission is not considered complete without digital submission.</a>

### Plan Requirements: Engineering Information to be provided with the NOI Application

(Source: Worcester Wetlands Protection Regulations, approved by the Worcester Conservation Commission on July 2, 1990, as amended.)

**Note:** Plans shall be provided at a *legible scale and size* (two full size, one reduced size) and must be folded, so as to fit in a letter sized folder, at submission. Application submissions may be rejected at the discretion of staff if materials are illegible or not properly folded.

- 5.1 <u>General</u> Plans shall describe the proposed activity and its effect on the environment. All plans, drawings, sketches, and calculations shall be dated and signed by the person responsible for their preparation. Plans and drawings involving the practice of surveying or engineering shall be stamped and signed by a professional surveyor or engineer if required by the Commission. Plans shall be consistent with those submitted to other City boards and departments.
- 5.3 <u>Plan Requirements for a Notice of Intent</u> Unless otherwise authorized by the Commission, plans submitted for a Notice of Intent shall include the following information at a minimum:
  - a) A project locus map copied from a U.S. Geological Survey quadrangle sheet or City of Worcester map showing the location of the proposed project.
  - b) Names and locations of adjacent roadways.
  - c) Property lines including distances.
  - d) On all drawings the title designating the project location, the name of the person preparing the drawings, the date prepared and any revision dates.
  - e) Delineation of all known wetland resource areas and the Buffer Zone for Bordering Vegetated Wetland (Conservation Commission's clarification showing 15', 30', 50'and 100' buffers for jurisdictional wetlands, 25' Riverfront area, &/or a 100' buffer for a storm drains/catch basins, etc.).
  - f) Location of all present and proposed structures and paved areas.
  - g) Existing and proposed contours of the entire site and affected adjacent areas. Generally, two (2) foot contours should be shown. Contours should refer to the National Geodetic Vertical Datum of 1927 and any amendments thereof.
  - h) Location of existing and proposed stormwater management facilities and associated engineering data.
  - Location of proposed wetland areas to be filled and associated replication areas. Cross sections showing slopes, bank and bottom treatment of each wetland resource to be altered. Locations of cross sections must be specified.
  - j) Locations and elevations of cellars or floors and subsurface sewage disposal systems, including leaching facilities and reserve leaching areas.
  - k) Soil characteristics of the site.
  - I) Erosion and sediment control plans.
  - m) Layout and site plans shall be drawn at commonly acceptable scales, preferably one (1) inch = forty (40) feet with detail and profile drawings drawn to appropriate scales.
  - n) For plans involving construction of areas in excess of one acre, methods for stabilizing cleared areas of the site during extended shutdown due to weather, economic conditions or any other cause should be provided.
  - o) The sequence of construction for proposed erosion and sediment controls, clearing and grubbing, excavation, installation of improvements, grading, and stabilization.
  - p) For projects requiring hydraulic/hydrologic calculations, plans showing subcatchment areas, cover, soil types, drainage paths and design points with labeling which corresponds to the calculations should be provided. Analysis of the 1 (or 2), 10, 25, and 100 year frequency storms for pre-development and post-development conditions should be provided as appropriate, including a concise summary of peak rates of flow at design points and flood elevations and duration. Massachusetts Stormwater Standards, or standards otherwise required by the ordinance or regulations, shall be met using design storms based on NOAA Atlas 14, Cornell's Northeast Regional Climate Center data, or if newer data is available, most conservative data based on highest precipitation amounts.
- 5.4 Other Information The requirements stated above are not definitive or exclusive. Some may be omitted in a particular case and an applicant may be required to submit additional information deemed necessary to determine compliance with the Ordinance. Applicants and their consultants are encouraged to contact Conservation Commission staff to ascertain information requirements for specific projects.

#### **Abutter Notification Guidance**

The following Conservation Commission filing types require abutter notification to be completed by the applicant:

- Notice of Intent under Wetlands Protection Act and/or Wetlands Protection Ordinance
- Abbreviated Notice of Intent
- Abbreviated Notice of Resource Area Delineation
- Request to Amend an Order of Conditions

#### **Notification Process:**

- 1. Obtain a Certified List of Abutters from the City of Worcester Assessing Department (City Hall, 455 Main Street, Second Floor, Room 209). Submit a copy of this list to the Office of the Commission at the time of filing. <u>Note</u>: An abutters list is current if it is less than three (3) months old at the time notice is provided.
- 2. Prepare a written notification. <u>Note:</u> A copy of the notice must be submitted to the Office of the Conservation Commission prior to or at the first hearing. It is recommended that the following information is included in the notice to abutters:
  - 1) The applicant's name;
  - 2) The project's address;
  - 3) Type of the City of Worcester Conservation Commission filing (NOI, ANRAD, etc.) and the reason for Commission's review:
  - 4) Description of the proposal;
  - 5) Date, time and place of the public hearing (can be obtained from the Division of Planning & Regulatory Services at the time of filing; however, the notice can be sent prior to a set hearing date);
  - 6) Please add the following statements:
    - This application may be viewed 8:30am-2:00pm at the Division of Planning & Regulatory Services, City Hall, 455 Main Street, Room 404, Worcester, MA. Contact phone number 508-799-1400 x31440.
    - Notice of the public hearing, including its date, time and place, will be published at least 7 calendar days prior to the hearing in the Worcester Telegram & Gazette.
    - Agenda for the public hearing, including its date, time, and place, will be posted on the City website (http://www.worcesterma.gov/city-clerk/agendas-minutes/boards-commissions) not less than 48 hours prior to the hearing.
- 3. Provide **notification to abutters**. Notification shall be provided by the applicant, concurrent with the filing of an application with the Office of the Commission, but **must be postmarked a minimum of seven (7) business days (excluding legal holidays) prior to the public hearing**, via one of the following methods:
  - A. Hand Delivery. The applicant shall provide a notarized affidavit, certifying the dates on which deliveries were conducted and that notification was completed in compliance with the current certified abutters list.
  - **B.** Certified Mail, return receipt requested. The original Certified Mail receipts and return receipts must be submitted to the Office of the Conservation Commission prior to or at the first hearing.
  - **C. Certificate of Mailing**. The original certificate of mailing(s) must be submitted to the Office of the Conservation Commission prior to or at the first hearing.

**Legal Advertising:** Please note that the Office of the Conservation Commission will submit a legal ad for the project to the Worcester Telegram & Gazette which will be published 5 business days prior to the hearing.

### Source of the Notification Requirements:

- 1) City of Worcester Wetlands Protection Ordinance Section 5(a)
  - "Section 5: Notice and Hearings
  - (a) Any person filing a Notice of Intent or a Request for Determination of Applicability with the Commission at the same time shall provide notice thereof in accordance with the Wetlands Protection Act, G. L. Ch. 131, Sec. 40."
- 2) 310 CMR 10.05 (4) (Code of Massachusetts Regulations) as last amended.

Per October, 2014 revision:

"...Concurrent with the filing of the Notice of Intent, the applicant shall provide notification to all Abutters.

Notwithstanding the foregoing, the requirement to provide Abutter notification is subject to the following limits. An applicant is required to provide notification to an Abutter whose Lot is separated from the Project Locus by a public or private street or body of water only if the Abutter's Lot is within 100 feet from the property line of the Project Locus.

An applicant who proposes work solely within Land under Water Bodies or Waterways, or solely within a Lot with an area greater than 50 acres, is required to provide notification only to Abutters whose Lot is within one hundred feet from the Project Site. An applicant proposing a Linear-shaped Project greater than 1,000 feet in length is required to provide notification only to Abutters whose Lot is within 1,000 feet from the Project Site.

Abutter notification is not required for projects proposed by the Massachusetts Department of Transportation Highway Division pursuant to St. 1993, c. 472 as approved on January 13, 1994.

The applicant shall provide notification at the mailing addresses shown on the most recent applicable tax list from the municipal assessor. Notification shall be at the applicant's expense. The notification shall state where within the municipality copies of the Notice of Intent may be examined or obtained and where information on the date, time, and location of the public hearing may be obtained.

To ensure compatibility with local procedures, applicants must comply with any rules of the local conservation commission pertaining to the location for examining or obtaining the Notice of Intent and information about the hearing.

The applicant shall provide written notification to all Abutters required to be notified by hand delivery or certified mail, return receipt requested, or by certificates of mailing. Mailing at least seven days prior to the public hearing shall constitute timely notice. The applicant shall present either the certified mail receipts or certificate of mailing receipts for all Abutters at the beginning of the public hearing. The presentation of the receipts for all abutters required to be notified as identified on the tax list shall constitute compliance with Abutter notification requirements.

The conservation commission shall determine whether the applicant has complied with Abutter notification requirements. The Department will dismiss Requests for Action based on allegations of failure to comply with Abutter notification requirements, absent a clear showing by an Abutter seeking Department action that the applicant failed to notify the Abutter. An applicant submitting a Notice of Intent for a project that is also subject to 310 CMR 9.00: Waterways and/or 314 CMR 9.00: 401 Water Quality Certification for Discharge of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States Within the Commonwealth may provide joint public notice by appending to the public notice required by 310 CMR 9.13: Public Notice and Participation Requirements and/or 314 CMR 9.05: Submission of an Application, as applicable, notification that a Notice of Intent is pending before the issuing authority, provided the notification complies with 310 CMR 10.05(4). An applicant may provide a joint public notice, even if the Notice of Intent is not a Combined Application..."

Section 2.0 Project Narrative



### 2.0 PROJECT NARRATIVE

#### 2.1 Introduction

Shore Park is located at 85 Shore Drive in Worcester, Massachusetts. A number of existing land uses occupy the Property, including a recreational beach, standalone municipal structure (restrooms/lifeguard station), paved parking areas, designated green space, and forested cover. Pedestrian walking paths traverse the wooded areas and open green space throughout the parcel. The Property is bounded to the north by Shore Drive, to the east by a forested wetland and the Greendale Family YMCA, to the south by Indian Lake, and to the west by a Bordering Vegetated Wetland (BVW) and existing residential development. The Project Site is located on the east side of the subject Property.

Currently, the Applicant is looking to construct an elevated boardwalk commencing to the east of the existing restroom building, extending to the edge of Indian Lake and eventually connecting to a floating dock to provide access to the lake for canoes and kayaks (the Project). The City of Worcester Department of Public Works and Parks (DPW&P) is looking to proceed with construction beginning in spring 2025. At this time, the Applicant proposes to conduct exploratory geotechnical borings to determine the soil conditions along the route of the boardwalk. The Applicant is proposing to conduct 2-3 borings to obtain representative soil information to aid in the design of the boardwalk system. These borings are the subject of this NOI.

### 2.2 Existing Conditions

The Project Site includes a portion of an approximate 6.8-acre parcel located between Shore Drive and Indian Lake in the northwest portion of the City of Worcester. The Property is colloquially known as Shore Park and maintains municipal facilities in the form of a bathhouse, picnic areas and other green space, a parking lot, and beach access to Indian Lake.

The Project Site and its associated limits of disturbance are confined to an area to the east of the existing restroom building.

State and locally jurisdictional resource areas on the Property include Bordering Land Subject to Flooding (BLSF), Bordering Vegetated Wetlands (BVW), Bank, Land Under Waterbodies and Waterways (LUWW), and the 100-foot Stormwater Protection Zone.



### 2.2.1 Wetland Resource Areas Summary

### Bank (310 CMR 10.54)

Solid blue flagging labeled BF-B1 through BF-B6 delineates the Bank of Indian Lake in the vicinity of the Project Site that either overlaps with or is exterior to the BVW associated with this waterbody.

Bank on-site is generally characterized by a distinct break in slope that is further evidenced by a transition between terrestrial and aquatic vegetation.

### 2.3 Proposed Conditions

The Applicant proposes to construct an elevated boardwalk to access a floating dock along the edge of Indian Lake and to provide an opportunity for visitors to launch canoes and/or kayaks into Indian Lake. To provide the design parameters for the proposed boardwalk, exploratory soil borings are required to determine the suitability of the soil to support the boardwalk structure.

### 2.3.1 Description of Work

Up to four borings are proposed within the buffer zone to the resource area, all on land owned by the City of Worcester. The specific location of the borings may be adjusted in the field to avoid disturbance of trees.



Photograph 1. Proposed route of boardwalk (left to right in photo).



The preferred method of conducting the borings consists of a small track-mounted boring machine, such as Geoprobe 6610 (or similar). The routes and locations of the borings will be selected to minimize disturbance to vegetation. No trees greater than one-inch caliper will be cut to provide access. The ground surface within the wetland may be protected from the tractor treads using "swamp" mats, or an approved equal.



Photograph 2. Mats to be used to protect the ground surface.





Photograph 3. Geoprobe equipment for performing borings- rubber tracked.

### 2.3.2 Impacts to BVW

The proposed area of temporary impact to BVW is  $\pm 250$  square feet and the proposed area of temporary impact within the BLSF is  $\pm 1,000$  square feet. The proposed area of temporary impact to the 15-foot Buffer Zone is  $\pm 650$  square feet. Under 310 CMR 10.02(2)(b)2.g. "exploratory borings" within the buffer zone are a minor activity exempt from the permit and application requirements. The Applicant respectfully requests a waiver from Section 4.2.4 of the Regulations to conduct temporary disturbance of the 15-foot and 30-foot Buffer Zones.

The impacts to the 15-foot and 30-foot Buffer Zones will be temporary in nature, and the wetland will be allowed to return to its original condition upon completion of the subsurface investigations. Although compaction and rutting are not anticipated due to the use of "swamp mats", if soils are compacted or rutted, they will be returned to their original elevations by hand raking or other appropriate means. It is anticipated that the disturbed areas will readily revegetate, and avoidance and minimization of vegetative cutting to achieve access. Therefore, the performance standards in 310 CMR 10.55(4)(b) for work in wetlands have been met.

Refer to Section 5.0: Plans.



### 2.3.3 Alternatives Analysis

Tripod Method

An alternative method of conducting the geotechnical boings is using the tripod method. The tripod method includes the setup of a tripod system in a location that can be performed without cutting the existing trees. The equipment is placed within the wetland without use of vehicles and is set up by hand. This alternative is significantly more labor intensive than the Geoprobe, and therefore more costly. Accordingly, and considering the minimal and temporary nature of the proposed access and borings proposed within the wetland, the tripod method was not selected as the preferred alternative.

#### No-Build Alternative

The no-build alternative will not meet the goals of designing at Shore Park. The construction of a fully-accessible boardwalk will ensure that all of Worcester's residents will be able to experience and enjoy this amenity.

# 2.4 INTERESTS OF THE MASSACHUSETTS WETLANDS PROTECTION ACT AND THE CITY OF WORCESTER WETLANDS PROTECTION BYLAW AND REGULATIONS

The following is a discussion of the relationship of the project site to the interests of the Massachusetts Wetlands Protection Act (Act) as defined by 310 CMR 10.01(2) and the City of Worcester Wetlands Protection Ordinance and Regulations (the Ordinance).

### 2.4.1 Protection of Public and Private Water Supply and Ground Water Supply

The site is not located within a Zone I, Zone II, or Interim Wellhead Protection Area (IWPA). Therefore, the public and private water supply, and groundwater protection interests of the Act and Ordinance will be upheld.

### 2.4.2 Flood Control and Storm Damage Prevention

The proposed borings and access to perform the borings will be temporary in nature and will not consist of the addition of any fill within Bordering Land Subject to Flooding (BLSF). As a result, the flood storage capacity of the Subject Property will not be impacted. Therefore, the flood control and storm damage prevention interests of the Act and Ordinance will be maintained.

### 2.4.3 Erosion and Sedimentation Control

The proposed project incorporates appropriate erosion and sedimentation controls as described herein and depicted on the enclosed plans. Additionally, the ability of the on-site resource areas to perform erosion and sedimentation control functions will not be negatively impacted. Therefore, the erosion and sedimentation control interests of the Act and Ordinance will be upheld.

#### 2.4.4 Prevention of Pollution

Erosion control measures consisting of silt fencing will be implemented along the perimeter of the work area, upgradient of the BVW. Standard filter bags



will be installed in all catch basins proximate to the work area and downgradient of all work located within the Subject Property. Therefore, the pollution interests of the Act and Ordinance will be upheld.

### 2.4.5 Protection of Fisheries, Shellfisheries and Wildlife Habitat

The project site does not contain Natural Heritage & Endangered Species Program (NHESP) designated priority or estimated habitats or vernal pools. Therefore, the fisheries, shellfisheries, and wildlife habitat interests of the Act and Ordinance will be protected.

### 2.5 SUMMARY

The Applicant respectfully requests the Commission issue an Order of Conditions for the performance of exploratory borings to aid in the design of a future boardwalk and boat launch at Shore Park.



# Section 4.0 Wetland Boundary Documentation

MassDEP Transect Forms



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

Applicant:	Worcester Department of Public Works and Parks Prepared by: Andrew Gorman of Beals and Thomas, Inc. Project location: 85 Shore Drive, Worcester
Check all t	hat apply:
$\square$ $\vee$	egetation alone presumed adequate to delineate BVW boundary: fill out Section I only
V	egetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
	Method other than dominance test used (attach additional information)

#### Section I.

Layer	Vegetation	Observation Plot Num	Observation Plot Number: WF-A59		Date of Delineation:
		WF-A59			September 24, 2022
	A. Sample Layer & Plant Species	B. Percent Cover (or	C. Percent	D. Dominant Plant	E. Wetland Indicator
	(by common/scientific name)	basal Area)	Dominance	(yes or no)	Category*
Herbaceous/	Beggartick/Bidens frondosa	20.5%	47%	Yes	FACW*
Groundcover	Woolgrass/Scirpus cyperinus	20.5%	47%	Yes	FACW+*
	Sedges/Carex sp.	3%	6%	No	Varies
Shrub	Speckled alder/Alnus incana	20.5%	100%	Yes	NI/FACW in ACE* 2020 List
Climbing Vines	Bittersweet/Celastrus orbiculatus	20.5%	100%	Yes	NI/FACU in ACE 2020 List
Tree					

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

### **Vegetation conclusion:**

Number of dominant wetland indicator plants:

Number of dominant non-wetland indicator plants: 1 (depending on Carex taxonomy)

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? Yes

3

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

#### Section II. Indicators of Hydrology Other Indicators of Hydrology: (check all that apply & describe) □ Site Inundated: **Hydric Soil Interpretation** Depth to free water in observation hole: 1. Soil Survey Depth to soil saturation in observation hole: Is there a published soil survey for this site? Yes title/date: NRCS Web Soil Survey Water marks: map number: NRCS Web Soil Survey soil type mapped: Udorthents Drift lines: hydric soil inclusions: No Sediment Deposits: Are field observations consistent with soil survey? No 🙀 Drainage patterns in BVW: \_\_\_\_\_ Remarks: Some urban fill but shoreline has horizonination near transect. Oxidized rhizospheres: 2. Soil Description Water-stained leaves: Horizon Depth Matrix Color Mottles Color Recorded Data (streams, lake, or tidal gauge; aerial photo; 0-4" 10YR 3/2 7.5YR 4/4 other): 4-12~" 10YR 5/1 7.5YR 4/4 Bg **Rock restrictions Bounding Indian Lake** M Other: **Vegetation and Hydrology Conclusion** Remarks: Unknown if rock restrictions are ledge/bedrock or erratics. Yes No Number of wetland indicator plants 3. Other: X > # of non-wetland indicator plants Conclusion: Is soil hydric? Yes **Wetland hydrology present:** X Hydric soil present X Other indicators of hydrology present X Sample location is in a BVW

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

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

Applicant: <u>Worcester Department of Public Works and Parks</u> Prepared by: <u>Andrew Gorman of Beals and Thomas, Inc.</u> Project location: <u>85 Shore Drive, Worcester</u>
Check all that apply:
Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
Method other than dominance test used (attach additional information)

#### Section I.

Layer	Vegetation Observation Plot Number:		nber:	Transect Number:	Date of Delineation:
		WF-A59		UPL	September 24, 2022
	A. Sample Layer & Plant Species	B. Percent Cover (or	C. Percent	D. Dominant Plant	E. Wetland Indicator
	(by common/scientific name)	basal Area)	Dominance	(yes or no)	Category*
Herbaceous/	Fleabane/Erigeron annuus	20.5%	33%	Yes	FACU
Groundcover	Common plaintain/Plantago major	20.5%	33%	Yes	FACU
	Lawn grasses	20.5%	33%	Yes	Varies
Shrub					
Climbing					NI/FACU in ACE
Vines	Asiatic bittersweet/Celastrus orbiculatus	38.5%	100%	Yes	2020 List
Tree					

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

### **Vegetation conclusion:**

Number of dominant wetland indicator plants: 0 Number of dominant non-wetland indicator plants: 3 (including *Celastrus*)

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? No

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

#### Section II. Indicators of Hydrology Other Indicators of Hydrology: (check all that apply & describe) □ Site Inundated: **Hydric Soil Interpretation** Depth to free water in observation hole: 1. Soil Survey Depth to soil saturation in observation hole: Is there a published soil survey for this site? Yes title/date: NRCS Web Soil Survey Water marks: map number: NRCS Web Soil Survey soil type mapped: Udorthents Drift lines: hydric soil inclusions: No Sediment Deposits: Are field observations consistent with soil survey? No Drainage patterns in BVW: \_\_\_\_\_ Remarks: Some urban fill but shoreline has horizonination near transect. Oxidized rhizospheres: 2. Soil Description Water-stained leaves: Horizon Depth Matrix Color Mottles Color Recorded Data (streams, lake, or tidal gauge; aerial photo; 0-6" 10YR 3/2 αA other): 6-18" 10YR 6/4 Bw **Rock restrictions** □ Other: **Vegetation and Hydrology Conclusion** Remarks: Unknown if rock restrictions are ledge/bedrock or erratics. Yes No Number of wetland indicator plants 3. Other: X > # of non-wetland indicator plants Conclusion: Is soil hydric? No **Wetland hydrology present:** X Hydric soil present $\mathbf{X}$ Other indicators of hydrology present X Sample location is in a BVW

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

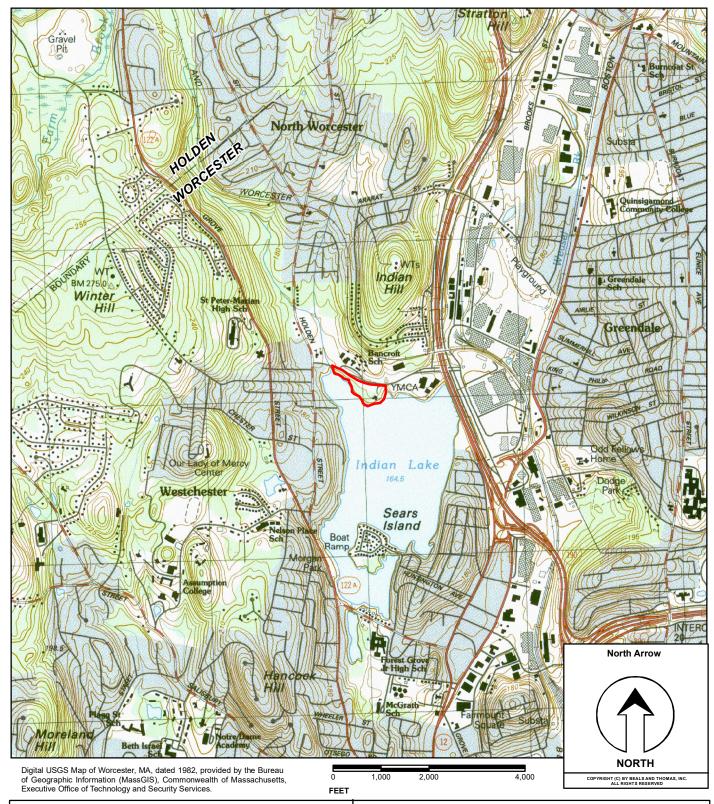
## Section 5.0 Plans

Locus Map

Aerial Map

Entitled Shore Park Boring Exhibit Prepared by Beals and Thomas, Inc. In 2 Sheets Dated 6/10/2024





PROJECT:

# Shore Park Sidewalk Imrovements

Worcester, Massachusetts

PREPARED FOR:

City of Worcester

Department of Public Works

and Parks

## **Locus Map**

Figure 1

Scale: 1" = 2,000' Date: 05/16/2022

B+T Project No. 2407.07



PROJECT:

### **Shore Park** Sidewalk Imrovements

Worcester, Massachusetts

PREPARED FOR:

**City of Worcester Department of Public Works** and Parks

# Aerial Map

Scale: 1" = 200' Date: 05/16/2022

B+T Project No. 2407.07