



Merrymount Park Pedestrian Boardwalk
Quincy, Massachusetts

Environmental Notification Form

City of Quincy
Park & Forestry Department

April 2021

Q-0019-048
April 30, 2021

Secretary Kathleen A. Theoharides
MEPA Office
MEPA@mass.gov

Re: **Environmental Notification Form (ENF)**
Merrymount Park Pedestrian Boardwalk Project
Quincy, Massachusetts

Dear Secretary Theoharides:

On behalf of the City of Quincy Park & Forestry Department, Tighe & Bond is submitting this Environmental Notification Form (ENF) for the Merrymount Park Pedestrian Boardwalk Project, located within Merrymount Park in the City of Quincy, Massachusetts.

The project consists of the construction of a pile-supported pedestrian boardwalk to connect the main area of Merrymount Park near the parking area for the William F. Ryan Boating and Sailing Facility with Pine Island. Pine Island and its trails are inaccessible to most visitors to the park for most of the year, with current access being by walking across salt marsh from Thornton Street. The addition of the timber bridge will provide access to bicycles and pedestrians of all abilities and effectively open up new parkland and free passive recreational activities to Quincy residents, including residents of surrounding Environmental Justice neighborhoods, while preventing direct damage to the salt marsh from pedestrian activity. The pedestrian boardwalk will increase access and views of Blacks Creek, the tidal marshlands, and Pine Island, and will include interpretive elements to reinforce educational program opportunities.

The project area includes Land Subject to Coastal Storm Flowage, Coastal Bank, Salt Marsh, and Coastal Beach, and the project meets several ENF review thresholds for wetlands, waterways and tidelands. No mandatory EIR thresholds are triggered by the proposed project.

Enclosed with this submittal are the ENF form, a project narrative and alternatives analysis, project figures and plans, and other required materials. The ENF is being submitted for publication in the May 10, 2021 edition of the Environmental Monitor. Should you have any questions or require additional information, please contact me by phone at (413) 875-1622 or by email at ETully@TigheBond.com.

Very truly yours,

TIGHE & BOND, INC.



Emily Tully
Project Manager/Planner

Enclosures

Copy: David Murphy, Commissioner, City of Quincy Park & Forestry Department
Refer to the provided Distribution and Circulation List

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CONTENTS

Section 1 Required Forms**Section 2 Introduction**

2.1	Project Description	2-1
2.2	MEPA Process	2-2

Section 3 Existing Environment

3.1	General Project Area.....	3-1
3.2	Wetland Resource Areas.....	3-2
	3.2.1 Methodology of Resource Area Investigations	3-2
	3.2.2 Description of Wetland Resource Areas	3-2
3.3	Benthic Assessment.....	3-3
3.4	Rare Species.....	3-3

Section 4 Alternatives Analysis

4.1	No Action Alternative	4-4
4.2	Boardwalk Location Alternatives.....	4-4
	4.2.1 Geographic Location Alternatives.....	4-4
	4.2.2 Abutment Location Alternatives.....	4-5
4.3	Boardwalk Design Alternatives	4-5
	4.3.1 Boardwalk Alignment Alternatives	4-5
	4.3.2 Boardwalk Material Alternatives	4-6
4.4	Project Alternatives Comparison Summary Table.....	4-6
4.5	Preferred Alternative Project Description	4-11
	4.5.1 Summary of Preferred Alternative Project Components	4-11
	4.5.2 Anticipated Construction Sequence.....	4-11
	4.5.3 Construction Methodology	4-11
	4.5.4 Erosion & Sedimentation Control	4-12
	4.5.6 Site Access.....	4-12
	4.5.7 Site Stabilization	4-12

Section 5 Regulatory Compliance

5.1	MA WPA / QWPO	5-1
	5.1.1 Anticipated Temporary and Permanent Impacts	5-1
	5.1.2 Proposed Mitigation Measures	5-2
5.2	Chapter 91 Regulations.....	5-2
5.3	401 Water Quality Certification Regulations	5-3
5.4	Section 404 Army Corps Regulations	5-3
5.5	Coast Guard Bridge Permit	5-4
5.6	CZM Federal Consistency Review.....	5-4
5.7	EPA NPDES CGP NOI and SWPPP.....	5-5

Appendix A Figures

Figure 1: USGS Site Locus

Figure 2: Priority Resources

Figure 3: Existing Conditions Orthophotograph

Figure 4: Designated Shellfish Suitability and Growing Areas

Appendix B Site Photographs

Appendix C Project Plans

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SECTION 1

Section 1

Required Forms

- ENF
- ENF Filing and Circulation List
- Public Notice of Environmental Review

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Merrymount Park Pedestrian Boardwalk Project

Street Address: Vietnam Veterans Drive

Municipality: Quincy

Watershed: Boston Harbor

**Universal Transverse Mercator Coordinates:
334866.27 E, 4681158.76 N, Zone 19T**

Latitude: 42.265164

Longitude: -71.002239

Estimated commencement date: Fall 2022

Estimated completion date: Spring 2023

Project Type: Park, Bridges

Status of project design: 75 %complete

Proponent: City of Quincy, Park & Forestry Department

Street Address: One Merrymount Parkway

Municipality: Quincy

State: MA

Zip Code: 02169

Name of Contact Person: Emily Tully

Firm/Agency: Tighe & Bond, Inc.

Street Address: 53 Southampton Road

Municipality: Westfield

State: MA

Zip Code: 01085

Phone: (413) 875-1622

Fax: (413) 562-5317

E-mail: ETully@TigheBond.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☐ Yes ☒ **No**

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))

☐ Yes ☒ **No**

a Special Review Procedure? (see 301CMR 11.09)

☐ Yes ☒ **No**

a Waiver of mandatory EIR? (see 301 CMR 11.11)

☐ Yes ☒ **No**

a Phase I Waiver? (see 301 CMR 11.11)

☐ Yes ☒ **No**

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

- **301 CMR 11.03(3)(b)(1)(a) – Alteration of Coastal Bank**
- **301 CMR 11.03(3)(b)(1)(f) – Alteration of one-half or more acres of any other wetlands**
- **301 CMR 11.03(3)(b)(6) - Construction of a pile-supported structure of 2,000 or more sf base area that will occupy flowed tidelands or other waterways**

Which State Agency Permits will the project require?

- **Chapter 91 License (MassDEP)**
- **401 Water Quality Certification (MassDEP)**
- **Wetlands Protection Act order of Conditions (MassDEP, if City of Quincy Order of Conditions is superseded)**

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

None

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	0.93 acres (Limit of Work) ^A		
New acres of land altered		0.03 acres	
Acres of impervious area	0.44 acres	0.01 acres	0.45 acres
Square feet of new bordering vegetated wetlands alteration		N/A	
Square feet of new other wetland alteration*		Temporary: 36,015 sf ^B Permanent: 646 sf ^C	
Acres of new non-water dependent use of tidelands or waterways		N/A	
STRUCTURES			
Gross square footage	N/A	N/A	N/A
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A ^D	N/A	N/A
WASTEWATER			
Water Use (Gallons per day)	N/A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
^A The limit of work for the project area includes the temporary construction-period use of the gravel parking area near William F. Ryan Boating and Sailing Facility for laydown and staging. ^B The project includes temporary impacts to Land Subject to Coastal Storm Flowage (22,795 sf), Salt Marsh (2,905 sf), Coastal Beach (10,310 sf), and 100-ft Buffer Zone to Coastal Bank (3,200 sf) associated with construction-period access and staging. ^C Permanent impacts to Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) are associated with the installation of 12" diameter pilings and permanent impacts to Land Subject to Coastal Storm Flowage (600 sf) and Buffer Zone to Coastal Bank (455 sf) are associated with the installation of the abutments for the pedestrian boardwalk. ^D The project area includes an existing gravel parking area adjacent to the William F. Ryan Boating and Sailing Facility. No changes to the gravel parking area are proposed.			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

Merrymount Park is an 80-acre community park located in the central part of the City of Quincy that includes sports fields, walking trails, and a boating and sailing facility. The parcels that comprise Merrymount Park are bounded by Hancock Street and Fenno Street to the west, residences and the Beechwood Knoll Elementary School to the northwest, Fenno Street to the north, Quincy Shore Drive to the east, and Furnace Brook Parkway to the south.

The central area of Merrymount Park, including the William F. Ryan Boating and Sailing Facility and associated gravel parking area, is accessible via Vietnam Veterans Drive off Merrymount Parkway. Pine Island, an 11-acre drumlin, is located north of the William F. Ryan Boating and Sailing Facility, and is separated from the main area of the park by tidal flats and salt marsh associated with Blacks Creek and Quincy Bay. Pine Island and its trails are currently inaccessible to most people at most times of the year, with current access primarily through walking on salt marsh from Thornton Street.

Jurisdictional wetland resource areas impacted by the proposed project per the Massachusetts Wetlands Protection Act include Coastal Beach, Coastal Bank, Salt Marsh, and Land Subject to Coastal Storm Flowage (LSCSF). There are no mapped eelgrass areas or designated priority habitats of rare species or estimated habitats of rare wildlife in the project area.

Describe the proposed project and its programmatic and physical elements:

The proposed project includes installation of a pedestrian boardwalk that will connect the main Merrymount Park area to Pine Island without the need for visitors to walk directly on salt marsh. The proposed boardwalks would increase access to and views of Blacks Creek, the tidal marshlands, and Pine Island, and provide an ideal location for educational programs such as the Park Department's Environmental Treasures Program.

Proposed project elements include:

- Installation of temporary sediment and erosion control measures
- Construction of an Americans with Disabilities Act (ADA) / Massachusetts Architectural Access Board (MAAB) accessible pedestrian boardwalk connecting the parking area near the William F. Ryan Boating and Sailing Facility with Pine Island, including:
 - Paved access ramps and interpretive elements at the entrances to the boardwalk from the main area of the park and Pine Island
 - Flow-through decking on a portion of the boardwalk that passes above salt marsh on the main park side
 - Ipe timber boardwalk with timber piles and solar lighting features
- Removal of sediment and erosion control measures upon receipt of authorization from the Quincy Conservation Commission

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

The proposed project is specific to creating a pedestrian connection between the main area of Merrymount Park and Pine Island that prevents walking on salt marsh. Therefore, off-site alternatives were not considered for this project. Alternatives considered included alternate locations and layouts of the pedestrian boardwalk, as summarized below.

- **No Action Alternative:** Under the no-build scenario, pedestrian access to Pine Island would continue to be walking on salt marsh from Thornton Street, which is not preferred due to the impacts to salt marsh and lack of ADA/MAAB accessibility improvements.
- **Boardwalk Location and Orientation Alternatives:** Alternatives for the configuration of the proposed boardwalk were assessed, including whether the abutments should be placed lower or higher on the respective shorelines and different potential placement locations of the boardwalk across the channel. Alternatives were evaluated based on avoiding or

minimizing impacts to Coastal Bank, Salt Marsh, and use of the boating and sailing facility.

- **Boardwalk Design Alternatives:** Considerations for the design of the boardwalk included the historic and natural environment setting within Merrymount Park, avoiding impacts to Salt Marsh, ADA/MAAB accessibility requirements, and accommodation of tidal environmental conditions, including climate change-related increases in sea level rise.

A comprehensive on-site alternatives analysis is provided in the project narrative.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The recommended alternative has been designed to avoid and minimize environmental impacts, such as through locating the abutments outside of Coastal Bank and using flow-through decking in the area of the boardwalk that passes over salt marsh on the main park side, and will be constructed using Best Management Practices (BMPs) to avoid or minimize adverse impacts to resource areas during and post-construction. Please refer to the project narrative for additional information.

If the project is proposed to be constructed in phases, please describe each phase:

The project is proposed to be constructed in one phase.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

☐ Yes ☒ **No**

if yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No; If yes, describe how the project complies with this plan. Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No; If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species?

☐ Yes ☒ **No**

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☒ **Yes** ☐ No

Merrymount Park is included in the MHC inventory as QUI.938; supplementary inventory forms include QUI.510 Women's Building, QUI.924 Veterans Memorial Stadium, QUI.926 Adams Memorial Monument, QUI.923 Charles Francis Adams III Monument, and QUI.925 Ruth Gordon Amphitheatre. The project does not include alteration of any listed or inventoried historic or archaeological resources.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐ Yes ☒ **No**

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?

☐ Yes ☒ **No**

if yes, identify the ORW and its location. _____

Are there any impaired water bodies on or within a half-mile radius of the project site?

☒ **Yes** ☐ No

if yes, identify the water body and pollutant(s) causing the impairment:

Quincy Bay segment MA70-04 is listed in the Massachusetts Year 2016 Integrated List of Waters as Category 5 – "Waters requiring a Total Maximum Daily Load" for Fecal Coliform, Cause Unknown (Contaminants in Fish and Shellfish), and PCBs in Fish Tissue.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission?

☐ Yes ☒ No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

Creation of impervious area will be limited to the access ramp entrances to the boardwalk, and further minimized through the use of porous pavement. Construction-period stormwater impacts will be addressed through implementation of appropriate erosion and sediment controls. Stormwater Management Standards will be addressed in the Wetlands Protection Act Notice of Intent that will be filed with the Quincy Conservation Commission.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan?

☐ Yes ☒ No

if yes, please describe the current status of the site (RTN, cleanup phase, and RAO classification):

Is there an Activity and Use Limitation (AUL) on any portion of the project site?

☐ Yes ☒ No

if yes, describe which portion of the site and how the project will be consistent with the AUL:

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?

☐ Yes ☒ No

if yes, please describe: _____

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

Solid waste generated during construction is anticipated to be minimal. The site contractor will assess site materials to quantify what elements can be recycled, reused, or require disposal.

Will your project disturb asbestos containing materials?

☐ Yes ☒ No

Describe anti-idling and other measures to limit emissions from construction equipment:

The Proponent and its contractors will comply with MassDEP's Diesel Retrofit Program and vehicle idling will be limited to the extent practicable.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River?

☐ Yes ☒ No

if yes, specify name of river and designation: _____; If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River? Yes ___ No___; if yes, specify name of river and designation: _____; if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River. Yes ___ No ___; if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document.
2. U.S.G.S. map (good quality color copy, 8-1/2 x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.
3. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.

4. Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
7. List of municipal and federal permits and reviews required by the project, as applicable.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

- A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))
☐ Yes ☒ **No**
if yes, specify each threshold:

II. Impacts and Permits

- A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>0 ac</u>	<u>0 ac</u>	<u>0 ac</u>
Internal roadways	<u>0 ac</u>	<u>0 ac</u>	<u>0 ac</u>
Parking and other paved areas	<u>0.44 ac</u>	<u>0.01 ac</u>	<u>0.45 ac</u>
Other altered areas	<u>0 ac</u>	<u>0.001 ac</u>	<u>0.001 ac</u>
Undeveloped areas	<u>0.49 ac</u>	<u>-0.001 ac</u>	<u>0.489 ac</u>
Total: Project Site Acreage	<u>0.93 ac</u>	<u>0 ac</u>	<u>0.93 ac</u>

Parking and other paved areas within the project site consist of the existing gravel parking area and proposed pervious pavement ramps to the abutments for the pedestrian boardwalk. Other altered areas will include the pilings for the pedestrian boardwalk.

- B. Has any part of the project site been in active agricultural use in the last five years?
☐ Yes ☒ **No**
if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?
- C. Is any part of the project site currently or proposed to be in active forestry use?
☐ Yes ☒ **No**
if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:
- D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97?
☐ Yes ☒ **No**
if yes, describe:
- E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction?
☒ **Yes** ☐ **No**
if yes, does the project involve the release or modification of such restriction?
☐ Yes ☒ **No**
if yes, describe:
- F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A?
☐ Yes ☒ **No**
if yes, describe:
- G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B?
☐ Yes ☒ **No**
if yes, describe:

III. Consistency

- A. Identify the current municipal comprehensive land use plan
Title: **City of Quincy Open Space & Recreation Plan (OSRP) Update**
Date: **2019-2025**

- B. Describe the project's consistency with that plan with regard to:
- 1) economic development
The project meets the 2019-2025 City of Quincy OSRP Update goal of “making the best, most efficient and creative uses of the parks that we already have” by expanding upon the ability of Merrymount Park visitors of all abilities to view Blacks Creek and access Pine Island.
 - 2) adequacy of infrastructure
The proposed project will meet the OSRP Update's goal of encouraging safe public access to waterfront areas through the addition of an ADA and MAAB accessible pedestrian boardwalk connecting Pine Island to the main portion of Merrymount Park.
 - 3) open space impacts
The proposed project will meet the City of Quincy's OSRP goals of protecting and maintaining current open space and recreational areas and encouraging safe public access to waterfront areas through construction of a pedestrian boardwalk that will prevent pedestrian walking impacts to salt marsh. The proposed project is not anticipated to alter or disturb core habitat areas, or result in a change to existing protected open space uses.
 - 4) compatibility with adjacent land uses
The project is located within Merrymount Park. The project has been designed to minimize impacts on adjacent park uses with regard to traffic flow and noise/construction impacts.
- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
RPA: **Metropolitan Area Planning Council (MAPC)**
Title: **MetroFuture: Making a Greater Boston Region**
Date: **2008 - 2030**
- D. Describe the project's consistency with that plan with regard to:
- 1) economic development
MetroFuture goals include improving transit systems, providing options for commuters to avoid congestion, and increasing the ability of people with disabilities to get around the region. The proposed project will increase the ability of pedestrians of all abilities to access more areas within Merrymount Park, which serves an important role in Quincy's residential, recreational, and summer tourist economic sectors, and meets the MetroFuture economic development goal of increasing and strengthening growth across various facets of the region's economy.
 - 2) adequacy of infrastructure
The proposed project meets the MetroFuture Regional Plan goal of enhancing existing land use through expanding and encouraging passive recreation uses within Merrymount Park.
 - 3) open space impacts
The MetroFuture Plan's environmental section is focused around the concept of a strong “environmental ethic,” through goals like leading the area in a reduction in greenhouse gas emissions, and protection of open space and wetland resources. The proposed project will not result in loss of land to development, will enhance public waterfront access, and will allow for the continued safe utilization of existing recreational facilities, meeting the MetroFuture environmental goals of protection of open space and wetland resources.

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))?
☐ Yes ☒ **No**
if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **rare species or habitat**?
☐ Yes ☒ **No**
- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)?
☐ Yes ☒ **No**
- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

- A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)?
☐ Yes ☐ No
If yes,
1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? ___ Yes ___ No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? ___ Yes ___ No; if yes, attach the letter of determination to this submission.
 2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts
 3. Which rare species are known to occur within the Priority or Estimated Habitat?
 4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? ___ Yes ___ No
 5. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes ___ No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No
- B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))?

☒ **Yes** ☐ **No**

if yes, specify, in quantitative terms:

- **310 CMR 11.03(3)(b)(1)(a) – Alteration of Coastal Bank:** the project includes temporary construction period impacts and permanent impacts to Coastal Bank for the installation of 12, 12-inch diameter timber piles for the boardwalk.
- **301 CMR 11.03(3)(b)(1)(f) – Alteration of one-half or more acres of any other wetlands:** the project includes 635 sf of permanent impacts and 33,110 sf of temporary construction-period impacts to Land Subject to Coastal Storm Flowage and Coastal Beach
- **301 CMR 11.03(3)(b)(6) – Construction of a pile-supported structure of 2,000 or more sf base area that will occupy flowed tidelands or other waterways – the proposed pile-supported boardwalk is approximately 4,500 sf in base area and will be located above filled and flowed tidelands.**

- B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**?

☒ **Yes** ☐ **No**

if yes, specify which permit:

- **Order of Conditions from Quincy Conservation Commission**
- **Chapter 91 Waterways License from MassDEP**
- **Sections 404 Pre-Construction Notification Authorization from Army Corps of Engineers**

- C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

- A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)?

☒ **Yes** ☐ **No**;

if yes, has a Notice of Intent been filed?

☐ **Yes** ☒ **No**;

if yes, list the date and MassDEP file number:

if yes, has a local Order of Conditions been issued?

☐ **Yes** ☐ **No**;

Was the Order of Conditions appealed?

☐ **Yes** ☐ **No**

Will the project require a Variance from the Wetlands regulations?

☐ **Yes** ☒ **No**

- B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

The project involves temporary impacts to Coastal Beach, Salt Marsh, Coastal Bank, and LSCSF related to construction period impacts for access, staging, and work areas. Permanent impacts to Coastal Beach, Salt Marsh, and Coastal Bank are due to the installation of pilings and permanent impacts to LSCSF and buffer zone to Coastal Bank are due to installation of abutments for the pedestrian boardwalk.

- C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (sf) or Length (lf)</u>	<u>Temporary or Permanent Impact</u>
Land Under the Ocean	<u>N/A</u>	<u>N/A</u>
Designated Port Areas	<u>N/A</u>	<u>N/A</u>
Coastal Beaches	<u>10,310 sf / 35 sf</u>	<u>Temporary / Permanent</u>
Coastal Dunes	<u>N/A</u>	<u>N/A</u>
Barrier Beaches	<u>N/A</u>	<u>N/A</u>
Coastal Banks	<u>10 lf</u>	<u>Permanent</u>
Rocky Intertidal Shores	<u>N/A</u>	<u>N/A</u>
Salt Marshes	<u>2,905 sf / 11 sf</u>	<u>Temporary / Permanent</u>
Land Under Salt Ponds	<u>N/A</u>	<u>N/A</u>
Land Containing Shellfish	<u>N/A</u>	<u>N/A</u>
Fish Runs	<u>N/A</u>	<u>N/A</u>
Land Subject to Coastal Storm Flowage	<u>22,800 sf / 600 sf</u>	<u>Temporary / Permanent</u>
<u>Inland Wetlands</u>	<u>Area (sf) or Length (lf)</u>	<u>Temporary or Permanent Impact</u>
Bank (lf)	<u>N/A</u>	<u>N/A</u>
Bordering Vegetated Wetlands	<u>N/A</u>	<u>N/A</u>
Isolated Vegetated Wetlands	<u>N/A</u>	<u>N/A</u>
Land Under Water	<u>N/A</u>	<u>N/A</u>
Isolated Land Subject to Flooding	<u>N/A</u>	<u>N/A</u>
Bordering Land Subject to Flooding	<u>N/A</u>	<u>N/A</u>
Riverfront Area	<u>N/A</u>	<u>N/A</u>

- D. Is any part of the project:

- proposed as a **limited project**?
☐ Yes ☒ No;
if yes, what is the area (in sf)? _____
- the construction or alteration of a **dam**?
☐ Yes ☒ No;
if yes, describe:
- fill or structure in a **velocity zone** or **regulatory floodway**?
☒ Yes ☐ No
- dredging or disposal of dredged material?
☐ Yes ☒ No;
if yes, describe the volume of dredged material and the proposed disposal site:
- a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**?
☐ Yes ☒ No
- subject to a wetlands restriction order?
☐ Yes ☒ No;
if yes, identify the area (in sf):
- located in buffer zones?
☒ Yes ☐ No;
if yes, how much (in sf) 3,200 sf temporary / 455 sf permanent

On the Pine Island side of the proposed pedestrian boardwalk, the 100-foot buffer zone to Coastal Bank is located above FEMA Zone AE. Temporary impacts to buffer zone are associated with construction-period laydown, staging, access, and construction, and permanent impacts are associated with the installation of the abutments and associated porous pavement access ramps.

- E. Will the project:
1. be subject to a local wetlands ordinance or bylaw?
☒ **Yes** ☐ No
 2. alter any federally-protected wetlands not regulated under state law?
☐ Yes ☒ **No**;
if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

- A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91?
☒ **Yes** ☐ No;
if yes, is there a current Chapter 91 License or Permit affecting the project site?
☒ **Yes** ☐ No;
if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:
License 10092 was issued in 2004 to the City of Quincy Park Department for construction and maintenance of a concrete pier abutment, prefabricated timber bridge, gangway, and float in and over the waters of Blacks Creek (associated with the William F. Ryan Boating and Sailing Facility).
- B. Does the project require a new or modified license or permit under M.G.L.c.91?
☒ **Yes** ☐ No;
if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use?
Current: 0 acres Change: 0 acres Total: 0 acres
The proposed project is water-dependent per 310 CMR 9.12(2)(a)4 as a boardwalk that will promote use and enjoyment of the water by the general public and will be located at or near the water's edge.
if yes, how many square feet of solid fill or pile-supported structures (in sf)? **The base area of the elevated boardwalk is approximately 4,500 sf, supported by 66, 12-inch diameter piles.**
- C. For non-water-dependent use projects, indicate the following: N/A
Area of filled tidelands on the site: N/A
Area of filled tidelands covered by buildings: N/A
For portions of site on filled tidelands, list ground floor uses and area of each use: N/A
Does the project include new non-water-dependent uses located over flowed tidelands?
☐ Yes ☒ **No**
Height of building on filled tidelands N/A
Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.
- D. Is the project located on landlocked tidelands?
☐ Yes ☒ **No**;
if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:
- E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations?
☐ Yes ☒ **No**;
if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:
- F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR?
☐ Yes ☒ **No**;
- G. Does the project include dredging?
☐ Yes ☒ **No**
if yes, answer the following questions:
What type of dredging? ☐ Improvement ☐ Maintenance ☐ Both

What is the proposed dredge volume, in cubic yards (cy) _____
What is the proposed dredge footprint _____ length (ft) _____ width (ft) _____ depth (ft) _____
Will dredging impact the following resource areas?

Intertidal ☐ Yes ☐ No; if yes, _____ sq ft

Outstanding Resource Waters ☐ Yes ☐ No; if yes, _____ sq ft

Other resource area (i.e. shellfish beds, eel grass beds) ☐ Yes ☐ No; if yes, _____

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?
If no to any of the above, what information or documentation was used to support this determination?
Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Sediment Characterization

Existing gradation analysis results? ☐ Yes ☐ No; if yes, provide results.

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ☐ Yes ☐ No; if yes, provide results.

Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment _____

Unconfined Ocean Disposal _____

Confined Disposal:

Confined Aquatic Disposal (CAD) _____

Confined Disposal Facility (CDF) _____

Landfill Reuse in accordance with COMM-97-001 _____

Shoreline Placement _____

Upland Material Reuse _____

In-State landfill disposal _____

Out-of-state landfill disposal _____

IV. Consistency:

- A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone?

☒ Yes ☐ No;

if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

The proposed pedestrian boardwalk complies with CZM Policies described in the CZM Policy Guide of October 2011 as summarized below:

Coastal Hazards Policy #1 and Habitat Policy #1: the preferred alternative for the proposed pedestrian boardwalk avoids impacts to Coastal Bank by locating the abutments outside of Coastal Bank and is intended to prevent further impacts to Salt Marsh from the current pedestrian access to Pine Island via walking across Salt Marsh from Thornton Street. The proposed pedestrian boardwalk has been designed using the guidelines for elevated walkways provided in the CZM *Applying the Massachusetts Coastal Wetlands Regulations* practical manual and the MassDEP *Small Docks & Piers* guide. The proposed project has been designed to meet or exceed the standards of the Wetlands Protection Act and Chapter 91 Waterways Regulations, and will comply with all associated permits and regulations.

Coastal Hazards Policy #2: the proposed boardwalk will be pile-supported, which will minimize impacts to water circulation and sediment transport. Best Management Practices such as careful site planning, and nonstructural measures will be used to minimize impacts on water circulation and sediment transport during construction.

Energy Policy #2: One of the proposed elements of the boardwalk is solar lighting.

Growth Management Policy #1: As described above, the proposed pedestrian boardwalk is consistent with the goals and objectives of the City of Quincy's OSRP and the regional MetroFuture plan, and will enhance the ability of surrounding Environmental Justice neighborhoods to utilize Merrymount Park.

Public Access Policy #1, 2, & 3: The proposed water-dependent project will enhance public use of and access to the water by providing ADA and MAAB accessible pedestrian access over Blacks Creek to Pine Island, thereby also preventing the continuation of Salt Marsh impacts from direct walking across the Salt Marsh to access Pine Island.

- B. Is the project located within an area subject to a Municipal Harbor Plan?

☐ Yes ☒ **No**;

if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **water supply**?
☐ Yes ☒ **No**; if yes, specify which permit.
- C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

- A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

- B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No.
- C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? ___ Yes ___ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. _____
- D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? Will the project require an increase in that withdrawal? ___ Yes ___ No; if yes, then how much of an increase (gpd)? _____
- E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Permitted Flow</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

- F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?
- G. Does the project involve:
1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ___ Yes ___ No
 2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
 3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ___ Yes ___ No

III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))?
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **wastewater**?
☐ Yes ☒ **No**; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

- A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

- B. Is the existing collection system at or near its capacity? ____ Yes ____ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:
- C. Is the existing wastewater disposal facility at or near its permitted capacity? ____ Yes ____ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:
- D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ____ Yes ____ No; if yes, describe as follows:

	<u>Permitted</u>	<u>Existing ADF</u>	<u>Project Flow</u>	<u>Total</u>
Wastewater treatment plant capacity (in gpd)	_____	_____	_____	_____

- E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?
- F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ____ Yes ____ No
- G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ____ Yes ____ No; if yes, what is the capacity (tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

- H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency

- A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:
- B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ____ Yes ____ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

- A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))?
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **state-controlled roadways**?
☐ Yes ☒ **No**; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

- A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

- B. What is the estimated average daily traffic on roadways serving the site?

<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

- C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:
- D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?
- E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ____ Yes ____ No; if yes, describe if and how will the project will participate in the TMA:
- F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ____ Yes ____ No; if yes, generally describe:
- G. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))?
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **roadways or other transportation facilities**?
☐ Yes ☒ **No**; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

- A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:
- B. Will the project involve any
1. Alteration of bank or terrain (in linear feet)? _____
 2. Cutting of living public shade trees (number)? _____
 3. Elimination of stone wall (in linear feet)? _____

III. Consistency

Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

ENERGY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **energy**?
☐ Yes ☒ **No**; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

- A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

- B. If the project involves construction or expansion of an electric generating facility, what are:
1. the facility's current and proposed fuel source(s)?
 2. the facility's current and proposed cooling source(s)?
- C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ___Yes ___No; if yes, please describe:
- D. Describe the project's other impacts on energy facilities and services:

III. Consistency

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))?
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **air quality**?
☐ Yes ☒ **No**; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

- A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

- B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

- A. Describe the project's consistency with the State Implementation Plan:
- B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))?
☐ Yes ☒ **No**; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **solid and hazardous waste**?
☐ Yes ☒ **No**; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

- A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ____ Yes ____ No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

- B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ____ Yes ____ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

- C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:
- D. If the project involves demolition, do any buildings to be demolished contain asbestos? ____ Yes ____ No
- E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

- A. Have you consulted with the Massachusetts Historical Commission?

☐ Yes ☒ **No**; if yes, attach correspondence.

For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources?

☐ Yes ☒ **No**; if yes, attach correspondence

- B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth?

☐ Yes ☒ **No**;

Merrymount Park in general contains structures that are inventoried by Massachusetts Historic Commission, but no inventoried or State or Federally-listed historic structures or districts are located within or adjacent to the project area.

if yes, does the project involve the demolition of all or any exterior part of such historic structure?

☐ Yes ☒ **No**; if yes, please describe:

- C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth?

☐ Yes ☒ **No**;

if yes, does the project involve the destruction of all or any part of such archaeological site? ____ Yes ____ No; if yes, please describe:

- D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):
(Name) The Patriot Ledger (Date) May 10, 2021
2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

4/27/2021 David Murphy
Date Signature of Responsible Officer or
Proponent

David Murphy, Commissioner

Name (print or type)

City of Quincy Park & Forestry Division

Firm/Agency

One Merrymount Parkway

Street

Quincy, MA 02169

Municipality/State/Zip

(617) 376-1253

Phone

4/28/21 Emily Tully
Date Signature of person preparing
ENF (if different from above)

Emily Tully

Name (print or type)

Tighe & Bond, Inc.

Firm/Agency

53 Southampton Road

Street

Westfield, MA 01085

Municipality/State/Zip

(413) 875-1622

Phone

Addressee	Email Address
Massachusetts Environmental Policy Act (MEPA) Office	MEPA@mass.gov
Massachusetts Department of Environmental Protection (MassDEP) Commissioner's Office	Helena.Boccadoro@mass.gov
MassDEP Northeast Regional Office	John.D.Viola@mass.gov Pamela.Merrill@state.ma.us
Massachusetts Department of Transportation (MassDOT) Public/Private Development Unit	MassDOTPPDU@dot.state.ma.us
MassDOT - District #6	Amitai.Lipton@dot.state.ma.us
Massachusetts Historical Commission	Hard copy mailed to: The MA Archives Building 220 Morrissey Boulevard Boston, MA 02125
Metropolitan Area Planning Council	MPillsburg@mapc.org
Quincy City Council c/o Nicole Crispo, City Clerk	NCrispo@quincyma.gov
Quincy Planning Board c/o James Fatseas, Planning Director	JFatseas@quincyma.gov
Quincy Conservation Commission c/o Norah Conners	NConners@quincyma.gov
Quincy Health Department c/o Cynthia P. DeCristofaro, Chief Sanitarian	CDeCristofaro@quincyma.gov
Massachusetts Office of Coastal Zone Management	Robert.Boeri@mass.gov Patrice.Bordonaro@mass.gov Erikk.Hokenson@state.ma.us
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Wampanoag Tribe of Gay Head (Aquinnah) Tribal Historic Preservation Officer	thpo@wampanoagtribe-nsn.gov
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***Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs***

MEPA Office

100 Cambridge St., Suite 900
Boston, MA 02114
Telephone 617-626-1020

The following should be completed and submitted to a local newspaper:

PUBLIC NOTICE OF ENVIRONMENTAL REVIEW

PROJECT: Merrymount Park Pedestrian Boardwalk

LOCATION: Merrymount Park, Quincy, Massachusetts

PROPONENT: City of Quincy, Park & Forestry Department

The undersigned is submitting an Environmental Notification Form ("ENF") to the Secretary of Energy & Environmental Affairs on or before April 30, 2021.

This will initiate review of the above project pursuant to the Massachusetts Environmental Policy Act ("MEPA", M.G.L. c. 30, s.s. 61-62I). Copies of the ENF may be obtained from: Emily Tully, Tighe & Bond, ETully@TigheBond.com, 413-875-1622.

During the interim Covid-19 response period, electronic copies of the ENF are also being sent to the Conservation Commission and Planning Board of Quincy.

The Secretary of Energy & Environmental Affairs will publish notice of the ENF in the Environmental Monitor, will receive public comments on the project for 20 days, and will then decide, within ten days, if an Environmental Impact Report is needed. A site visit and consultation session on the project may also be scheduled. All persons wishing to comment on the project, or to be notified of a site visit or consultation session, should email MEPA@mass.gov. Mail correspondence will continue to be accepted, though responses may be delayed. Mail correspondence should be direct to the Secretary of Energy & Environmental Affairs, 100 Cambridge St., Suite 900, Boston, Massachusetts 02114, Attention: MEPA Office, referencing the above project.

By City of Quincy Park & Forestry Department

Tighe&Bond

SECTION 2

Section 2

Introduction

Project Name: Merrymount Park Pedestrian Boardwalk Project

Project Location: Merrymount Park

Project Proponent: City of Quincy Park & Forestry Department

2.1 Project Description

This Environmental Notification Form (ENF) is being submitted on behalf of the City of Quincy for the proposed Merrymount Park Pedestrian Boardwalk Project. Merrymount Park, which was donated to the City of Quincy in 1885 by Charles Francis Adams II, a member of the Quincy Park Commission and a direct descendant of Presidents John Adams and John Quincy Adams, is located in the geographical center of Quincy and is the heart of the City's Park system, offering active and passive recreational opportunities in an idyllic setting.

The original vision of the park, as laid out by Charles Francis Adams and Herbert Kellaway, a renowned landscape architect, called for access to all parts of the park, including Pine Island. Pine Island is currently accessible only by boat, or under certain low-tide conditions by walking across salt marsh from Thornton Street. The Kellaway landscape plan for the park called for a pedestrian bridge out to the island, which would provide additional walking trails, and, more importantly, a truly unique opportunity to experience peace and serenity inside of the urban setting. This project seeks to complete this long-ago vision, creating an opportunity for the residents of Quincy and visitors to discover a tucked away gem.

The proposed project includes installation of a pedestrian boardwalk that will connect the main Merrymount Park area to Pine Island without the need for visitors to walk directly on salt marsh. The proposed boardwalks would increase access to and views of Blacks Creek, the tidal marshlands, and Pine Island, and provide an ideal location for educational programs such as the Park Department's Environmental Treasures Program.

Although many recreational facilities have been developed in the park, there are still substantial acres of wooded uplands, salt marsh, kettle holes, and views of Quincy Bay that Frederick Law Olmsted and Charles Francis Adams II were drawn to over 100 years ago. Merrymount Park has different access points around its perimeter, yet visitors to it lack the opportunity of traversing the central portion to the park. The addition of the pedestrian boardwalk will start the process of allowing the community to fluidly travel through the park and enjoy all that it has to offer.

A Site Locus Map (Figure 1), MassDEP Priority Resource Area Map (Figure 2), Existing Conditions Figure with FEMA flood zone and wetland resource areas (Figure 3), and Designated Shellfish Suitability and Growing Areas Map (Figure 4) are provided in Appendix A. Photographs of the project area are provided in Appendix B, and project plans are provided in Appendix C.

2.2 MEPA Process

The project is subject to environmental review pursuant to Section 11.01.2.a. of the MEPA regulations as it requires a State Agency action (i.e. a permit and funding).

The project meets the following ENF review thresholds:

- 301 CMR 11.03(3)(b)(1)(a): alteration of Coastal Bank
- 301 CMR 11.03(3)(b)(1)(f) – alteration of one-half or more acres of any other wetlands
- 301 CMR 11.03(3)(b)(6) - construction of a pile-supported structure of 2,000 or more sf base area that will occupy flowed tidelands or other waterways.

No mandatory EIR thresholds are triggered by the proposed project.

Tighe&Bond

SECTION 3

Section 3

Existing Environment

3.1 General Project Area

Merrymount Park is an 80-acre community park that includes sports fields, walking trails, and a boating and sailing facility, and is located in the central part of the City of Quincy. The park is accessible by bike, and there are multiple bus stops in walking distance. The Wollaston MBTA Station is 0.5 miles from one of the entrances to Merrymount Park. The park abuts Caddy Park and Wollaston Beach, which are both property of the Massachusetts Department of Conservation and Recreation (DCR). The scenic beauty of both Wollaston Beach and Caddy Park, coupled with Merrymount Park, creates a magnificent natural corridor in the heart of the 8th largest city in the Commonwealth.

The parcels that comprise Merrymount Park are bounded by Hancock Street and Fenno Street to the west, residences and the Beechwood Knoll Elementary School to the northwest, Fenno Street to the north, Quincy Shore Drive to the east, and Furnace Brook Parkway to the south. The central area of Merrymount Park, including the William F. Ryan Boating and Sailing Facility and associated gravel parking area, is accessible via Vietnam Veterans Drive off Merrymount Parkway. Pine Island, an 11-acre drumlin, is located north of the William F. Ryan Boating and Sailing Facility, and is separated from the main area of the park by tidal flats and salt marsh associated with Blacks Creek and Quincy Bay.

Blacks Creek parallels Furnace Brook Parkway along the southern boundary of the Park. Per the Massachusetts Department of Environmental Protection (MassDEP) Massachusetts Mouth of Coastal River Map for Blacks Creek (Quincy MOR-1), the mouth of Blacks Creek has been delineated by MassDEP near the William F. Ryan Boating and Sailing Facility.

While most parts of Merrymount Park are accessible, Pine Island and its trails are currently inaccessible to most people at most times of the year. The proposed structure would connect two City-owned parcels, bridging the portion of Blacks Creek that flows between Pine Island (Parcel ID 5075-16) and Merrymount Park (Parcel ID 5076-1).

Merrymount Park is dedicated park land that is surrounded by Environmental Justice Neighborhoods. Besides Merrymount Park, the public parks currently serving these neighborhoods consist of ballfields, "pocket parks," and playgrounds. While these recreational spaces are valuable, Merrymount Park alone provides residents of surrounding neighborhoods convenient access to large, contiguous natural areas, miles of trails, and waterfront recreation.

The combination of upland and waterfront offers visitors to the park an unparalleled opportunity to experience a tremendous array of recreational activities ranging from walking trails with views of Quincy Bay to a highly regarded boating and sailing program. Merrymount Park truly serves the recreational needs of the entire city, drawing interest from minority groups and rich and poor, old and young, and everything in between.

3.2 Wetland Resource Areas

3.2.1 Methodology of Resource Area Investigations

A Tighe & Bond wetland scientist conducted an evaluation of wetland resource areas on May 21, 2020, August 18, 2020, and January 27, 2021. Wetland resource areas regulated by the Massachusetts Wetlands Protection Act (MA WPA) and the Quincy Wetlands Protection Ordinance (QWPO) in the vicinity of the proposed work were delineated in accordance with 310 CMR 10.00 and MassDEP guidelines.

3.2.2 Description of Wetland Resource Areas

Wetland resource areas located within the vicinity of the project area include Land Subject to Coastal Storm Flowage (LSCSF), Coastal Bank, Salt Marsh, Coastal Beach (tidal flats), and Buffer Zone. These areas are depicted on Figures 2, 3, and 4 in Appendix A, site photographs in Appendix B, and on project plans in Appendix C, and are described in greater detail below.

LSCSF: LSCSF means land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater (310 CMR 10.04). According to FEMA Flood Insurance Rate Map (FIRM) Panel No. 25021C0069F (revised in Letter of Map Revision (LOMR) effective March 13, 2017), portions of the project area are within the Special Flood Hazard Area Zone AE (Base Flood Elevation (BFE) 11 to 13 feet NAVD88; therefore, LSCSF is present in the project area.

Coastal Bank: Coastal Bank is defined as the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland (310 CMR 10.30). In the project area, Coastal Bank was delineated through development of transects in and near the area of the proposed pedestrian bridge alignment and abutments as per the MassDEP Wetlands Program Policy 92-1: Coastal Banks, as shown on the plans provided in Appendix C.

Salt Marsh: Salt Marsh is defined as a coastal wetland that extends landward up to the highest high tide line and is characterized by plants that are well adapted to or prefer living in saline soils (310 CMR 10.32). Within the project area, Salt Marsh consists of wetlands vegetated with saltmeadow cordgrass (*Spartina patens*), smooth cordgrass (*Spartina alterniflora*), and marsh elder (*Iva frutescens*) located between Coastal Beach and Coastal Bank.

Coastal Beach: Coastal Beach is defined as unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of saltwater and includes tidal flats (310 CMR 10.27). Coastal Beach extends from the Mean Low Water (MLW) line landward to the dune line, coastal bankline or the seaward edge of existing man-made structures, whichever is closest to the ocean (310 CMR 10.27). Within the project area, Coastal Beach extends from MLW landward to the vegetated seaward edge of Salt Marsh. As shown on Figure 4 in Appendix A, shellfish growing is designated as "prohibited" in the entire vicinity of the project area (GBH2.0), and the project area does not include any mapped shellfish suitability species per MassGIS; therefore, the project area is presumed to not include Land Containing Shellfish.

Land Under the Ocean: Land Under the Ocean means land extending from the MLW line seaward to the boundary of the municipality's jurisdiction (310 CMR 10.25). The project area does not extend seaward of the MLW.

Buffer Zone: Under the MA WPA and QWPO, areas extending 100 feet from certain areas subject to protection are considered Buffer Zone. In the vicinity of the project area, buffer zone extends landward from Coastal Bank.

3.3 Benthic Assessment

On July 23 and July 30, 2020, a Tighe & Bond wetland scientist completed benthic surveys for the project area during low tide. Two one-meter quadrants were observed at each abutment location for a total of four survey locations near the proposed boardwalk (B1T1-1 and B1T1-2 were observed near Pine Island, and B1T2-1 and B1T2-2 were observed near the parking area for the William F. Ryan Boating and Sailing Facility). The plots were located outside of vegetated salt marsh and within the intertidal flats for a representative sample of the benthic environment. Photos from the benthic assessment can be found in Attachment B.

The survey consisted of an examination of the color, odor, and grain size of the sediment to a depth of six-inches, as well as observations of signs of marine life. The sediment color was assessed using a Munsell Soil Color book. For the purpose of the survey, the grain size was broken into the broad categories of cobble, gravel, sand, silt, and clay. Shellfish and aquatic plant life (e.g., seaweed, algae, and eelgrass) found within the survey area were identified down to the genus and species level when possible.

A total of two aquatic plant species, four species of shellfish, and three species of crab were identified within the survey area and were representative of the overall benthic community in this general location. Two plots (B1T1-1 and B1T2-2) did not have any aquatic plants within them. Crabs were found in three of the plots (B1T1-2, B1T2-1, and B1T2-2) though only the hermit crabs in plot B1T1-2 were alive.

When present within an individual plot, gutweed (*Ulva intestinalis*) was the most abundant species, with the highest percentage cover within the quadrat. Blue mussel (*Mytilus edulis*) and soft-shelled clam (*Mya Arenaria*) were the most commonly observed species among all the sampling plots and occurred at a higher frequency among plots than other species. Two invasive species were identified within the plots: green crabs (*Carinus maenas*), and common periwinkle (*Littorina littorea*).

The sediment ranged from silt to gravel with generally small cobble throughout the plots. The plots located by sparsely vegetated areas (B1T2-1 and B1T2-2 near the William F. Ryan Boating and Sailing Facility) consisted of gravel and sand with a faint salty smell. The plots located near the salt marsh (B1T1-1 and B1T1-2 near Pine Island) contained silty muck with a strong hydrogen sulfide smell. Cobble was generally located on the surface of all the plots. The characteristics observed within the sample plots appear to be consistent with intertidal and subtidal areas outside of the areas of investigation, and these plots may be considered to be a reliable baseline for existing conditions.

3.4 Rare Species

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) Atlas, 14th Edition, effective August 1, 2017, was consulted during preparation of this application. According to this source, the proposed project area is not located within designated Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife and therefore will not require review pursuant to the Massachusetts Endangered Species Act.

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SECTION 4

Section 4

Alternatives Analysis

The purpose of the proposed pedestrian boardwalk project is to improve public access to the currently inaccessible central area of Merrymount Park, expanding access to over 100 acres of parkland where Quincy residents, including surrounding Environmental Justice communities, can enjoy passive and active recreation activities. As the proposed project is specific to creating a connection between Pine Island and the main area of Merrymount Park, no off-site alternatives were considered.

Alternatives for the design and specific location/orientation of the proposed boardwalk were evaluated based on environmental impacts, Americans with Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB) accessibility requirements, feasibility, and compatibility with existing recreational uses within the park and Blacks Creek. In all location and design alternatives, the proposed boardwalk includes Ipe timber, timber piles, and a height above the water level designed to provide consistency with the historical and marine setting of the park while allowing continued kayak use of the channel between Pine Island and main area of the park.

4.1 No Action Alternative

The no-build scenario would result in no direct short-term costs or environmental impacts, but also would not result in benefits such as improved access to Pine Island. Under the no-build scenario, pedestrian access to Pine Island would continue to be walking on salt marsh from Thornton Street, which is not preferred due to the ongoing impacts to salt marsh and lack of ADA/MAAB accessibility improvements.

4.2 Boardwalk Location Alternatives

Several alternatives for the location and orientation of the proposed boardwalk connecting the main area of Merrymount Park and Pine Island were considered.

4.2.1 Geographic Location Alternatives

Considerations for assessing the geographic location of the boardwalk relative to the William F. Ryan Boating and Sailing Facility and Pine Island include avoiding unnecessary impacts to salt marsh, preventing impacts to salt marsh from the current mode of access via walking across salt marsh, avoiding impacts to the boating and sailing uses within Blacks Creek, and utilizing existing disturbed areas.

4.2.1.1 West of the Parking Area

One potential location for the pedestrian boardwalk that would avoid temporary or permanent impacts to the boating and sailing uses of the William F. Ryan Boating and Sailing Facility and within Blacks Creek and would avoid impacts to the circulation within and use of the parking area would be to locate the pedestrian boardwalk west of the parking area, across the tidal channel rather than Blacks Creek. As this location does not utilize existing disturbed areas, would result in permanent impacts to salt marsh for the installation of the access ramp and abutment, and would be more challenging for ADA accessibility, it is not preferred.

4.2.1.2 Near North Corner of the Parking Area (Preferred)

The preferred alternative is to locate the bridge near the northern corner of the parking area, utilizing a curved north-south orientation to connect to Pine Island. By utilizing the northern corner of the parking area, the entrance to the boardwalk can be graded for ADA access from the parking area while minimizing impacts to boater access to the water from the parking area and existing boating and sailing uses within Blacks Creek. Unnecessary salt marsh impacts are avoided by utilizing this location, and the abutment and access ramp will utilize the existing disturbed footprint of the gravel parking area.

4.2.1.3 Furnace Brook Parkway to Pine Island

Alternatively, the boardwalk could be located east of the parking area, connecting the portion of the park adjacent to Furnace Brook Parkway to Pine Island. This alternative would provide additional access to Pine Island, but would require a larger pedestrian bridge that would itself not be easily accessible from the main area of the park, and would potentially not provide an attractive alternative to the current mode of access to the park from the north of walking across the salt marsh.

4.2.2 Abutment Location Alternatives

Alternatives for the locations of the boardwalk abutments were evaluated based on maintaining ADA accessibility, minimizing impacts to the existing parking area uses and circulation near the William F. Ryan Boating and Sailing Facility, and avoiding impacts to Coastal Bank.

4.2.2.1 Low Abutments

In this alternative, the boardwalk abutments would be constructed lower on the slope both on the main area of the park and on Pine Island. This would result in lower construction costs, and would more easily accommodate the placement of solar-powered lighting features on the portions of the boardwalk close to land. However, as this alternative would make it more difficult to provide the required separation from salt marsh on the Pine Island side of the boardwalk and would require impacts to Coastal Bank, it is not preferred.

4.2.2.2 High Abutments (Preferred)

Locating the abutments higher on Pine Island and within the parking area is preferred as these locations are above and minimize impacts to Coastal Bank. The higher abutments additionally allow the boardwalk to be located 10 feet above salt marsh near Pine Island while maintaining an ADA-required slope of 1:12.

4.3 Boardwalk Design Alternatives

The design of the boardwalk was developed based upon providing an ADA-accessible boardwalk that avoids impacts to salt marsh while providing interpretive elements and a design that is compatible with the historic and environmental setting within Merrymount Park and Blacks Creek. In all design alternatives, the boardwalk is proposed to be 6 feet above MHHW to allow for kayak passage with a seated passenger and accounts for 2 feet of sea level rise over the design life of the boardwalk.

4.3.1 Boardwalk Alignment Alternatives

Design considerations for the alignment of the proposed boardwalk include avoiding shading impacts to salt marsh, meeting ADA and MAAB requirements for accessibility, aesthetic compatibility with the historic and natural setting within the Park, and consistency with the Master Plan for Merrymount Park.

4.3.1.1 Straight Boardwalk

One alternative for the orientation of the boardwalk across the channel from the main area of the park to Pine Island would be a simple, straight design in a generally north-south orientation. This alternative would be slightly shorter in length than a curved orientation, but is less consistent with the Merrymount Park Master Plan and less conforming with the historic aesthetic setting within the park, so is not preferred.

4.3.1.2 Curved Boardwalk (Preferred)

In this alternative, the boardwalk is curved in an approximately north-south orientation across the channel from the main area of the park to Pine Island. This curved orientation is preferred as it is consistent with the Merrymount Park Master Plan, historic aesthetics within the Park, and will not result in additional impacts to salt marsh relative to a straight orientation.

4.3.2 Boardwalk Material Alternatives

Several alternatives for the material of the boardwalk were considered based on aesthetics, ADA-accessibility requirements, the design requirements of the MassDEP's *Small Docks and Piers: A Guide to Permitting Small, Pile-Supported Docks and Piers* guidance document relative to avoiding salt marsh impacts, and maintenance.

4.3.2.1 All Timber Boardwalk

In this alternative, the boardwalk would be constructed entirely of Ipe timber starting and ending at each abutment to provide uniformity of appearance and ease of construction and maintenance. In order for this alternative to be viable, however, the boardwalk would need to be located at least as high above salt marsh as it is wide in order to prevent shading impacts to salt marsh vegetation per the MassDEP's *Small Docks and Piers: A Guide to Permitting Small, Pile-Supported Docks and Piers* guidance document. As this is not feasible near the parking area while maintaining the ADA-required slope of 1:12, and increasing the spacing to the $\frac{3}{4}$ " spacing described in the *Small Docks and Piers* guide is incompatible with the maximum spacing allowed per ADA design requirements ($\frac{1}{2}$ "), this alternative is not preferred.

4.3.2.2 Timber Boardwalk with Flow-Through Decking (Preferred)

The preferred alternative for boardwalk materials is to construct the majority of the boardwalk of Ipe timber, except that the area less than 10 feet above salt marsh near the parking area is proposed to be constructed using flow-through decking. Flow-through decking is a boardwalk material designed to permit sunlight passage to avoid shading impacts to salt marsh where the boardwalk is unable to be elevated one foot in height for every foot in width.

4.4 Project Alternatives Comparison Summary Table

Table 4-1 below summarizes the impacts and feasibility of alternatives for the boardwalk location with a particular focus on the environmental implications of each.

Table 4-1

Summary of Impacts, Benefits, and Feasibility of Project Alternatives

Alternative	Description of Work Required	Accessibility	Benefits	Environmental Impacts – Qualitative	Environmental Impacts - Quantitative
No Action	None	Would not improve	No construction-related impacts or impacts to boating / sailing uses	No construction related or permanent impacts but access via walking across salt marsh would continue	None (see qualitative impacts)
Boardwalk West of Parking Area	Construct boardwalk connecting main area of park west of parking area with Pine Island	Boardwalk would be ADA compliant but access to boardwalk would be challenging	Would not impact circulation in parking area or boating / sailing activities	Salt marsh areas are more widely prevalent west of the parking area, would require greater temporary and permanent impacts	Temporary: Coastal Beach (8,000 sf), Salt Marsh (5,000 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (32 sf), and Salt Marsh (14 sf) for installation of 12" diameter pilings; Salt Marsh (200 sf), LSCSF (455 sf) and Buffer Zone to Coastal Bank (455 sf) for abutments
Boardwalk Near Northern Corner of Parking Area (Preferred)	Construct boardwalk connecting main area of park near northern corner of parking area with Pine Island	Boardwalk would be ADA compliant and easily accessible from parking area	Uses existing disturbed areas, avoids unnecessary salt marsh impacts	Would take advantage of existing disturbed areas to minimize salt marsh impacts	Temporary: Coastal Beach (10,310 sf), Salt Marsh (2,905 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; LSCSF (600 sf) and Buffer Zone to Coastal Bank (455 sf) for abutments

Alternative	Description of Work Required	Accessibility	Benefits	Environmental Impacts – Qualitative	Environmental Impacts - Quantitative
Boardwalk between Pine Island and Furnace Brook Parkway	Construct boardwalk connecting area of park near Furnace Brook Parkway with Pine Island	Boardwalk would be ADA compliant but access to boardwalk would be challenging	Would avoid impacts to parking area and salt marsh area west of parking lot	May still require salt marsh impacts, impacts to Land Under Water and boater use of Blacks Creek	Temporary: Coastal Beach (10,310 sf), Salt Marsh (2,905 sf), Land Under Water (600 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), Land Under Water (35 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; LSCSF (600 sf) and Buffer Zone to Coastal Bank (455 sf) for abutments
Low Abutments	Abutments for boardwalk constructed downslope	Would be ADA accessible via graded access ramp	More easily accommodate solar lighting Lower cost	Abutments located within Coastal Bank	Temporary: Coastal Bank (22,800 sf), Beach (10,310 sf), Salt Marsh (2,905 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; Coastal Bank (455 sf) for abutments
High Abutments (Preferred)	Abutments for boardwalk constructed upslope	Would be ADA accessible via graded access ramp	Avoids impacts to Coastal Bank from abutments	Abutments located above Coastal Bank in LSCSF, buffer zone	Temporary: Coastal Beach (10,310 sf), Salt Marsh (2,905 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; LSCSF (600 sf), and Buffer Zone to Coastal Bank (455 sf) for abutments

Alternative	Description of Work Required	Accessibility	Benefits	Environmental Impacts – Qualitative	Environmental Impacts - Quantitative
Straight Boardwalk Orientation	Boardwalk constructed straight across channel from main area of park to Pine Island	Would be able to meet ADA / MAAB accessibility requirements	Slightly shorter length than curved orientation	No difference in salt marsh impacts between curved and straight orientation	Temporary: Coastal Beach (10,000 sf), Salt Marsh (2,905 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (32 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; LSCSF (600 sf) , and Buffer Zone to Coastal Bank (455 sf) for abutments
Curved Boardwalk Orientation (Preferred)	Boardwalk constructed in a curved orientation from main area of park to Pine Island	Would be able to meet ADA / MAAB accessibility requirements	Consistent with Master Plan and historic aesthetics of Merrymount Park	No difference in salt marsh impacts between curved and straight orientation	Temporary: Coastal Beach (10,310 sf), Salt Marsh (2,905 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; LSCSF (600 sf), and Buffer Zone to Coastal Bank (455 sf) for abutments
All Timber Boardwalk	Boardwalk constructed entirely of Ipe timber	Would not be ADA accessible if providing 10 ft of clearance above salt marsh near parking area	Ease of construction / maintenance, presumptive no shading impacts to salt marsh if 10 ft above	Presumptive no shading impacts to salt marsh if 10 ft above	Temporary: Coastal Beach (10,310 sf), Salt Marsh (2,905 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) for installation of 12" diameter pilings; LSCSF (600 sf), and Buffer Zone to Coastal Bank (455 sf) for abutments

Alternative	Description of Work Required	Accessibility	Benefits	Environmental Impacts – Qualitative	Environmental Impacts - Quantitative
Timber Boardwalk with Flow-Through Decking (Preferred)	Boardwalk constructed of Ipe timber with flow-through decking above salt marsh near the parking area	Would be ADA accessible	Prevent shading of salt marsh in area where boardwalk is unable to be 10 ft above salt marsh	Would allow sunlight passage to salt marsh to prevent shading impacts	Temporary: Coastal Beach (10,310 sf), Salt Marsh (2,905 sf), LSCSF (22,800 sf) for construction, staging, and access Permanent: Coastal Bank (10 lf), Coastal Beach (35 sf), and Salt Marsh (11 sf) for installation of 12” diameter pilings; LSCSF (600 sf) and Buffer Zone to Coastal Bank (455 sf) for abutments

4.5 Preferred Alternative Project Description

4.5.1 Summary of Preferred Alternative Project Components

The recommended alternative is construction of a pile-supported timber pedestrian boardwalk with abutments located above Coastal Bank near the William F. Ryan Sailing Facility parking area and on Pine Island that includes flow-through decking for the portion above salt marsh near the parking area. The boardwalk will include interpretative elements at both entrances, and landscaping and design details consistent with the historic and marine setting of the park. The height of the boardwalk above the channel will be 6 feet above MHHW to allow for continued passage of kayaks while using ADA-required slopes of 1:12 with flat areas every 30 feet. The abutments are proposed to be concrete with granite abutments that transition to paved access ramps for compliance with ADA accessibility requirements.

4.5.2 Anticipated Construction Sequence

Due to construction safety concerns, the contractor will be responsible for providing public safety protection measures, including safety signage and observation to ensure the public stays at a safe distance from active equipment and does not enter potentially unsafe active work areas. Construction sequencing for the project is anticipated to occur as follows:

- Installation of temporary sediment and erosion control measures
- Construction of the boardwalk, including driving of piles, installation of flow-through decking and timber boardwalk, installation of lighting features, and construction of abutments
- Installation of landscaping and interpretive features
- Removal of sediment and erosion control measures upon receipt of authorization from the Quincy Conservation Commission.

4.5.3 Construction Methodology

The proposed project will be performed with measures to minimize potential construction disturbances. As noted below, in some instances specific construction means and methods will be determined by the contractor. However, the contractor will be restricted to the limit of work depicted on the project plans. The proposed project will be within the tidal zone. In order to ensure quality workmanship and minimize potential environmental disturbances, any work performed from a barge within the water will be performed outside of low tide conditions. As the times of low tides change daily, the tidal zone work hours will also vary and will be subject to periodic weather related shut-downs.

Truck deliveries and site work will be performed within hours limited by City of Quincy Ordinance, or as further defined by project specifications. Performing site work within hours specified by the City of Quincy work hour requirements will help mitigate construction related noise impacts.

The site resource areas will be protected during the project. Where possible, work will be completed from the landward side. Where it is not feasible to conduct the work from the landward side of the seawall, portions of the work may occur from the beach or from a barge. During this work, appropriate resource area protection best management practices (BMPs) will be used to minimize the potential for erosion and sedimentation. These BMPs are described below.

4.5.4 Erosion & Sedimentation Control

Based on prior experience with similar ocean shoreline/beach repair work with wave-sorted coarse-grained sediments (sand, cobble, shingle, shell hash), we anticipate minimal turbidity concerns. The contractor will be required to maintain appropriate siltation/turbidity controls, such as wood chip filled filtering tubes around the down gradient side of the work area. To minimize the potential for these BMP controls themselves to contribute to marine litter, they will be moved out of the wave environment when not in use (on a daily/nightly basis). Calm water BMPs, including staked silt fencing and turbidity booms, are not appropriate for this wave-and-wake exposed ocean site, and are not proposed due to concerns they will fail and create marine litter, or will themselves generate turbidity by moving under wave forces or from tidal current blockage.

Additional control measures to be used during the project include the use of silt fence, inlet protection barriers, and construction management techniques such as limiting disturbance. Supplemental and/or alternative construction BMPs may be required during work, depending on site and weather conditions.

4.5.5 Site Access

Access to the proposed work area will be from the parking area adjacent to the William F. Ryan Boating and Sailing Facility, from the boardwalk as it is constructed, and from a barge as necessary. As noted above, it is anticipated that the construction equipment will operate from the landward side where feasible in order to minimize intertidal disturbance.

If the proposed work is not feasible from the land, then portions of the work may occur from the beach. Equipment and materials will be staged within the parking area and stored outside of resource areas.

4.5.6 Site Stabilization

The areas of construction will remain in a stable condition at the close of each construction day via the use of appropriate erosion and sedimentation control measures. Erosion control measures will be inspected at the close of each construction day and maintained or reinforced as necessary. All erosion and sedimentation control measures will be inspected, cleaned, or replaced during construction and controls on the upland side of the seawall will remain in place until such time as stabilization of all areas that may impact jurisdictional areas is permanent.

Tighe&Bond

SECTION 5

Section 5

Regulatory Compliance

The proposed project has been designed to avoid environmental impacts when possible, minimize unavoidable impacts when practicable, and provide mitigation that is commensurate with the proposed alterations. The City has coordinated with CZM, the Massachusetts Division of Marine Fisheries (DMF), MassDEP, and the US Army Corps of Engineers (Army Corps) regarding this Project and will continue to coordinate with the agencies throughout the permitting process.

The Project incorporates specific design elements to avoid or minimize impacts to resource areas including locating the abutments outside of Coastal Bank, elevating the boardwalk 10 feet above salt marsh where possible when consistent with ADA slope requirements and using flow-through decking where the 10-foot separation is not possible, and by preventing continued pedestrian impacts to salt marsh. Descriptions of the project's compliance with the regulatory requirements of the MA WPA, the QWPO, and other pertinent state and federal regulatory programs are provided in the following sections.

5.1 MA WPA / QWPO

5.1.1 Anticipated Temporary and Permanent Impacts

The project will require an Order of Conditions from the Quincy Conservation Commission pursuant to the MA WPA and QWPO. A Notice of Intent (NOI) will be submitted to the City of Quincy Conservation Commission following the submittal of the ENF.

Temporary and permanent impacts to wetland resource areas have been avoided and minimized to the maximum extent feasible through alternatives selection and use of construction-period BMPs. **Table 5-1** presents a summary of the resource area impacts from the proposed project relative to existing conditions. The figures in Appendix A and project plans in Appendix C also depict the proposed activities and resource areas. There are no anticipated impacts to Land Under the Ocean, as the project area does not extend below Mean Low Water.

Table 5-1
Summary of Resource Area Impacts

Resource Area	Temporary Impacts	Permanent Impacts
Coastal Beach (sf)	10,310	35
Salt Marsh (sf)	2,905	11
Coastal Bank (lf) ¹	0	10
LSCSF (sf)	22,800	600
Total Impacts (sf) ²	36,015	646

¹ Coastal Bank impacts are given in linear feet (lf)

² Total impacts, which are presented in sf, do not include Coastal Bank

The majority of the anticipated wetland resource area impacts are associated with temporary construction-period impacts. Permanent impacts quantified in **Table 5-1** are

limited to those associated with the installation of 12-inch diameter piles and the construction of the abutments and associated access ramps.

Temporary construction-period impacts to 3,200 sf and permanent impacts to 455 sf of the 100-foot buffer zone to Coastal Bank will result from the construction of the abutments and associated access ramp on the Pine Island side of the proposed boardwalk.

On MassGIS, and as shown on Figure 4 in Appendix A, the nearshore area is not mapped as suitable shellfish species habitat, with the project area within the designated "restricted" shellfish growing area.

Proper sediment and erosion control measures are proposed, including the use of silt fence, inlet protection barriers, and construction management techniques including limiting disturbance and sequencing construction. The ramp will be paved using porous pavement to minimize any stormwater runoff. Areas adjacent to the ramp will be stabilized during construction with jute matting and planted in the spring. The details of project compliance with the stormwater management standards will be provided as part of the NOI.

Per 310 CMR 10.32(4), "a small project within a salt marsh, such as an elevated walkway or other structure which has no adverse effects other than blocking sunlight from the underlying vegetation for a portion of each day, may be permitted if such a project complies with all other applicable requirements" of the Wetlands Protection Act. MassDEP's *Small Docks and Piers: A Guide to Permitting Small, Pile-Supported Docks and Piers* guidance document relative to avoiding salt marsh impacts by providing one foot of clearance above salt marsh for each foot in width on the Pine Island side of the boardwalk, for a presumptive avoidance of shading impacts, and by providing flow-through decking for the portion of the boardwalk that is unable to be elevated to 10 feet above the salt marsh near the parking area due to slope limitations required for compliance with ADA-design requirements.

5.1.2 Proposed Mitigation Measures

The proposed project has been designed to avoid and minimize impacts to the maximum extent feasible through the use of construction period BMPs, and avoidance of sensitive resource areas through project work area design. As the project progresses through federal and state permitting processes, the City will continue to coordinate with regulatory agencies.

5.2 Chapter 91 Regulations

The proposed project is located within filled and flowed tidelands under Chapter 91 jurisdiction. Based on a review of the City of Quincy's historic files, there is an existing Chapter 91 license in the project area. License 10092 was issued in 2004 to the City of Quincy Park Department for construction and maintenance of a concrete pier abutment, prefabricated timber bridge, gangway, and float in and over the waters of Blacks Creek (associated with the William F. Ryan Boating and Sailing Facility).

The proposed pedestrian boardwalk project enhances public access, and promotes the use and enjoyment of tidelands. The project area is not located within a Designated Port Area, Area of Critical Environmental Concern or Ocean Sanctuary.

The proposed pedestrian boardwalk is a water dependent use pursuant to CMR 310 9.12(2)(a)(4) as a boardwalk that promotes the use and enjoyment of the water by the general public and which is located at or near the water's edge. A summary of compliance with the License and Permit Requirements of 310 CMR 9.31 is provided below.

The proposed pile-supported pedestrian boardwalk will comply with the applicable environmental regulatory programs of the Commonwealth. The City of Quincy does not have a municipal harbor plan. The project will not significantly interfere with public rights of navigation, as the proposed pedestrian boardwalk will allow for pedestrian access from the main area of Merrymount Park to Pine Island, and the spacing of the timber piles and height of the elevated boardwalk will allow for the passage of small watercraft such as kayaks during high tide conditions.

The pedestrian boardwalk has been sited to prevent impacts to the use of the adjacent William F. Ryan Boating and Sailing Facility. The project does not include dredging, a nonwater-dependent use, or a marina, boatyard, or boat ramp. The proposed ADA and MAAB compliant pedestrian boardwalk will allow pedestrians to approach the shoreline from public ways and will be available to the public for use in connection with fishing, fowling, navigation, and any other purposes consistent with the extent of public rights at the project site.

5.3 401 Water Quality Certification Regulations

A Section 401 Water Quality Certification is triggered by the filing of a federal permit if the project results in a loss of 5,000 square feet cumulatively of bordering or isolated vegetated wetlands and land under water, the amount of any proposed dredging is greater than 100 cubic yards (cy), or if any other thresholds listed in 314 CMR 9.04 are met.

The project is not anticipated to result in a loss of bordering or isolated vegetated wetlands or land under water, and no dredging is proposed. Per 314 CMR 9.04 (8), however, any activity resulting in the discharge of dredged or fill material in any salt marsh is an activity requiring an application. As the project involves the placement of piles within areas of salt marsh as part of the construction of the elevated pedestrian boardwalk, a 401 Water Quality Certification application will be submitted to MassDEP.

5.4 Section 404 Army Corps Regulations

The proposed project is subject to Army Corps authorization jurisdiction under Section 404 of the Clean Water Act, required due to work (fill) within waters of the United States (i.e., work below the HTL of coastal waters). The Army Corps General Permits for Massachusetts (MA GPs) cover specific activities within the limits of Army Corps jurisdiction. Specific area limits apply when 1) there is a discharge of dredged or fill material into waters of the U.S., and 2) as stated in each of the activity General Permits. The total temporary and permanent impact area is used to determine if a project is eligible for Self-Verification, Pre-Construction Notification, or Individual Permit coverage.

A permit application will be prepared and submitted to the Army Corps, and will be concurrently reviewed by other federal agencies, including the U.S. Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (USFWS). This application will be submitted following submittal of the ENF.

In addition to environmental factors, the MA GPs require notification of the State Historic Preservation Office (SHPO), Tribal Historic Preservation Officers (THPOs), and Board of Underwater Archeological Resources (MA BUAR) (for underwater projects) per Section 106 of the National Historic Preservation Act of 1966.

A copy of the MEPA ENF will be sent to the SHPO, THPOs, and BUAR describing the proposed activities and providing a general description of the area where construction is proposed. The City will continue to coordinate with these parties as the project progresses in accordance with the Section 106 review process.

5.5 Coast Guard Bridge Permit

Under Section 9 of the Rivers and Harbors Act of 1899 and the General Bridge Act of 1946, any individual, partnership, corporation, or local, state, or federal legislative body, agency, or authority planning to construct or modify a bridge or causeway across a navigable waterway of the United States must apply for a Coast Guard bridge permit. The City will contact the Coast Guard District Bridge Office to discuss the proposed project.

5.6 CZM Federal Consistency Review

The project is subject to Federal Consistency Review (MA Federal Consistency Rules, 301 CMR 20.00 and Coastal Zone Management Act, 16 U.S.C. § 14560) because it is being conducted by a non-federal entity within the Coastal Zone and requires a permit from a Federal Agency (Army Corps of Engineers). This project proposes construction of a pedestrian boardwalk within the coastal zone.

The proposed project complies with the CZM Policies described in the CZM Policy Guide of October 2011 as follows:

Coastal Hazards Policy #1 and Habitat Policy #1: the preferred alternative for the proposed pedestrian boardwalk avoids impacts to Coastal Bank by locating the abutments outside of Coastal Bank and is intended to prevent further impacts to Salt Marsh from the current pedestrian access to Pine Island via walking across Salt Marsh from Thornton Street. The proposed pedestrian boardwalk has been designed using the guidelines for elevated walkways provided in the CZM Applying the Massachusetts Coastal Wetlands Regulations practical manual and the MassDEP Small Docks & Piers guide. The proposed project has been designed to meet or exceed the standards of the Wetlands Protection Act and Chapter 91 Waterways Regulations, and will comply with all associated permits and regulations.

Coastal Hazards Policy #2: the proposed boardwalk will be pile-supported, which will minimize impacts to water circulation and sediment transport. Best Management Practices such as careful site planning, and nonstructural measures will be used to minimize impacts on water circulation and sediment transport during construction.

Energy Policy #2: One of the proposed elements of the boardwalk is solar lighting.

Growth Management Policy #1: As described above, the proposed pedestrian boardwalk is consistent with the goals and objectives of the City of Quincy's OSRP and the regional MetroFuture plan, and will enhance the ability of surrounding Environmental Justice neighborhoods to utilize Merrymount Park.

Public Access Policy #1, 2, & 3: The proposed water-dependent project will enhance public use of and access to the water by providing ADA and MAAB accessible pedestrian access over Blacks Creek to Pine Island, thereby also preventing the continuation of Salt Marsh impacts from direct walking across the Salt Marsh to access Pine Island.

Water Quality Policy #2: Erosion and sedimentation controls will be incorporated into the construction practices to minimize impacts to resource areas during the construction process and in compliance with the Massachusetts Stormwater Management Policy and Wetlands Protection Act Regulations.

5.7 EPA NPDES CGP NOI and SWPPP

Under the EPA National Pollutant Discharge Elimination System (NPDES) program, an NOI for coverage under the Construction General Permit (CGP) and Stormwater Pollution Prevention Plan (SWPPP) for discharge of stormwater are required for construction site disturbances larger than one acre. The anticipated disturbance for the proposed project is not anticipated to meet this threshold

J:\Q\Q0019 Quincy, MA Consultant Review Services\Q0019-048 Merrymount Park Pedestrian Boardwalks\Task 6- Alts and Permitting\MEPA ENF\doc\5 - Draft Quincy Merrymount Ped Bdwk ENF Narrative.docx





Legend

- | | | |
|---|--|---|
| NHESP Certified Vernal Pools | Powerline | MassDEP Inland Wetlands |
| NHESP Potential Vernal Pools | Pipeline | MassDEP Coastal Wetlands |
| Non-Landfill Solid Waste Sites | Track or Trail | Public Surface Water Supply (PSWS) |
| Community Public Water Supply - Surface Water | Trains | Water Bodies |
| Community Public Water Supply - Groundwater | Public Surface Water Supply Protection Area (Zone A) | Non-Potential Drinking Water Source Area - High Yield |
| Non-Community Non-Transient Public Water Supply | DEP Approved Wellhead Protection Area (Zone I) | Non-Potential Drinking Water Source Area - Medium Yield |
| Non-Community Transient Public Water Supply | DEP Approved Wellhead Protection Area (Zone II) | Potentially Productive Medium Yield Aquifer |
| Limited Access Highway | DEP Interim Wellhead Protection Area (IWPA) | Potentially Productive High Yield Aquifer |
| Multi-Lane Highway, NOT Limited Access | Protected and Recreational Open Space | County Boundary |
| Other Numbered Highway | Solid Waste Landfill | Town Boundary |
| Major Road - Collector | Area of Critical Environmental Concern (ACEC) | |
| Minor Street or Road | NHESP Priority Habitats for Rare Species | |
| Aqueducts | NHESP Estimated Habitats for Rare Wildlife | |
| Hydrologic Connections | EPA Designated Sole Source Aquifer | |
| Stream/Intermittent Stream | Major Drainage Basin | |
| | Sub Drainage Basin | |

FIGURE 2 PRIORITY RESOURCES

Pine Island
Merrymount Park Pedestrian Boardwalk
Quincy, Massachusetts

Data source: Bureau of Geographic Information (MassGIS),
Commonwealth of Massachusetts, Executive Office of Technology
Circles indicate 500-foot and half-mile radii.
Data valid as of April 2021.

April 2021

Tighe&Bond



Ch. 91 Tidelands Jurisdiction

- Marsh Boundary - landward
- Jurisdiction
- Historic High Water
- Marsh Boundary - seaward
- Contemporary High Water



Pedestrian Bridge



100 Year Flood Zone

Tighe&Bond

Based on MassGIS Color Orthophotography (2019).

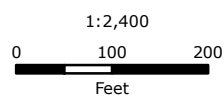
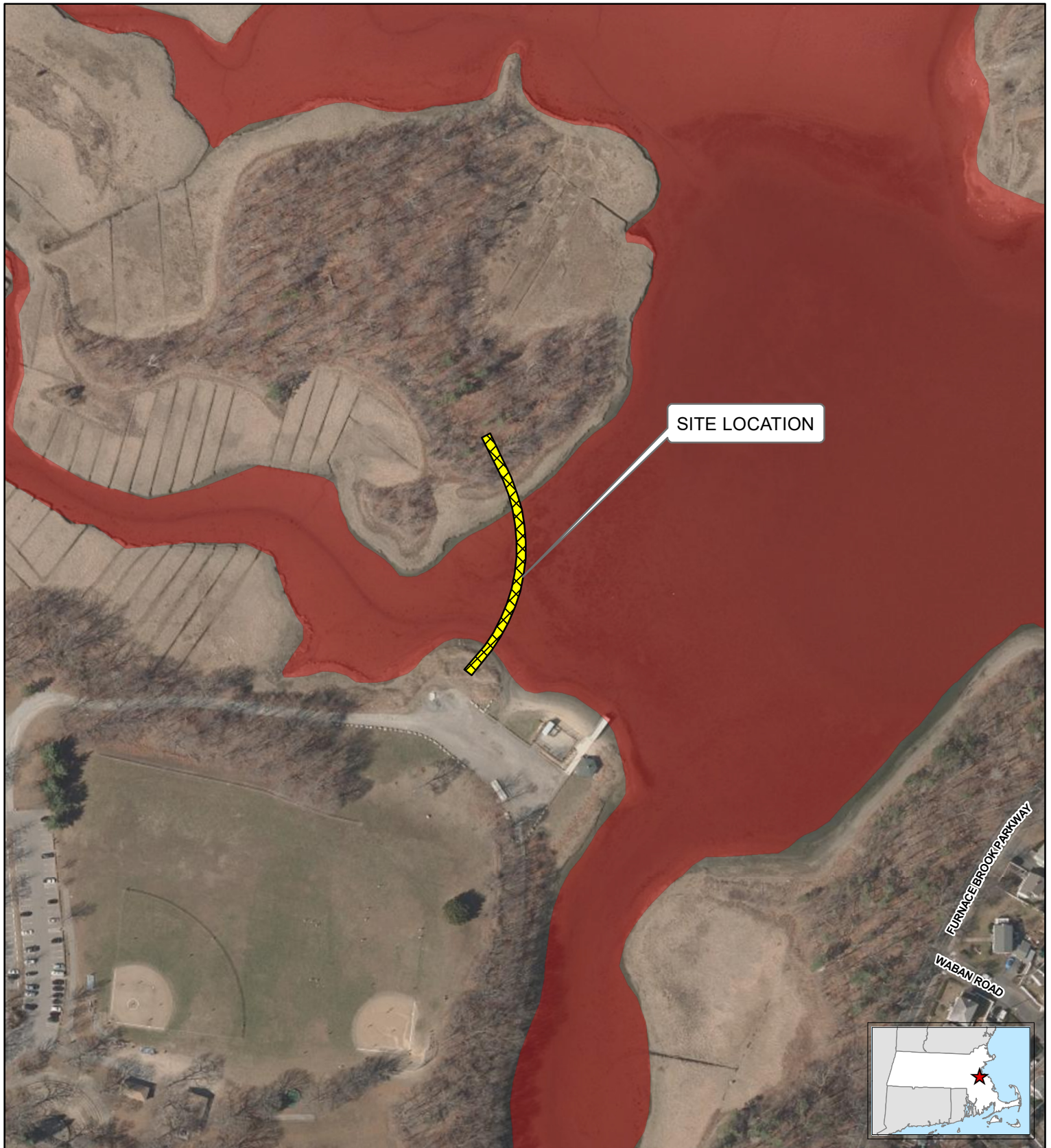


FIGURE 3

EXISTING CONDITIONS

Pine Island
Merrymount Park Pedestrian Boardwalk
Quincy, Massachusetts

April 2021



Designated Shellfish Growing Areas

- Prohibited
- Pedestrian Bridge

Tighe&Bond

Based on MassGIS Color Orthophotography (2019).

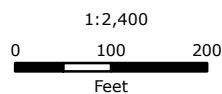


FIGURE 4 SHELLFISH SUITABILITY

Pine Island
Merrymount Park Pedestrian Boardwalk
Quincy, Massachusetts

April 2021

Photographic Log

Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk

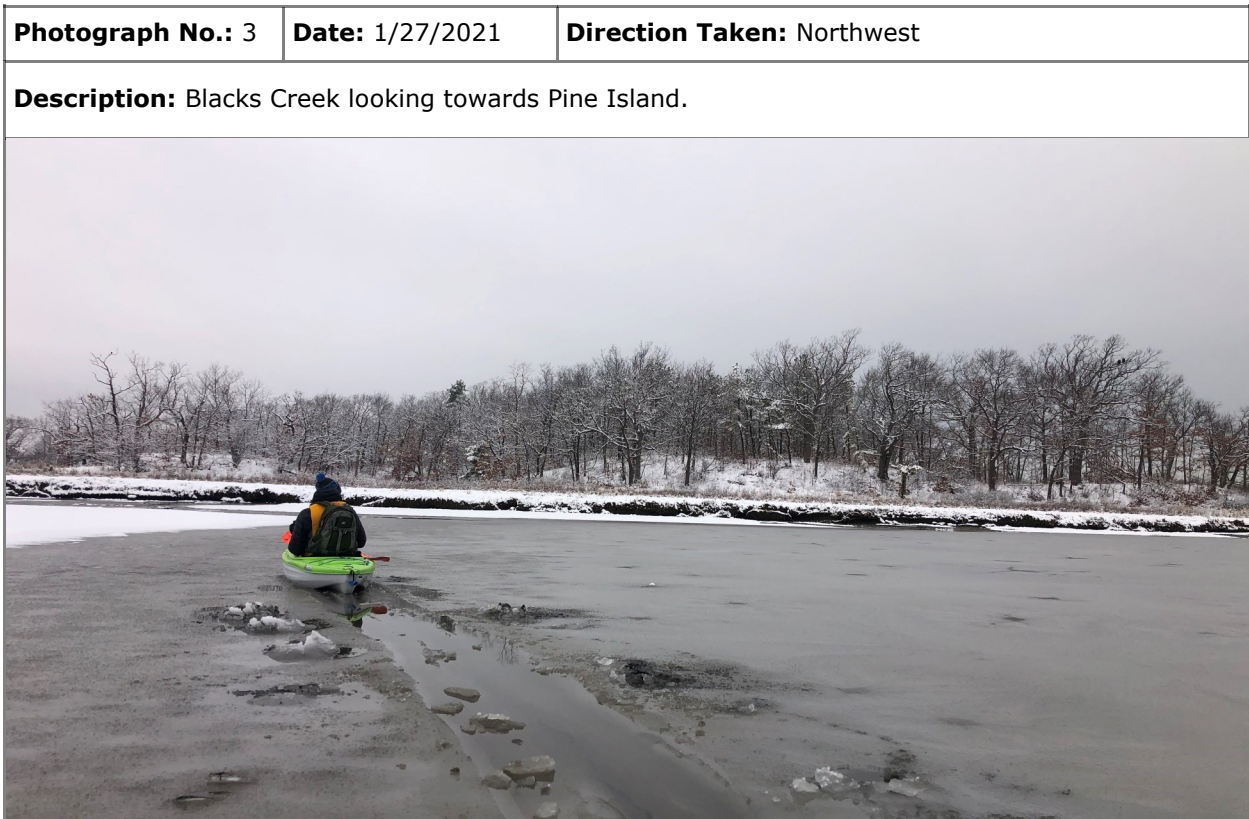


Photographic Log

Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk



Photographic Log

Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk

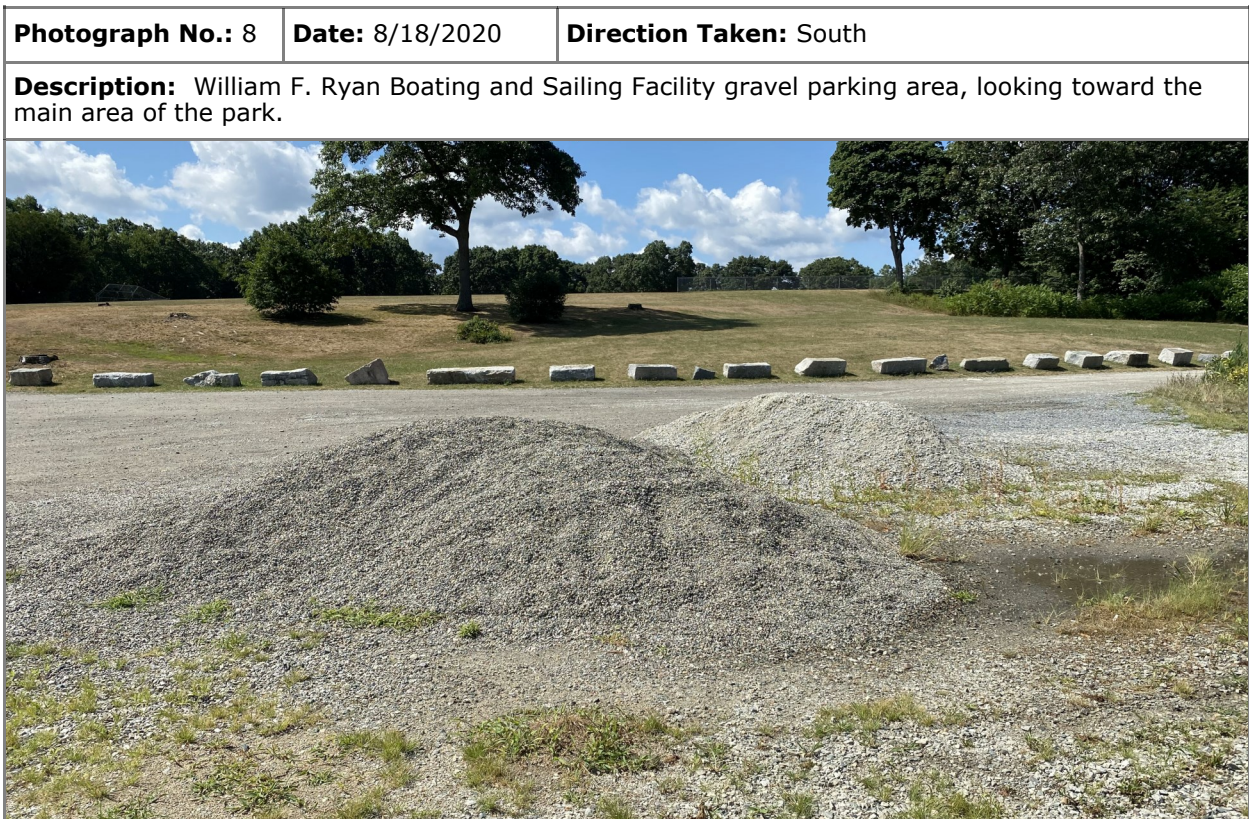


Photographic Log

Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk




Photographic Log

Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk

Photograph No.: 9	Date: 8/18/2020	Direction Taken: East
Description: A representative view of the vegetation and paths on Pine Island.		
		

Photograph No.: 10	Date: 1/27/2021	Direction Taken: North
Description: The vegetation on Pine Island consisted of saplings, woody shrubs, and trees. The emergent species were covered with snow at the time of the site visit.		
		

Photographic Log

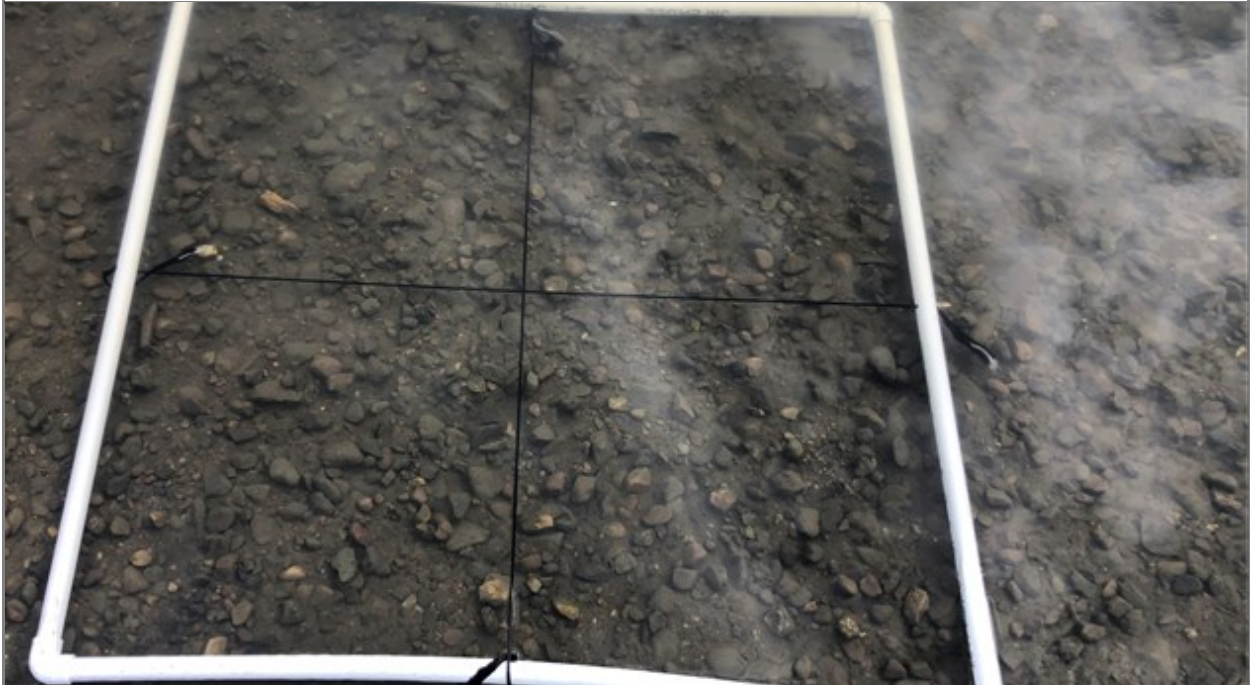
Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk

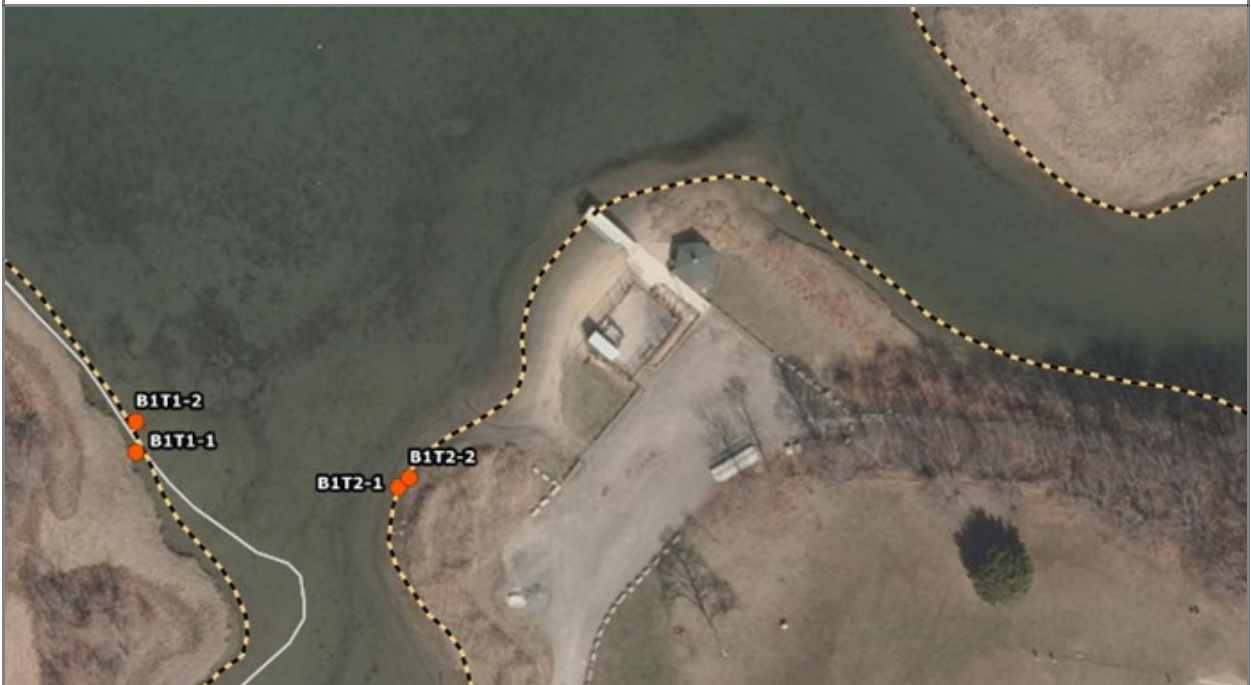
Photograph No.: 11	Date: 7/23/2020	Direction Taken: N/A
---------------------------	------------------------	-----------------------------

Description: A representative view of the one-meter plots where the benthic survey was conducted.



Photograph No.: 12	Date: 7/23/2020	Direction Taken: N/A
---------------------------	------------------------	-----------------------------

Description: Location of benthic survey plots near the potential abutments for the pedestrian boardwalk.





Photographic Log

Client: City of Quincy

Job Number: Q-0019-048

Site: Merrymount Park Pedestrian Boardwalk

Photograph No.: 13	Date: 7/23/2020	Direction Taken: N/A
Description: Representative photo of green crabs identified during benthic survey		
		

Photograph No.: 14	Date: 7/23/2020	Direction Taken: N/A
Description: Representative photo of blue mussels found during benthic survey.		
		

CITY OF QUINCY, MASSACHUSETTS

MERRYMOUNT PARK PEDESTRIAN BOARDWALK

PERMIT DRAWINGS

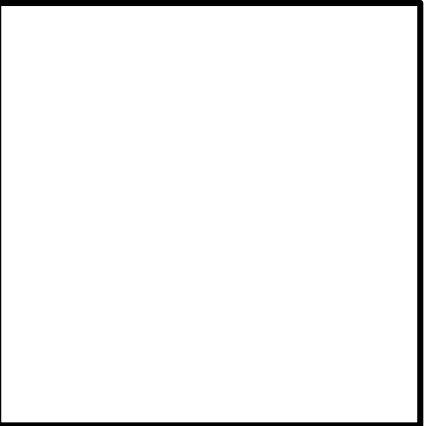
APRIL 2021

LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	04/09/2021
G-101	GENERAL NOTES, ABBREVIATIONS & LEGEND	04/09/2021
G-102	BORING LOGS & NOTES	04/09/2021
C-101	EXISTING CONDITIONS PLAN	04/09/2021
C-102	SITE PLAN	04/09/2021
C-103	GRADING PLAN & PROFILE	04/09/2021
C-501	EROSION CONTROL NOTES & DETAILS	04/09/2021
C-502	SITE DETAILS (NOT INCLUDED IN PERMIT SET)	04/09/2021
S-101	FRAMING PLAN	04/09/2021
S-102	PILE PLAN	04/09/2021
S-501	SUPERSTRUCTURE DETAILS (1 OF 2)	04/09/2021
S-502	SUPERSTRUCTURE DETAILS (2 OF 2) (NOT INCLUDED IN PERMIT SET)	04/09/2021
S-503	ABUTMENT DETAILS (1 OF 2)	04/09/2021
S-504	ABUTMENT DETAILS (2 OF 2)	04/09/2021
P-201	RESOURCE AREA IMPACT PLAN	04/09/2021
P-202	COASTAL BANK TRANSECTS (1 OF 3)	04/09/2021
P-203	COASTAL BANK TRANSECTS (2 OF 3)	04/09/2021
P-204	COASTAL BANK TRANSECTS (3 OF 3)	04/09/2021

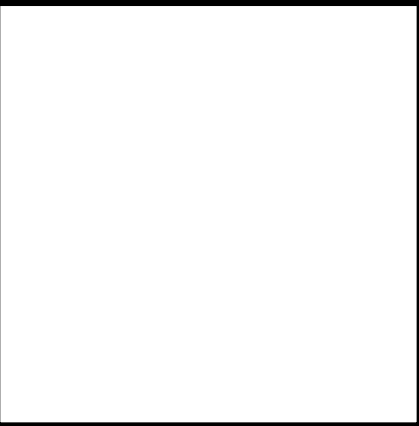


LOCATION MAP
SCALE: 1" = 2,000'

PREPARED BY:
Tighe&Bond



BRIAN BRENNER, PE



DAVID MURPHY, PE

COMPLETE SET 18 SHEETS

Last Saved: 4/29/2021
Plotted On: Apr 29, 2021 5:13pm By: JAKalimeren
Tighe & Bond \\gfbond.com\data\proj\proj\Q0019-048_Merrymount Park Pedestrian Boardwalk.dwg
Figures AutoCAD Sheet Q-0019-048 G-101-G-102.dwg

LEGEND

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	----	----
RIGHT-OF-WAY LINE	----	----
EASEMENT LINE	----	----
LIMITS OF WORK	----	----
INTERMEDIATE CONTOURS	----	----
INDEX CONTOURS	----- 25 -----	----- 25 -----
SPOT GRADE	X 141.2	+ 32.0
MAGNITUDE & DIRECTION OF SLOPE		← 0.0%
STORM DRAIN	----- SD -----	----- SD -----
EDGE OF PAVEMENT	-----	-----
DIRT ROAD	-----	-----
STORM DRAIN STRUCTURES	MANHOLE (M) CATCH BASIN (CB)	MANHOLE (M) AREA DRAIN (AD) CATCH BASIN (CB)
SANITARY SEWER MANHOLE	(S)	(S)
WATER SERVICE STRUCTURES	HYDRANT (H) MANHOLE (M) VALVE (V)	HYDRANT (H) MANHOLE (M) VALVE (V)
GAS SERVICE STRUCTURES	MANHOLE (G) VALVE (V)	MANHOLE (G) VALVE (V)
ELECTRIC SERVICE STRUCTURES	MANHOLE (E) LIGHT (L)	UTILITY CO. POLE # (E) MANHOLE (E) LIGHT (L)
TELECOMMUNICATIONS MANHOLE		(T)
TREELINE	~~~~~	~~~~~
TREE	EVERGREEN DECIDUOUS	EVERGREEN DECIDUOUS

LEGEND

DEMOLITION / GEOTECHNICAL	
EROSION & SEDIMENT CONTROL	=====
COFFERDAM	=====
TURBIDITY CURTAIN	=====
UTILITY TO BE ABANDONED	=====
UTILITY TO BE DEMOLISHED	=====
ITEM TO BE DEMOLISHED	=====
TEST PIT	=====
MONITORING WELL	=====
SOIL SAMPLE	=====
BORING	=====

LEGEND

RESOURCE AREAS	
SALTMARSH WETLAND LIMIT	-----
TOP OF COASTAL BANK	-----
MEAN HIGH WATER	-----
MEAN HIGHER HIGH WATER	-----
FEMA FLOOD ZONE	-----
HIGHEST OBSERVABLE TIDE LINE (HOTL)	-----

ABBREVIATIONS

ABDN('D)	ABANDON('D)
AC	ASBESTOS CEMENT PIPE
BC	BITUMINOUS CURB
BFP	BACK FLOW PREVENTOR
BIT	BITUMINOUS
BL	BASELINE
BLDG	BUILDING
BND	BOUND
BOC	BOTTOM OF CURB
BOT	BOTTOM
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CB	CATCH BASIN
CEM	CEMENT
CI	CAST IRON PIPE
CL	CENTERLINE
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
CPP	CORRUGATED POLYETHYLENE PIPE
CY	CUBIC YARD
DH	DRILL HOLE
DI	DUCTILE IRON PIPE
DIA	DIAMETER
DMH	DRAIN MANHOLE
E	EAST
EF	EACH FACE
EG	EXISTING GRADE
EL/ELEV	ELEVATION
ELEC	ELECTRIC
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EW	EACH WAY
EXIST	EXISTING
FES	FLARED END SECTION
FF	FINISH FLOOR
FM	FORCE MAIN
G	GAS
GG	GAS GATE
GRAN	GRANITE
HC	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
HYD	HYDRANT
IN	INCHES
INV	INVERT
IP	IRON PIN
L	LENGTH OF CURB
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MON	MONUMENT
MJ	MECHANICAL JOINT

ABBREVIATIONS CONT'D

N	NORTH
NITC	NOT IN THIS CONTRACT
NTS	NOT TO SCALE
N/A	NOT APPLICABLE
N/F	NOW OR FORMERLY
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
OH	OVERHEAD
PB	PLANT BED
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCPP	PERFORATED CORRUGATED POLYETHYLENE PIPE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYLCHLORIDE
PVMT	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REV	REVISION
ROW	RIGHT OF WAY
RT	RIGHT
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
S	SOUTH
SAN	SANITARY
SCH	SCHEDULE
SF	SQUARE FOOT
SMH	SEWER MANHOLE
SS	STAINLESS STEEL
STA	STATION
STL	STEEL
STRM	STORM
T	TANGENT LENGTH
TC	TOP OF CURB
TEL	TEL-DATA
TP	TEST PIT
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
UP	UTILITY POLE
W	WATER
WG	WATER GATE
WV	WATER VALVE
XFMR	TRANSFORMER

BASE PLAN NOTES

- THE EXISTING CONDITIONS INFORMATION SHOWN ON THE DRAWINGS IS BASED ON THE FOLLOWING:
 - SURVEY DRAWINGS PROVIDED BY CORNER POST LAND SURVEYING, INC., TITLED MERRYMOUNT PARK EXISTING CONDITIONS AND DATED 8-19-2020
 - FIELD INVESTIGATIONS PERFORMED BY TIGHE & BOND ON AUGUST 2020 AND FEBRUARY 2021
 - GIS INFORMATION
 - THE RESOURCE AREA BOUNDARIES DEPICTED ON THE DRAWINGS WERE DELINEATED BY TIGHE & BOND, INC. ON AUGUST 2020
- UTILITY LOCATIONS SHOWN WERE PLOTTED FROM INFORMATION SUPPLIED BY RESPECTIVE UTILITY COMPANIES AND DATA OBTAINED FROM FIELD SURVEYS AND AS BUILT DRAWINGS. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS IS NOT GUARANTEED. DETERMINE THE LOCATIONS AND ELEVATIONS OF ALL UTILITIES WHICH MAY AFFECT CONSTRUCTION OPERATIONS.
- SUB-SURFACE EXPLORATIONS WERE PERFORMED BY NEW ENGLAND BORING CONTRACTORS ON 6-17-2020. BORING LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND BORING INFORMATION IS NOT GUARANTEED IN ANY WAY TO REPRESENT EXISTING CONDITIONS. BORING LOGS ARE INCLUDED IN THE PROJECT MANUAL FOR THE CONTRACTORS INFORMATION ONLY.
- THE DRAWINGS ARE BASED ON THE FOLLOWING DATUMS: HORIZONTAL NORTH AMERICAN DATUM 1983 ; VERTICAL NAVD88
- THE EXISTING CONDITIONS SHOWN ARE APPROXIMATE. FIELD VERIFY EXISTING CONDITIONS.

GENERAL NOTES

- NOTIFY (DIGSAFE AT 1-888-344-7233) OR (CALL BEFORE YOU DIG AT 1-800-922-4455) AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE LIST AT LEAST 72 HOURS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, OR ANY OTHER EARTH MOVING OPERATIONS.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IN ADDITION, SOME UTILITIES MAY NOT BE SHOWN. DETERMINE THE EXACT LOCATION OF UTILITIES BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND/OR INTERRUPTIONS IN UTILITY SERVICE. PERFORM TEST PIT EXCAVATIONS AND OTHER INVESTIGATIONS TO LOCATE UTILITIES, AND PROVIDE THIS INFORMATION TO THE ENGINEER, PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS. LOCATE ALL EXISTING UTILITIES TO BE CROSSED BY HAND EXCAVATION.
- NOT ALL OF THE UTILITY SERVICES TO BUILDINGS ARE SHOWN. THE CONTRACTOR SHALL ANTICIPATE THAT EACH PROPERTY HAS SERVICE CONNECTIONS FOR THE VARIOUS UTILITIES.
- BOLD TEXT AND LINES INDICATE PROPOSED WORK. LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.
- TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.
- EXCAVATE ADDITIONAL TEST PITS TO LOCATE EXISTING UTILITIES AS DIRECTED OR APPROVED BY THE ENGINEER.
- NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL.
- THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY; COORDINATION WITH THE OWNER, ALL SUBCONTRACTORS, AND WITH OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK, THE MEANS AND METHODS OF CONSTRUCTING THE PROPOSED WORK.
- OBTAIN, PAY FOR AND COMPLY WITH PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK. ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE JURISDICTIONAL AUTHORITIES.
- SHORE UTILITY TRENCHES WHERE FIELD CONDITIONS DICTATE AND/OR WHERE REQUIRED BY LOCAL, STATE AND FEDERAL HEALTH AND SAFETY CODES.
- FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE OBSERVED THAT VARY SIGNIFICANTLY FROM THOSE SHOWN ON THE DRAWINGS, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION OF THE CONFLICTING INFORMATION.
- PROTECT AND MAINTAIN ALL UTILITIES IN THE AREAS UNDER CONSTRUCTION DURING THE WORK. LEAVE ALL PIPES AND STRUCTURES WITHIN THE LIMITS OF THE CONTRACT IN A CLEAN AND OPERABLE CONDITION AT THE COMPLETION OF THE WORK. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SAND AND SILT FROM DISTURBED AREAS FROM ENTERING THE DRAINAGE SYSTEM.
- NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION, WHETHER ABOVE OR BELOW GRADE. REPLACE DAMAGED UTILITIES IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER AND AT NO COST TO THE PROPERTY OWNER.
- TAKE NECESSARY MEASURES AND PROVIDE CONTINUOUS BARRIERS OF SUFFICIENT TYPE, SIZE, AND STRENGTH TO PREVENT ACCESS TO ALL WORK AND STAGING AREAS AT THE COMPLETION OF EACH DAYS WORK.
- NO OPEN TRENCHES WILL BE ALLOWED OVER NIGHT. THE USE OF ROAD PLATES TO PROTECT THE EXCAVATION WILL BE CONSIDERED UPON REQUEST, BUT BACKFILLING IS PREFERRED.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL/SAFETY DEVICES TO ENSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH THE WORK AREA, OR FOR SAFELY IMPLEMENTING DETOURS AROUND THE WORK AREA. PERFORM TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLAN.
- MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
- WHEN WORKING IN THE ROAD, PROVIDE THE OWNER AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING ON A DAILY BASIS. PROVIDE COORDINATION TO ENSURE COMMUNICATION AND COORDINATION BETWEEN THE OWNER, CONTRACTOR AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES THROUGHOUT THE CONSTRUCTION PERIOD.
- REMOVE AND DISPOSE OF ALL CONSTRUCTION-RELATED WASTE MATERIALS AND DEBRIS IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.
- THE TERM "DEMOLISH" USED ON THE DRAWINGS MEANS TO REMOVE AND DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- THE TERM "ABANDON" USED ON THE DRAWINGS MEANS TO LEAVE IN PLACE AND TAKE APPROPRIATE MEASURES TO DECOMMISSION AS SPECIFIED OR NOTED ON THE DRAWINGS.

PERMIT SET

Merrymount Park Pedestrian Boardwalk

City of Quincy

Quincy, Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO:		Q0019-48
DATE:		04/16/2021
FILE:		Q-0019-048_G-101-G-102.dwg
DRAWN BY:		JAK
CHECKED BY:		BB
APPROVED BY:		DAM

GENERAL NOTES, ABBREVIATIONS & LEGEND

SCALE:	AS SHOWN
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PERMIT SET

Merrymount Park Pedestrian Boardwalk

City of Quincy

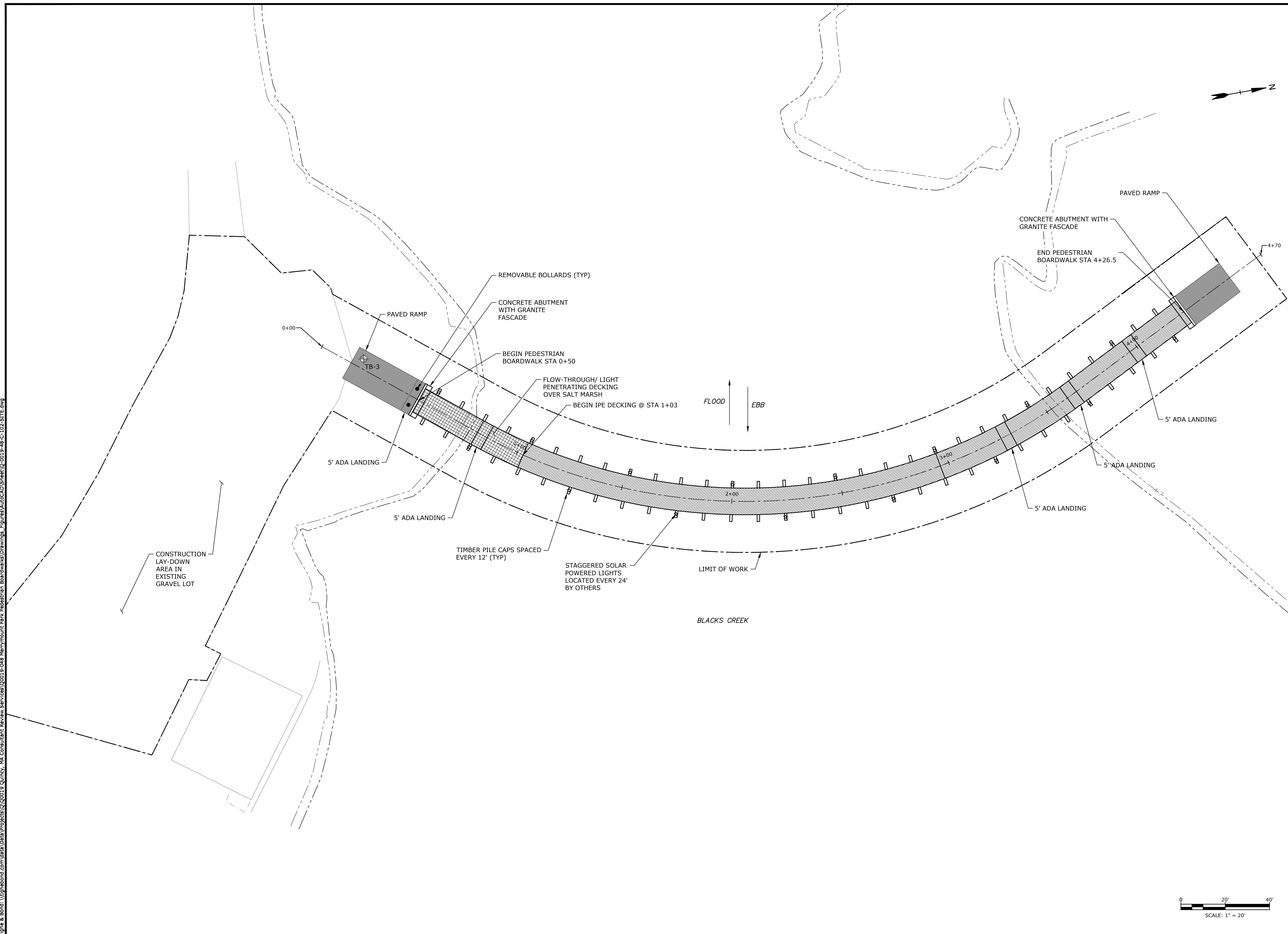
Quincy,
Massachusetts[illegible]

MARK	DATE	DESCRIPTION
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FILE:		Q-0019-48-C-102-SITE.dwg
DRAWN BY:		JAK
CHECKED BY:		BE
APPROVED BY:		DAM

SITE PLAN

SCALE: AS SHOWN

C-102
SHEET 5 OF XX



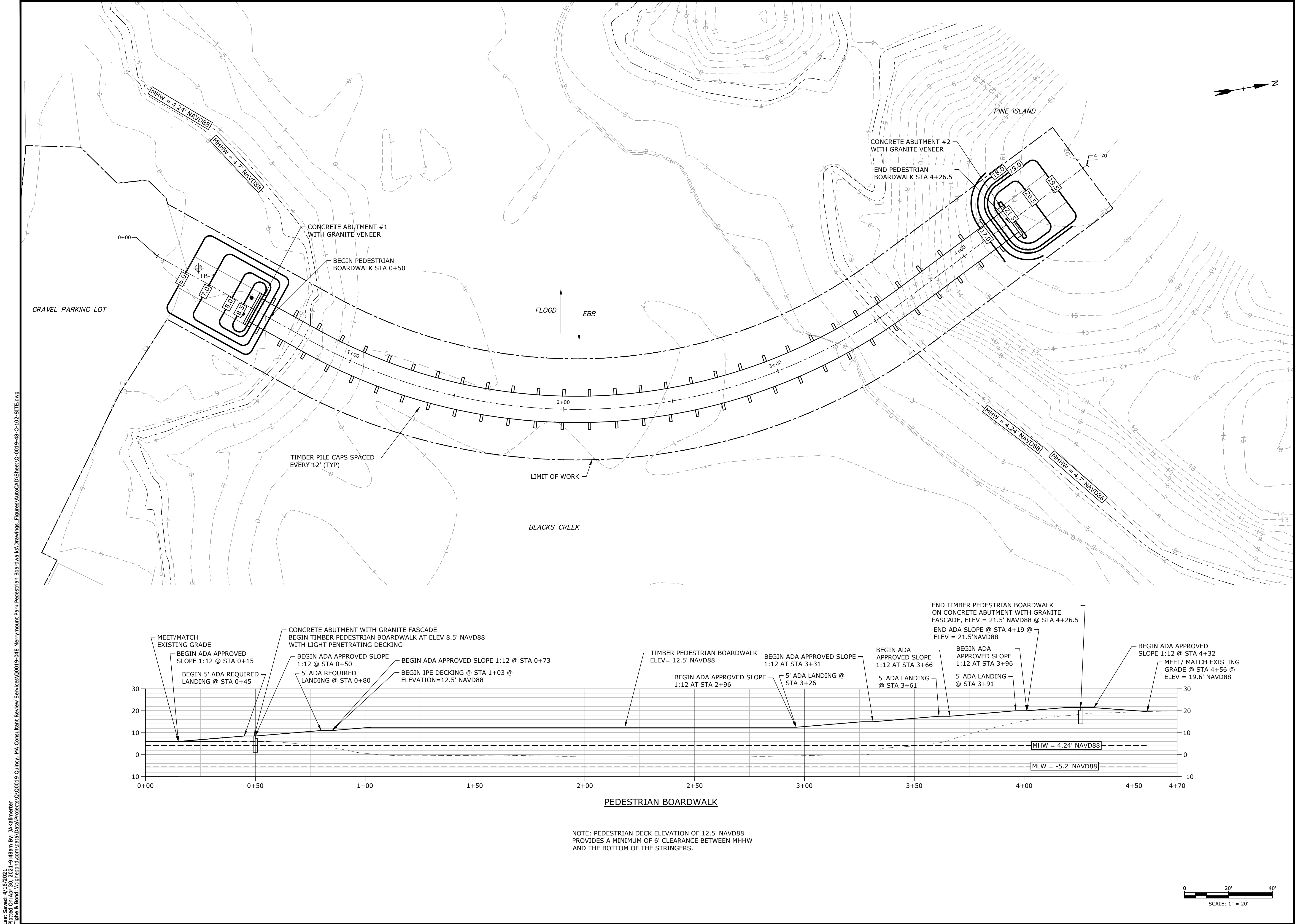
PERMIT SET

Merrymount Park
Pedestrian Boardwalk
City of Quincy

Quincy,
Massachusetts

MARK	DATE	DESCRIPTION
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FILE:		Q-0019-48-C-102-SITE.dwg
DRAWN BY:		JAK
CHECKED BY:		BB
APPROVED BY:		DAM

GRADING PLAN & PROFILE	
SCALE:	AS SHOWN
C-103	
SHEET 6 OF XX	

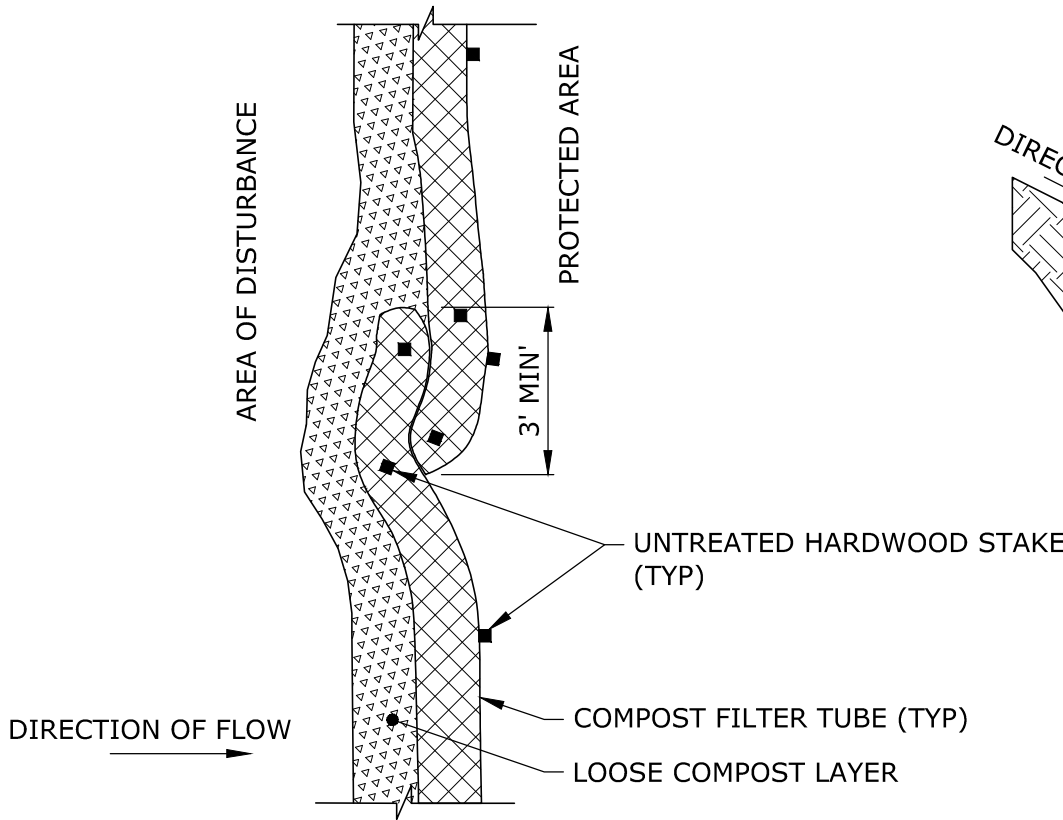


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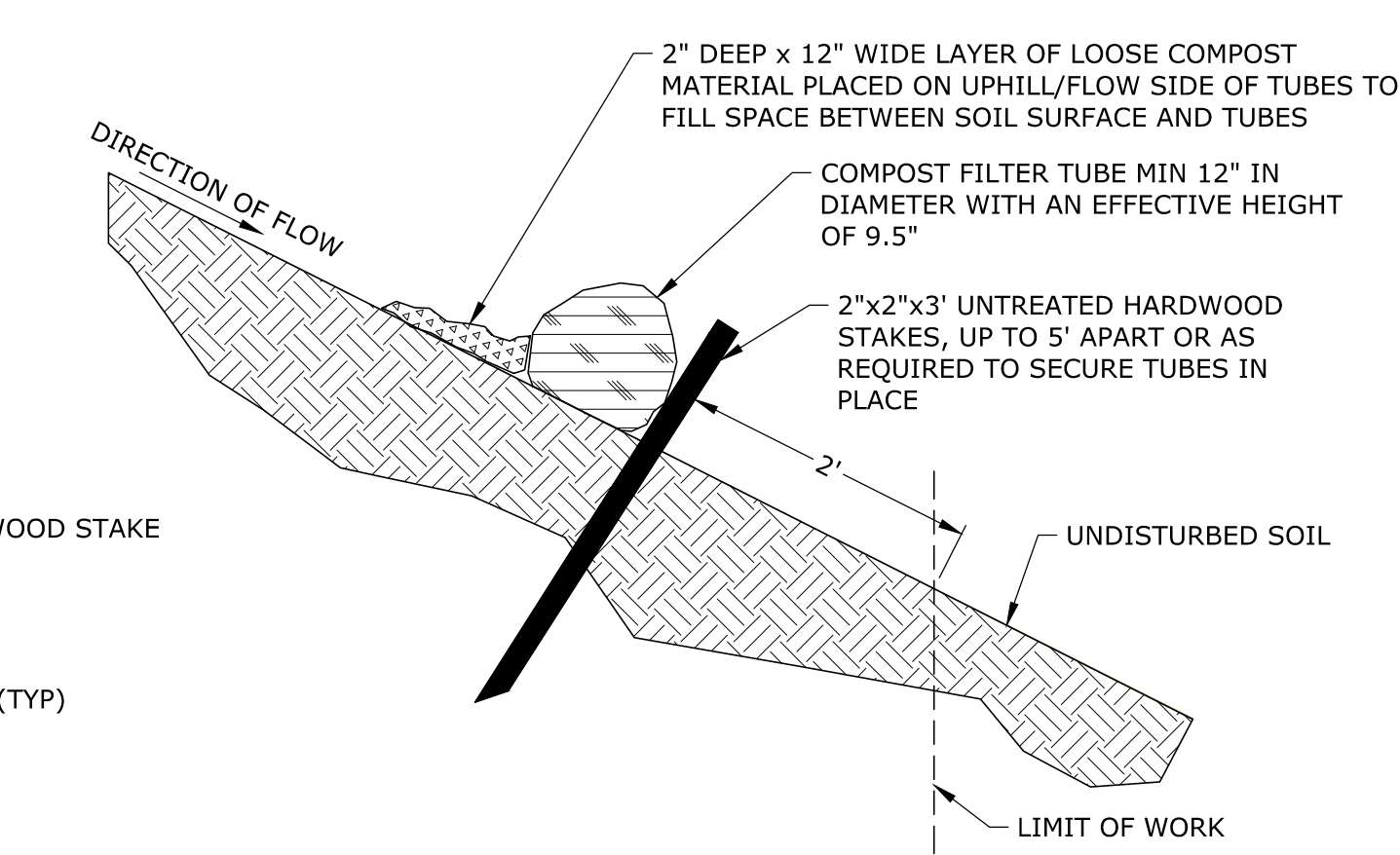
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EROSION CONTROL AND RESOURCE AREA PROTECTION NOTES

1. PROVIDE ALL EROSION CONTROL MEASURES SHOWN, SPECIFIED, REQUIRED BY PERMIT, AND/OR REQUIRED BY THE ENGINEER PRIOR TO ANY CONSTRUCTION OR IMMEDIATELY UPON REQUEST. MAINTAIN SUCH CONTROL MEASURES UNTIL FINAL SURFACE TREATMENTS ARE IN PLACE AND/OR UNTIL PERMANENT VEGETATION IS ESTABLISHED. INSPECT AFTER EACH RAINSTORM AND DURING MAJOR STORM EVENTS TO CONFIRM THAT ALL SEDIMENTATION AND EROSION CONTROL MEASURES REQUIRED ARE IN PLACE AND EFFECTIVE.
2. INSTALL SILT SACKS OR OTHER APPROVED SEDIMENTATION BARRIERS IN/AT ALL CATCH BASINS IN THE PROJECT AREA.
3. COMPACT, STABILIZE, AND LOAM AND SEED SIDE SLOPES, SHOULDER AREAS AND DISTURBED VEGETATED AREAS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND AS REQUIRED BY PERMITS. GRADE SIDE SLOPES, SHOULDER AREAS AND DISTURBED VEGETATED AREAS TO A MAXIMUM SLOPE OF 3 HORIZONTAL TO 1 VERTICAL (3H:1V), WHERE POSSIBLE. PROVIDE BIODEGRADABLE EROSION CONTROL BLANKETS TO PREVENT EROSION WHERE SLOPES ARE STEEPER THAN 3H:1V.
4. SETTLE OR FILTER ALL SILT-LADEN WATER FROM DEWATERING ACTIVITIES IN A SEDIMENTATION OR FILTER BAG TO REMOVE SEDIMENTS PRIOR TO RELEASE USING A SEDIMENTATION OR FILTER BAG LOCATED DOWN-GRADIENT OF THE DEWATERED AREA.
5. REMOVE AND PROPERLY DISPOSE OF SILT TRAPPED AT BARRIERS IN UPLAND AREAS OUTSIDE BUFFER ZONES. REMOVE MATERIALS DEPOSITED IN ANY TEMPORARY SETTLING BASINS AT THE COMPLETION OF THE PROJECT. RESTORE ALL DISTURBED AREAS TO THEIR PRECONSTRUCTION CONDITION.
6. SWEEP, COLLECT, REMOVE AND DISPOSE OF ANY SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS AT THE END OF EACH DAY.
7. LOAM AND SEED ALL DISTURBED VEGETATED AREAS TO ESTABLISH COVER AND STABILIZATION AS SOON AS POSSIBLE FOLLOWING DISTURBANCE.
8. MAINTAIN AN ADDITIONAL SUPPLY OF EROSION CONTROL MEASURES ON-SITE FOR EMERGENCY REPAIRS.
9. STORE FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS IN A SECONDARY CONTAINER AND REMOVE TO A SECURE LOCKED AND COVERED AREA DURING NON-WORK HOURS.
10. PROVIDE A SUPPLY OF ABSORBENT SPILL RESPONSE MATERIALS SUCH AS BOOMS, BLANKETS, AND OIL ABSORBENT MATERIALS AT THE CONSTRUCTION SITE AT ALL TIMES TO CLEAN UP POTENTIAL SPILLS OF HAZARDOUS MATERIALS. IMMEDIATELY REPORT SPILLS OF HAZARDOUS MATERIALS TO THE STATE ENVIRONMENTAL AGENCY AND THE MUNICIPALITY WHERE THE WORK IS OCCURRING.

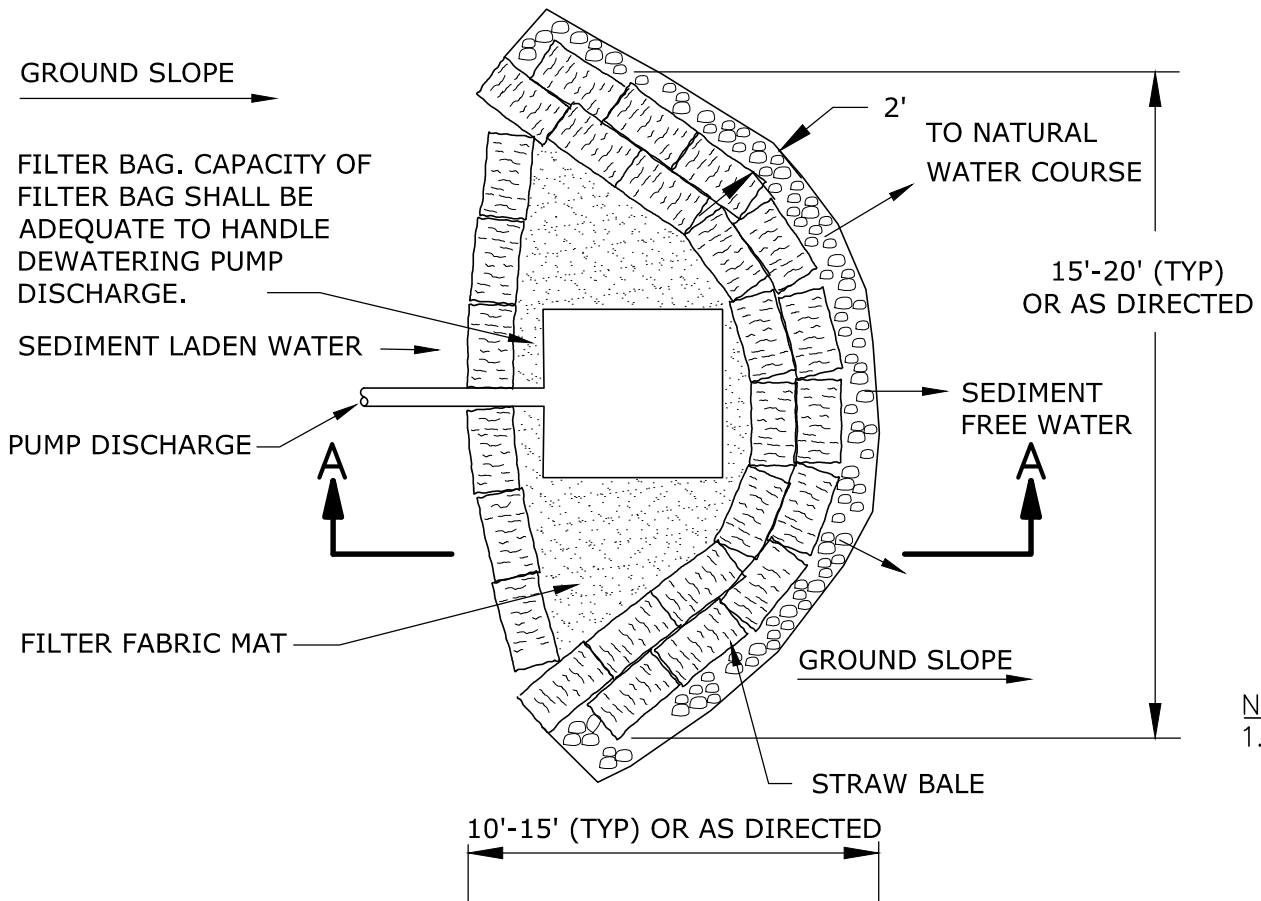


PLAN VIEW - JOIN DETAIL

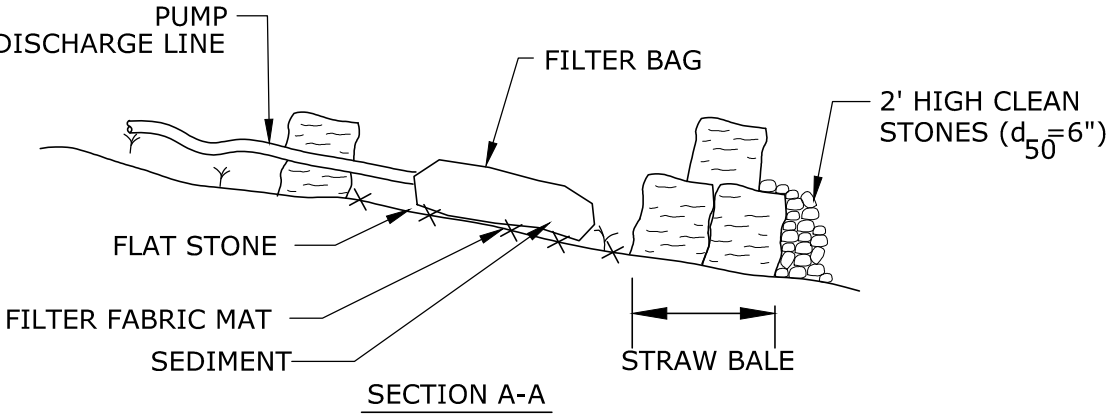


SECTION VIEW

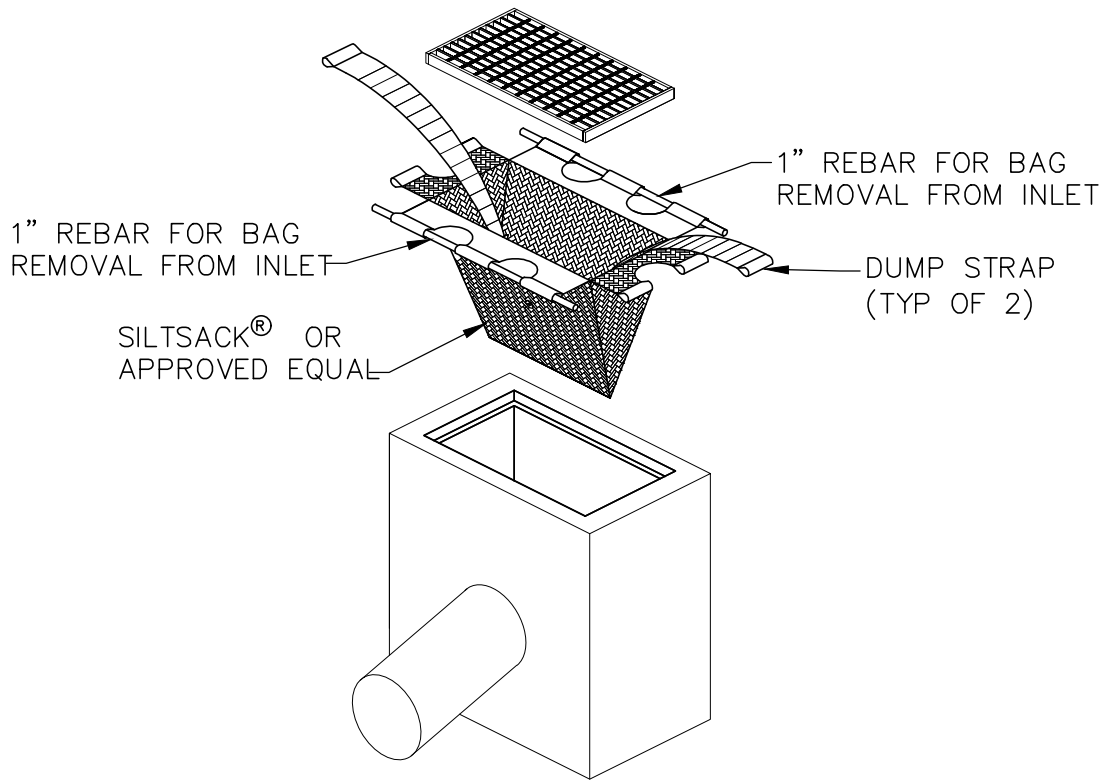
COMPOST FILTER TUBE
NO SCALE



DEWATERING BASIN
NO SCALE



- NOTES:
1. DISCHARGE LOCATION DEPENDS ON THE TYPE OF GROUNDWATER ENCOUNTERED. DISCHARGE INTO LIKE WATER BODY AFTER FILTRATION.



- NOTES:
1. "SILT SACKS", "DANDY BAG II," "BLOCKSON & CO. NATURAL FIBER INLET FILTER MAT" OR OTHER SIMILAR SILT RETENTION DEVICE SHALL BE INSTALLED IN LIEU OF HAY BALES FOR CATCH BASINS LOCATED IN EXISTING PAVED AREAS.

INLET SEDIMENTATION CONTROL DEVICE
NO SCALE

Tighe&Bond

PERMIT SET

Merrymount
Park
Pedestrian
Boardwalk

City of Quincy

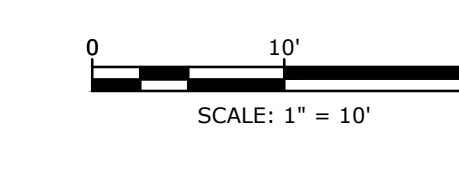
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Massachusetts

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DATE:		04/16/2021
FILE:		Q-0019-048_C-501-CS02.dwg
DRAWN BY:		JAK
CHECKED BY:		BB
APPROVED BY:		DAM

EROSION CONTROL NOTES
& DETAILS

SCALE: AS SHOWN

C-501
SHEET 7 OF XX

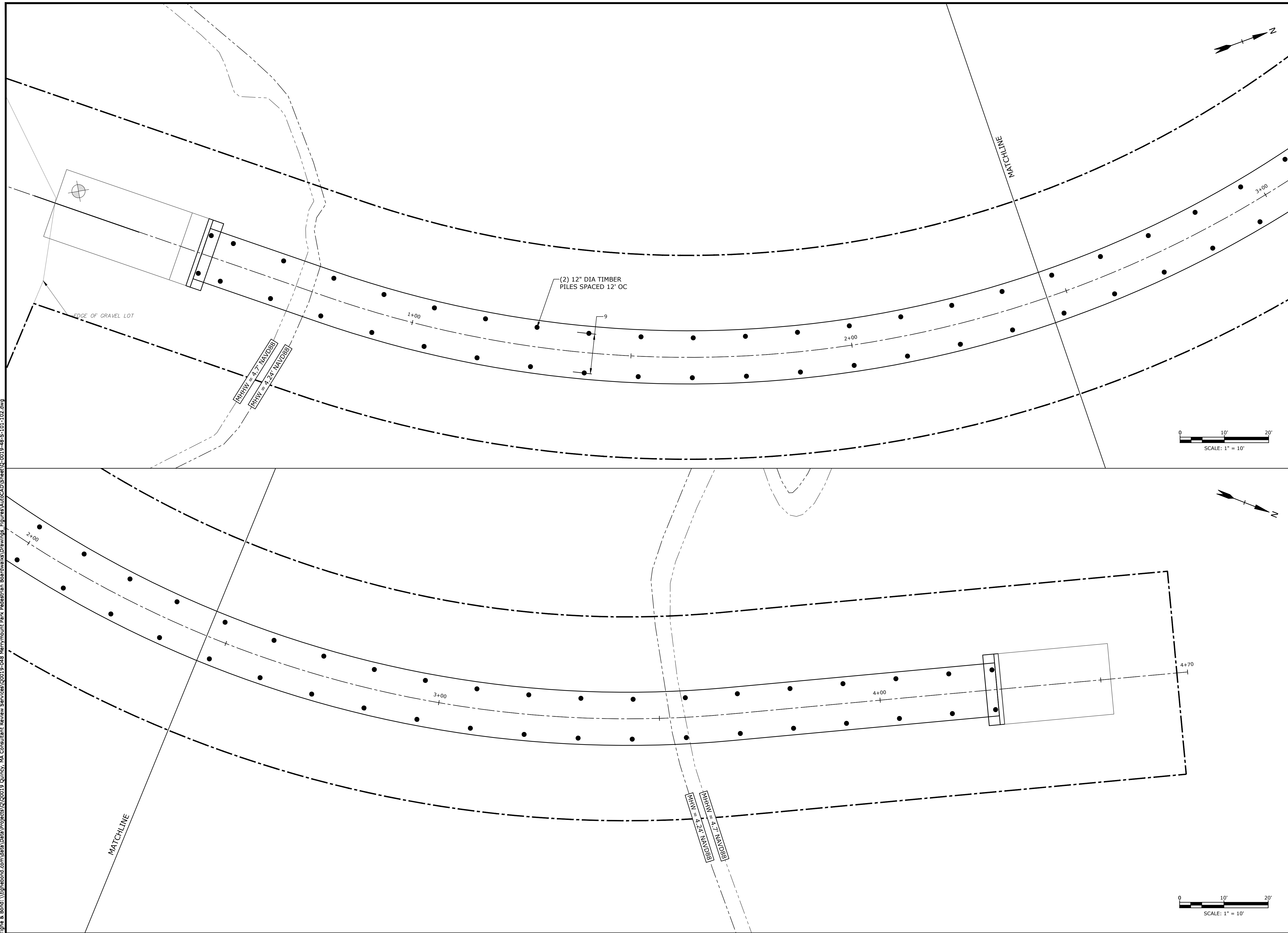
Quincy,
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DATE:		04/16/2022
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DRAWN BY:		JAK
CHECKED BY:		BE
APPROVED BY:		DAM

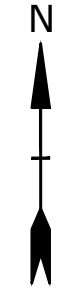
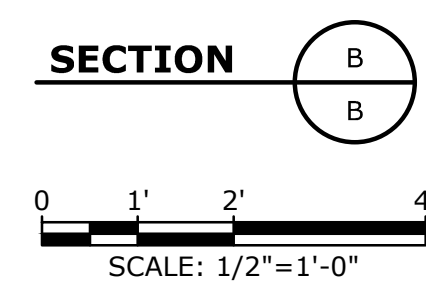
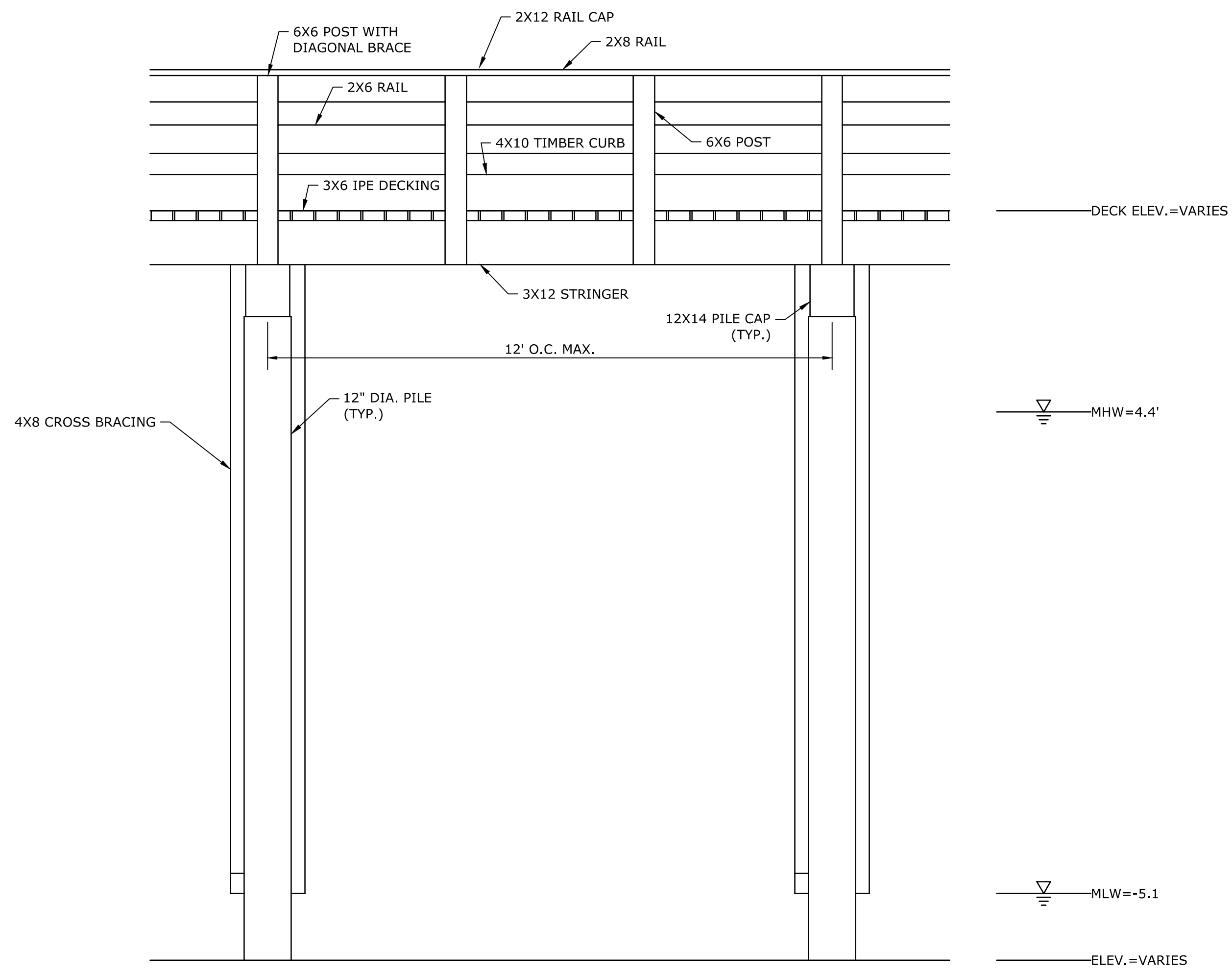
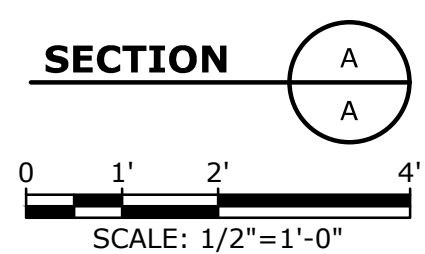
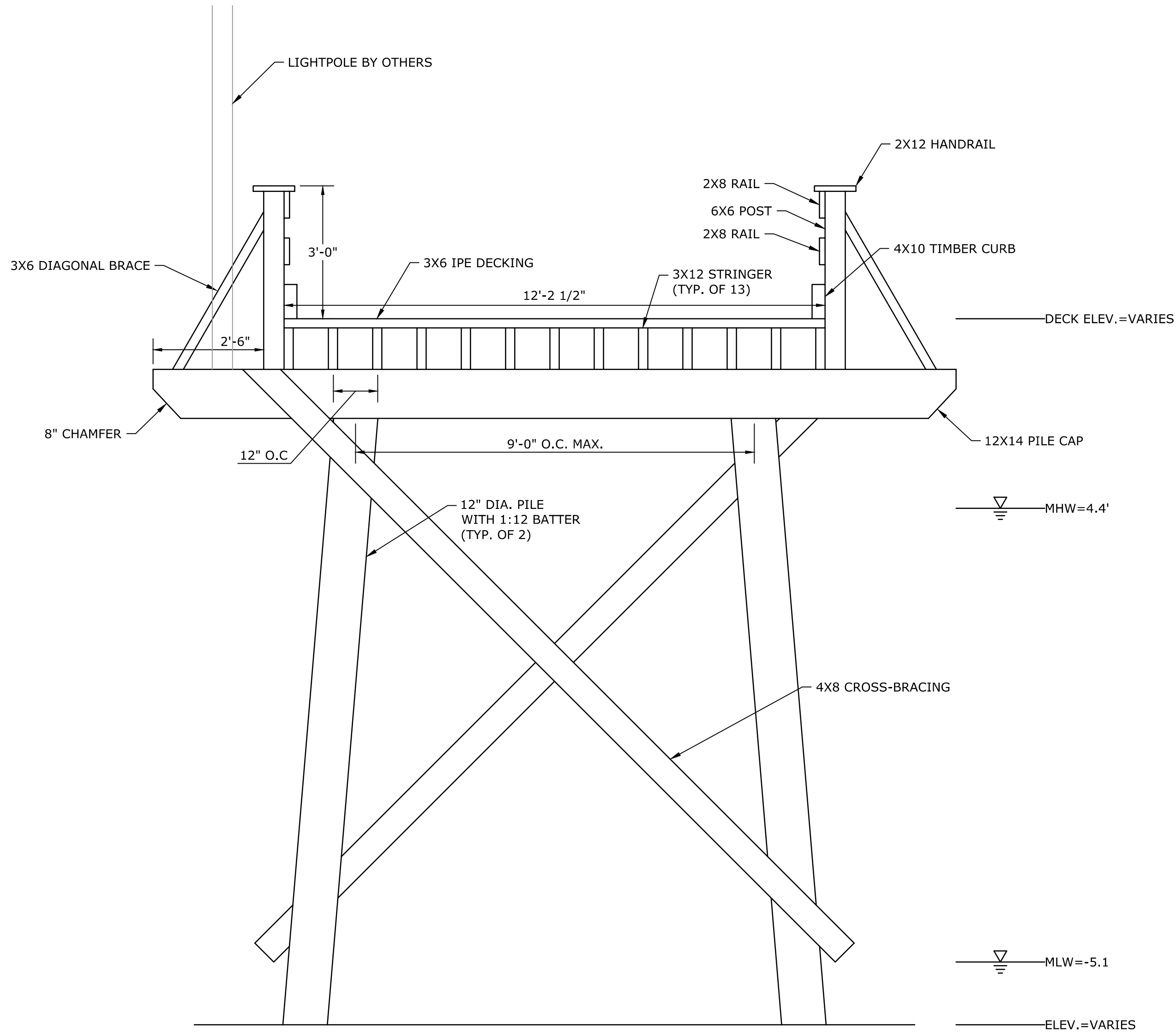
S-101
SHEET 8 OF XX

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SCALE: AS SHOWN



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Merrymount Park Pedestrian Boardwalk
Services: Q0019-048
Merrymount Park Pedestrian Boardwalk
Drawings: Figures AutoCAD Sheet Q-0019-048_S-501-S-50X.dwg



Tighe&Bond

PERMIT SET

**Merrymount
Park
Pedestrian
Boardwalk**

City of Quincy

Quincy,
Massachusetts

MARK	DATE	DESCRIPTION
PROJECT NO:		Q0019-48
DATE:		04/16/2021
FILE:		Q-0019-048_S-501-S-50X.dwg
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CHECKED BY:		BB
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**SUPERSTRUCTURE DETAILS
(1 OF 2)**

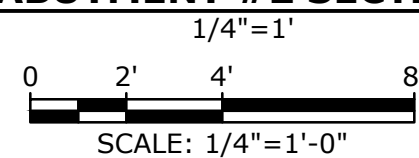
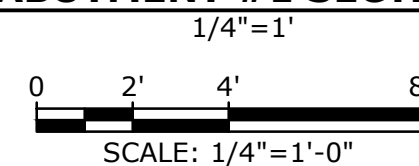
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S-501
SHEET 10 OF XX

**Merrymount
Park
Pedestrian
Boardwalk**
City of Quincy

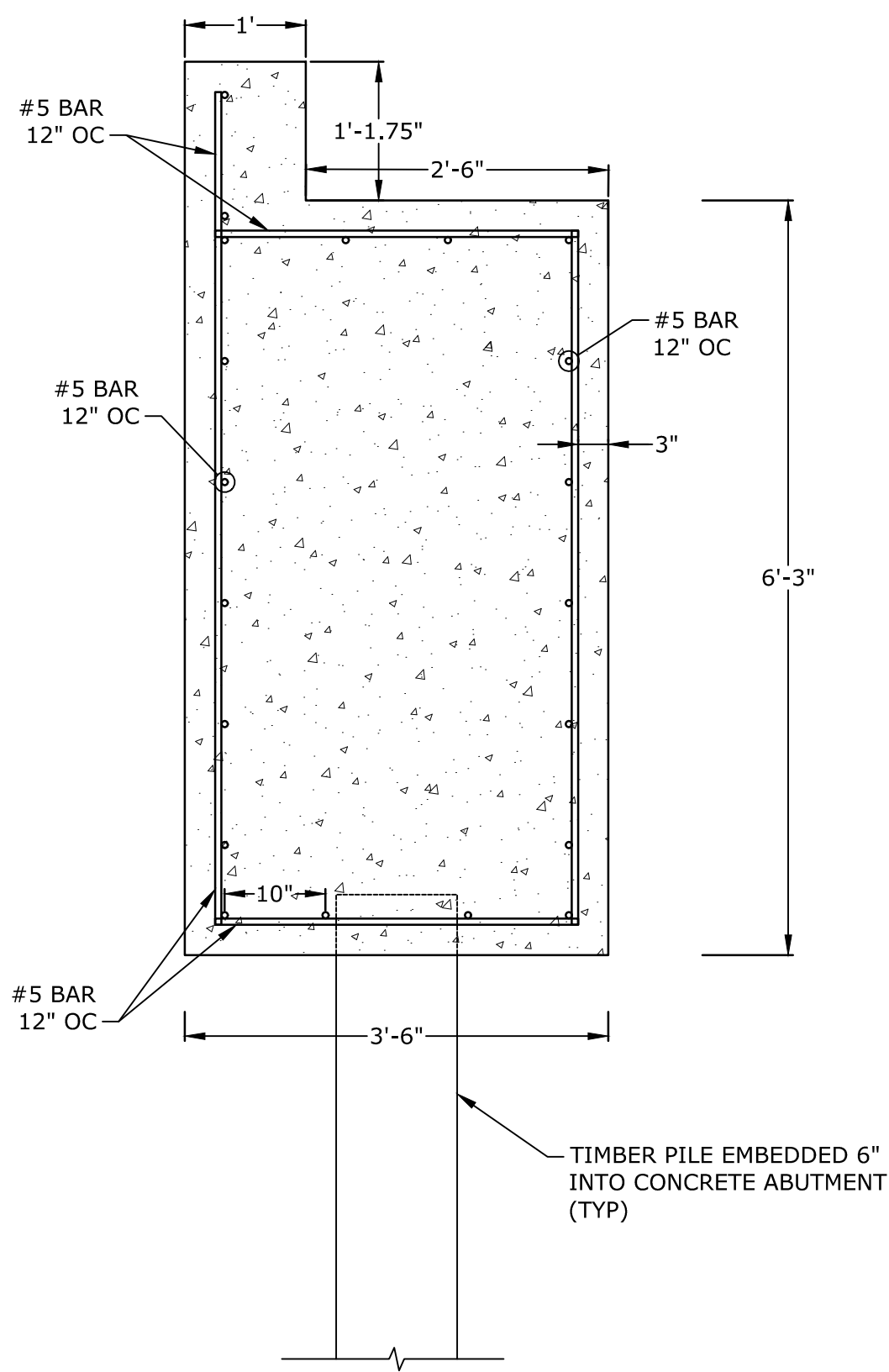
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S-503
SHEET 12 OF XX

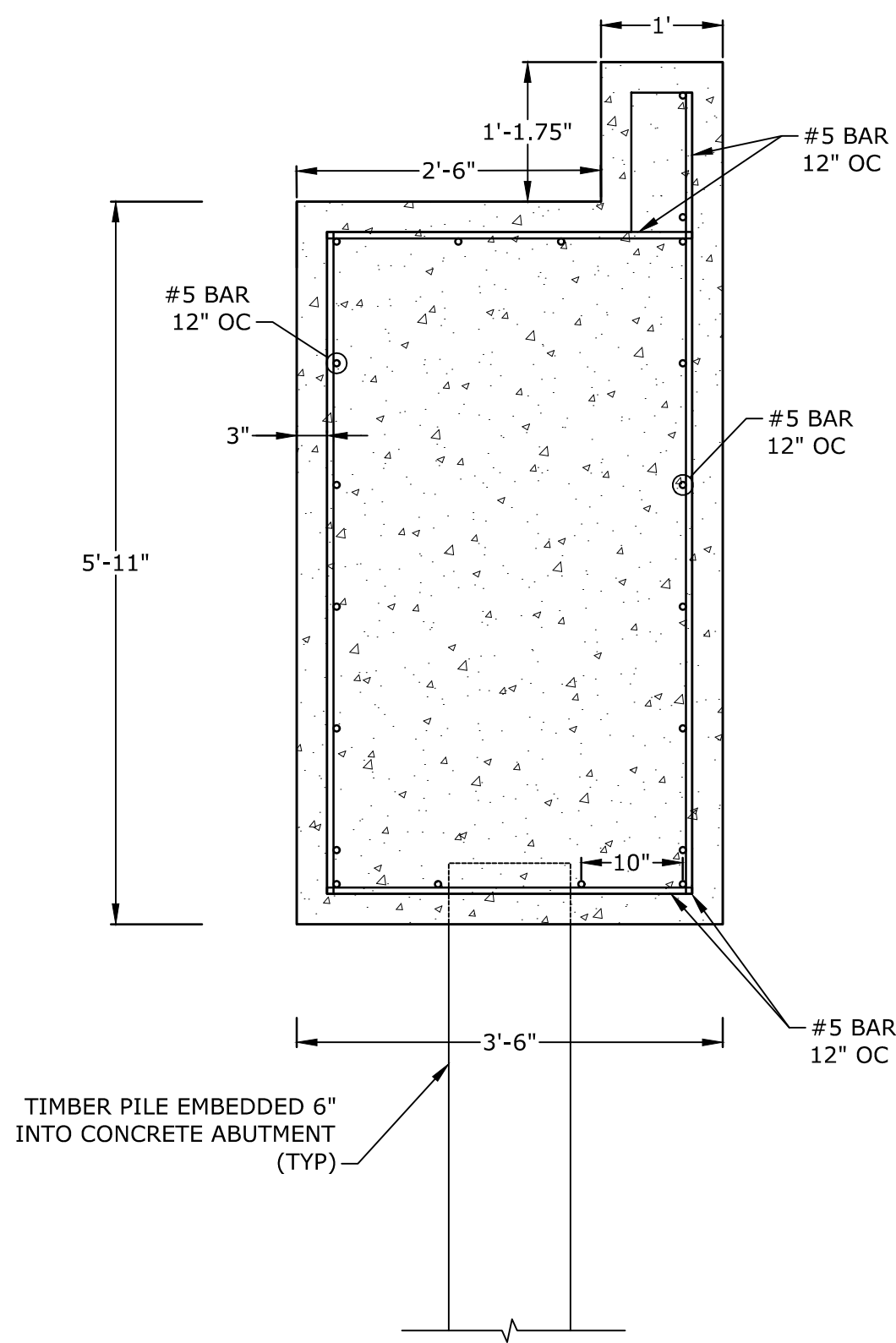


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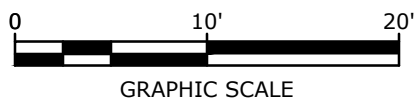
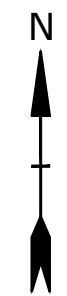
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DETAIL	1
3/4" = 1'	S-503



DETAIL	2
3/4" = 1'	S-503



Tighe&Bond

PERMIT SET

**Merrymount
Park
Pedestrian
Boardwalk**

City of Quincy

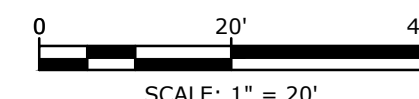
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Massachusetts

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CHECKED BY:		BB
APPROVED BY:		DAM

ABUTMENT DETAILS
(2 OF 2)

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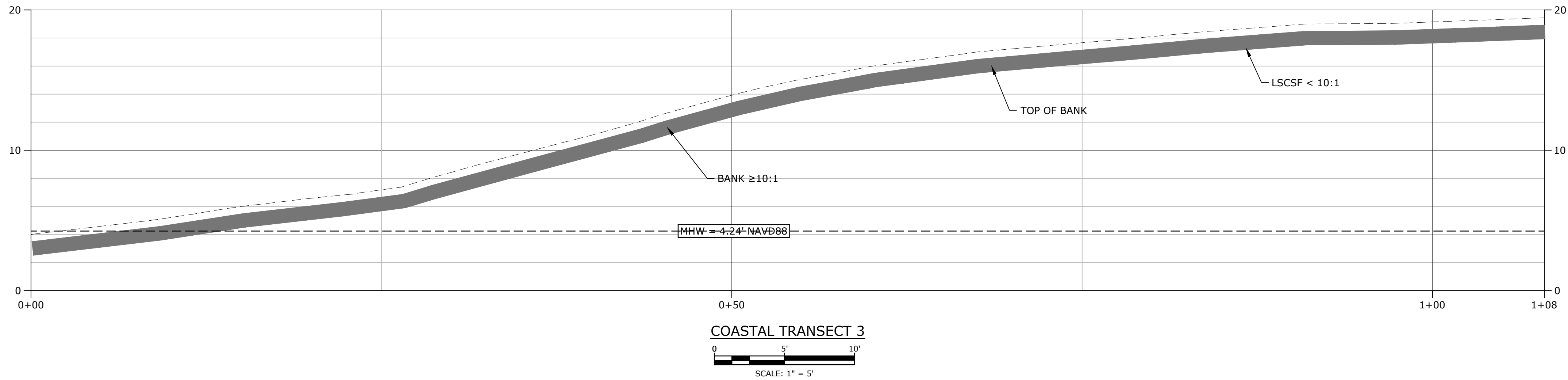
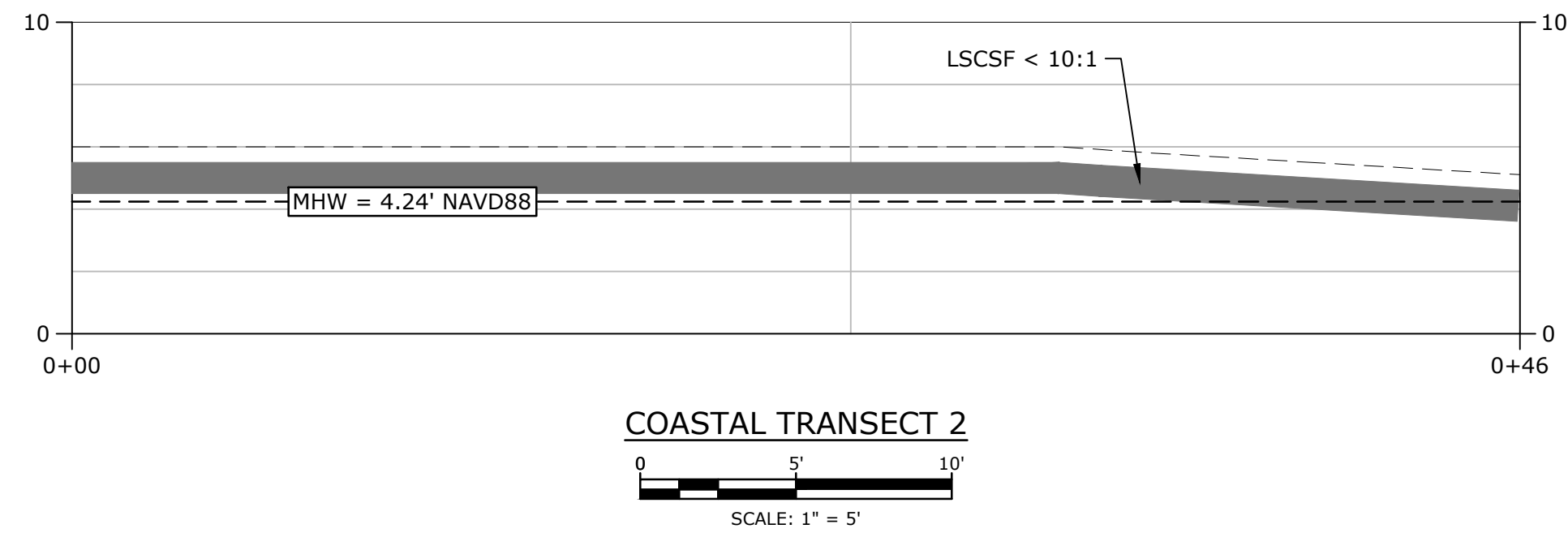
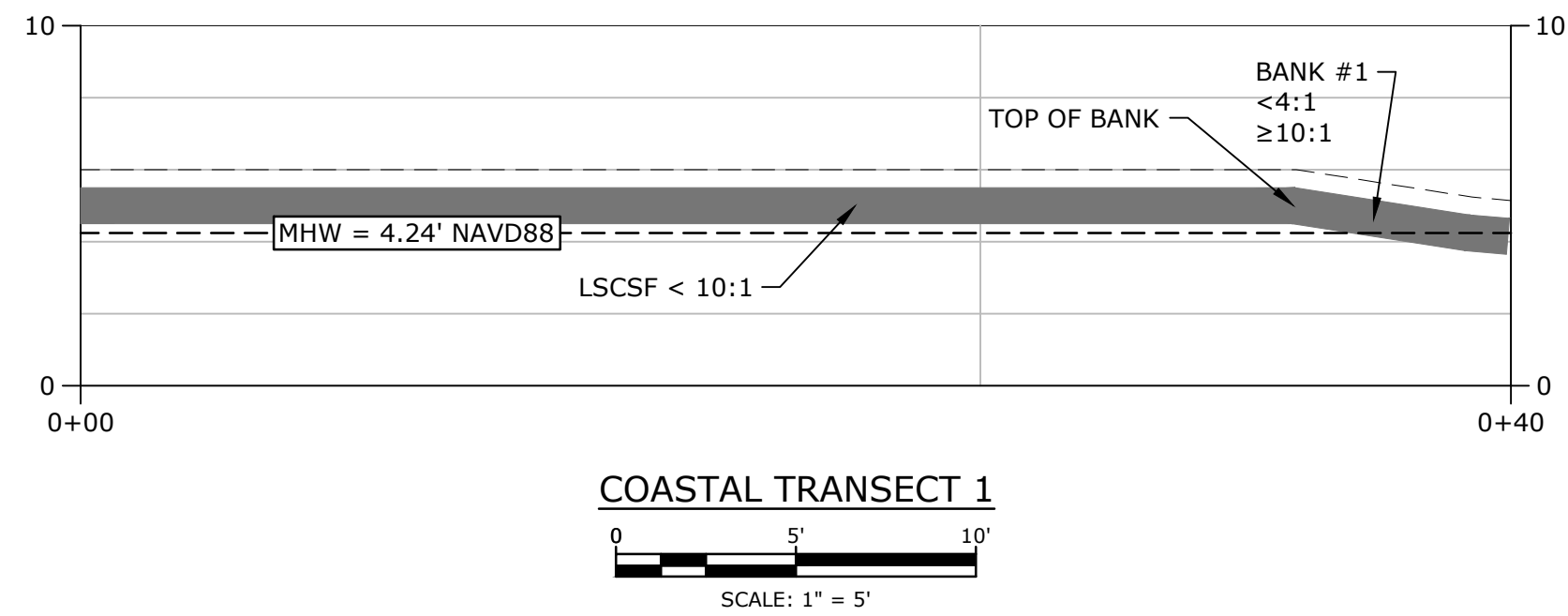
S-504
SHEET 13 OF XX



RESOURCE AREAS		RESOURCE AREAS	
VEGETATED SALTMARSH LIMIT		HIGHEST OBSERVABLE TIDE LINE (HOTL)	
TOP OF BANK			
MEAN HIGHER HIGH WATER			
MEAN HIGH WATER			
FEMA FLOOD ZONE			

P-201
SHEET 14 OF XX

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PERMIT SET

Merrymount
Park
Pedestrian
Boardwalk

City of Quincy

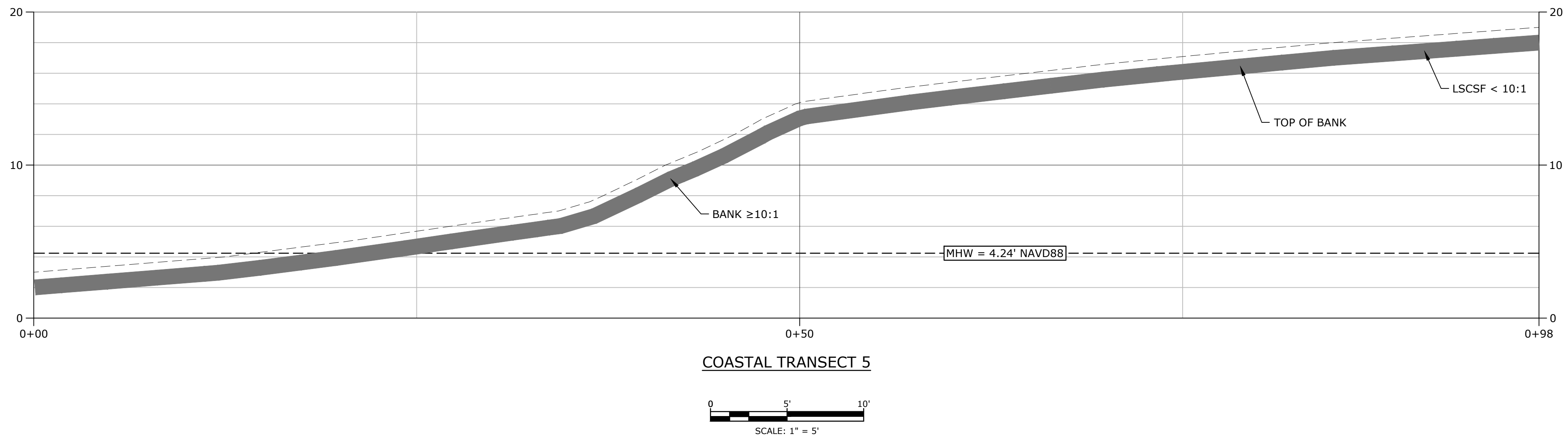
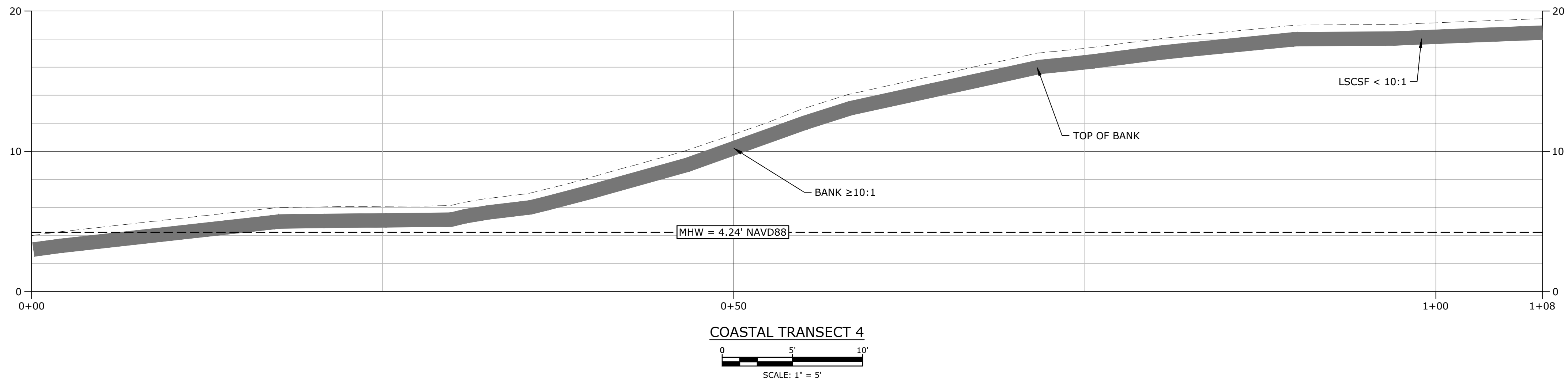
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COASTAL BANK TRANSECTS
(1 OF 3)

SCALE: AS SHOWN

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PERMIT SET

Merrymount Park
Pedestrian Boardwalk

City of Quincy

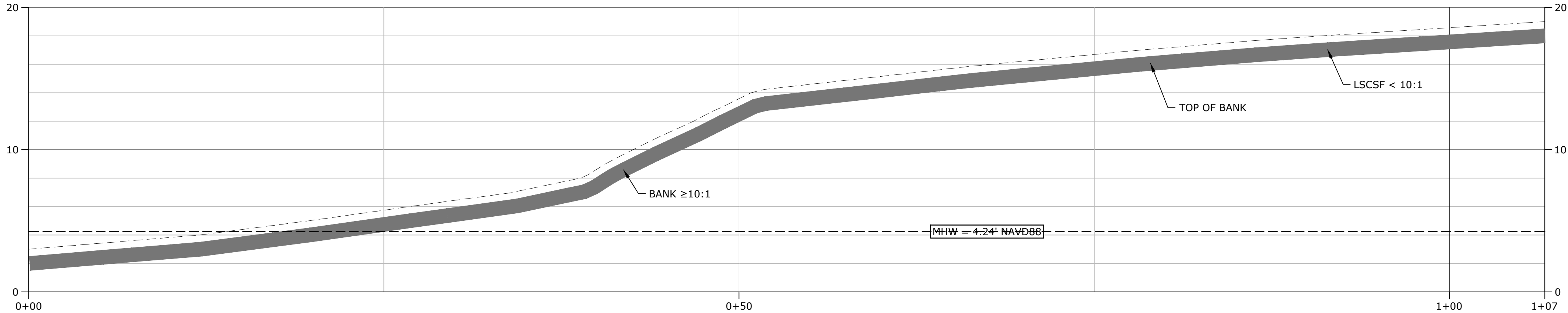
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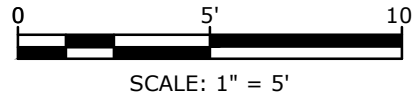
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COASTAL TRANSECT 6



PERMIT SET

Merrymount
Park
Pedestrian
Boardwalk

City of Quincy

Quincy,
Massachusetts

MARK	DATE	DESCRIPTION
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COASTAL BANK TRANSECTS
(3 OF 3)

SCALE: AS SHOWN

