

Notice of Intent

George Wright Irrigation Pump Replacement
Boston, MA

February 2019

Prepared for:
Boston Parks and Recreation Department

Submitted to:
Boston Conservation Commission



Weston & Sampson
Five Centennial Drive
Peabody, MA 01960-7985
www.westonandsampson.com
Tel: 978-532-1900
Fax: 978-977-0100

Boston – George Wright Irrigation Pump Replacement
WSE Project No. 2180447

February 28, 2019

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

Re:*NOI Filing
Irrigation Pump Replacement
George Wright Golf Course*

Dear Members of the Commission:

On behalf of the Boston Parks and Recreation Department, Weston & Sampson Engineers, Inc. is hereby enclosing eight (8) copies (including original) of the Notice of Intent submittal (including 11" x 17" size plans) and an electronic copy to fulfill the requirements of the Massachusetts Wetlands Protection Act, M.G.L. Chapter 131, Section 40 submittal requirements and the City of Boston submittal requirements. This submittal is a formal Notice of Intent for the irrigation pump replacement at the George Wright Golf Course.

As part of the filing, we have attached the following:

- Appendix A: Project Description
- Appendix B: Stormwater Report
- Appendix C: Project Maps
- Appendix D: Contract Specifications
- Appendix E: Abutters List / Notice to Abutters
- Appendix F: Wetlands Memorandum

If you have any questions regarding this submittal, please contact me at (978) 532-1900.

Very truly yours,

WESTON & SAMPSON



Mel Higgins, PWS
Senior Environmental Scientist



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number
Document Transaction Number
Boston
City/Town

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



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

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>420 West Street</u>	<u>Boston</u>	<u>02136</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:		
	<u>42deg15'51.49"N</u>	<u>71deg7'49.21"W</u>
	d. Latitude	e. Longitude
<u>1811338000</u>		
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Robert</u>	<u>Rottenbucher</u>	
a. First Name	b. Last Name	
<u>Boston Parks and Recreation Department</u>		
c. Organization		
<u>1010 Massachusetts Avenue</u>		
d. Street Address		
<u>Boston</u>	<u>MA</u>	<u>02118</u>
e. City/Town	f. State	g. Zip Code
<u>617-635-4505</u>	<u>robert.rottenbucher@boston.gov</u>	
h. Phone Number	i. Fax Number	j. Email Address

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

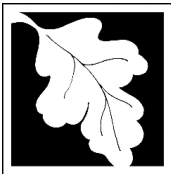
<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Mel</u>	<u>Higgins</u>	
a. First Name	b. Last Name	
<u>Weston & Sampson Engineers</u>		
c. Company		
<u>5 Centennial Drive</u>		
d. Street Address		
<u>Peabody</u>	<u>MA</u>	<u>01960</u>
e. City/Town	f. State	g. Zip Code
<u>978-532-1900</u>	<u>higginsm@wseinc.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>exempt</u>	<u></u>	<u></u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

Replacement of irrigation pumps at George Wright Golf Course

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Suffolk

a. County

55120

c. Book

b. Certificate # (if registered land)

248

d. Page Number

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

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

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



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

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

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

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	
4. <input type="checkbox"/> Restoration/Enhancement	If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.	
	_____	_____
	a. square feet of BVW	b. square feet of Salt Marsh
5. <input type="checkbox"/> Project Involves Stream Crossings		
	_____	_____
	a. number of new stream crossings	b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

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

- a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

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

- 2018 _____
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **
 - (a) Project description (including description of impacts outside of wetland resource area & buffer zone)
 - (b) Photographs representative of the site

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

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



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

- (c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following
1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)
 2. Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____
 3. Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.
3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?
- a. Not applicable – project is in inland resource area only b. Yes No

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

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

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

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



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

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

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
 a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
 b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
 a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
 a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
 a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
 1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 2. A portion of the site constitutes redevelopment
 3. Proprietary BMPs are included in the Stormwater Management System.
 b. No. Check why the project is exempt:
 1. Single-family house
 2. Emergency road repair
 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

George Wright Golf Course Pumping System

a. Plan Title

Weston & Sampson

b. Prepared By

2/13/19

d. Final Revision Date

Laurence F. Keegan, Jr.

c. Signed and Stamped by

1" = 40'

e. Scale

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payor name on check: First Name

7. Payor name on check: Last Name



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

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F. Signatures and Submittal Requirements

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

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

[Handwritten Signature]

1. Signature of Applicant

2/14/2019

2. Date

3. Signature of Property Owner (if different)

[Handwritten Signature]

5. Signature of Representative (if any)

4. Date

2/19/19

6. Date

For Conservation Commission:

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

For MassDEP:

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

Other:

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

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

APPENDIX A

PROJECT DESCRIPTION

Background

Due to the current irrigation pump and pumphouse being outdated, the proponent is requesting the replacement of the current system. The pump is approximately 20 years old, outdated, and working beyond its life expectancy.

Site Description

The project site is located near 420 West Street on already altered area consisting of golf course and paved road. The work area also intersects with the George Wright Golf Course Pond.

Scope of Work

The existing pump station will be demolished and replaced with a new building structure which will include all components including pumps, controls, piping, valves, and associated equipment that are required for a completely operational system. The design will be based on providing a new building, intake and discharge piping. No new impervious area will be added to this site.

The existing suction pipe will be removed and one 12" suction pipe will connect the pump house to a filter on a float in the irrigation pond. This pipe will be underground on land, and suspended four feet below water level in the pond. This pipe will be installed by boat.

Also connected to the new building will be a 6" discharge line and a 10" steel discharge pipe. These will replace the existing 10" PVC pipe, and will connect to the existing irrigation system. A 3" PRV discharge pipe will also connect the new pump house to the pond.

Environmental Considerations

Since the piping will be aboveground, there will be no bank impact due to the removal and replacement of the intake and discharge pipe in the pond. However, approximately three (3) linear feet of bank will be impacted due to the placement of riprap below the discharge outfall. During normal pool elevations, the outfall discharges water into the surface water. However, during low water level events, the outfall will discharge onto the bank which may result in scour. This riprap is being placed to protect the bank from the effects of scour should the bank be exposed during low-elevations. This is considered a resource improvement.

Erosion controls will be placed at the edge of the pond to minimize any sediment migration from the work area into the pond.

\\wse03.local\WSE\Projects\MA\Boston MA\Park Overview Engineering Services\2180447 Task Order #8 (Phase H) - George Wright Irrigation Pumps\Permitting\NOI\response to comments\from concom - responded 2019_05_14\PROJECT DESCRIPTION updated 2019_05_.doc

APPENDIX B



Checklist for Stormwater Report

A. Introduction

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



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

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

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

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

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

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

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



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

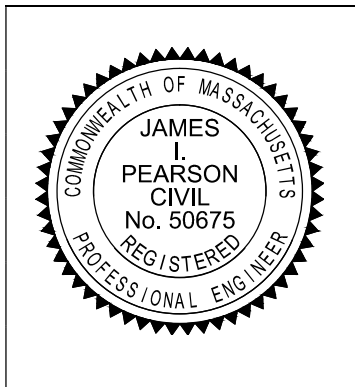
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the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

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature




Signature and Date

2/26/2019

Checklist

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

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



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of “country drainage” versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

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



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

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

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

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

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

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

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

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

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

Stormwater Report
To Be Submitted with the Notice of Intent

Applicant/Project Name: Boston Parks and Recreation/George Wright Irrigation Pump Replacement

Project Address: 420 West St Boston, MA

Application Prepared by:
Firm: Weston & Sampson, Inc.
Registered PE James Pearson, P.E.

Below is an explanation concerning Standards 1-10 as they apply to the Boston Parks and Recreation George Wright Golf Course Irrigation Pumps:

General:

The applicant operates an irrigation pump located inside of a pump house at the above referenced site. Due to the current irrigation pump and pumphouse being outdated, the applicant intends to replace the current system. The pump is approximately 20 years old, outdated, and working beyond its life expectancy.

The existing pump station will be demolished and replaced in-kind with a new building structure which will include all components including pumps, controls, piping, valves, and associated equipment that are required for a completely operational system. The design will be based on providing a new building, intake and discharge piping. No new impervious area will be added to this site.

Standard 1: No New Untreated Discharges

The proposed project will create no new untreated discharges. No new impervious area will be created during this project.

Standard 2: Peak Rate Attenuation

Since there will be no increase in impervious area, post-development (post-improvement) peak discharge rates will not exceed pre-development (pre-improvement) peak discharge rates.

To ensure that the work incorporates the performance standards recommended in the DEP's Stormwater Management Policy, necessary erosion and sedimentation control measures will be utilized during construction. These measures will include compost filter tubes.

Standard 3: Recharge

As noted in the **Standard 2** explanation, the impervious area in the work area will not be increased at the completion of the project. Therefore, recharge rates will not change in the work area at the end of the project.

Standard 4: Water Quality

The proposed work will not change water quality at the site. There will be no increase in stormwater flow. During the project, appropriate BMPs will be used to minimize sedimentation and soil erosion.

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

Not Applicable. There are no LUHPPLs in the work area.

Standard 6: Critical Areas

There will be no new discharge to critical areas.

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

This is a re-development project.

Standard 8: Construction Period Pollution Prevention and Erosion and Sediment Control

A detailed Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan is included. To ensure that the work incorporates the performance standards recommended in the DEP's Stormwater Management Policy, necessary erosion and sedimentation control measures will be utilized during construction. These measures will include compost filter tubes.

Standard 9: Operation and Maintenance Plan

An operations and maintenance plan is not needed since there will not be any new stormwater management systems put in place in the project work area.

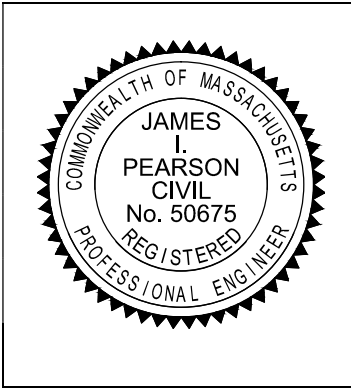
Standard 10: Prohibition of Illicit Discharges

By the nature of the proposed work, there will be no illicit discharges. There will be no opportunity for illicit discharges into the system.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including any relevant soil evaluations, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan, the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature




Signature and Date

2/26/2019

Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan

SECTION 1: Introduction

Due to the current irrigation pump and pumphouse being outdated, the proponent is requesting the replacement of the current system. The pump is approximately 20 years old, outdated, and working beyond its life expectancy.

The existing pump station will be demolished and replaced with a new building structure which will include all components including pumps, controls, piping, valves, and associated equipment that are required for a completely operational system. The design will be based on providing a new building, intake and discharge piping. No new impervious area will be added to this site.

As part of this project, this "Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan" has been created to ensure that no further disturbance to the wetland resource is created during the project.

SECTION 2: Construction Period Pollution Prevention Measures

Best Management Practices (BMPs) will be utilized as Construction Period Pollution Prevention Measures to reduce potential pollutants and prevent any off-site discharge. The objectives of the BMPs for construction activity are to minimize the disturbed areas, stabilize any disturbed areas, control the site perimeter and retain sediment. Both erosion and sedimentation controls and non-stormwater best management measures will be used to minimize site disturbance and ensure compliance with the performance standards of the WPA and Stormwater Standards. Measures will be taken to minimize the area disturbed by construction activities to reduce the potential for soil erosion and stormwater pollution problems. In addition, good housekeeping measures will be followed for the day-to-day operation of the construction site under the control of the contractor to minimize the impact of construction. This section describes the control practices that will be in place during construction activities. Recommended control practices will comply with the standards set in the MA DEP Stormwater Policy Handbook.

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

In order to minimize disturbed areas, work will be completed within well-defined work limits. These work limits are shown on the construction plans. The Contractor shall not disturb native vegetation in the undisturbed wetland area without prior approval from the Engineer. The Contractor will be responsible to make sure that all of their workers and any subcontractors know the proper work limits and do not extend their work into the undisturbed areas. The protective measures are described in more detail in the following sections.

2.2 Control Stormwater Flowing onto and through the project

Construction areas adjacent to wetland resources will be lined with compost filter tubes. The tubes will be inspected daily, and accumulated silt will be removed as needed.

2.3 Stabilize Soils

The Contractor shall limit the area of land which is exposed and free from vegetation during construction. In areas where the period of exposure will be greater than two (2) months, mulching, the use of erosion control mats, or other protective measures shall be provided as specified.

The Contractor shall take account of the conditions of the soil where erosion control seeding will take place to ensure that materials used for re-vegetation are adaptive to the sediment control.

2.4 Proper Storage and Cover of Any Stockpiles

The location of the Contractor's storage areas for equipment and/or materials shall be upon cleared portions of the job site or areas to be cleared as a part of this project and shall require written approval of the Engineer.

Adequate measures for erosion and sediment control such as the placement of compost filter tubes around the downstream perimeter of stockpiles shall be employed to protect any downstream areas from siltation.

There shall be no storage of equipment or materials in areas designated as wetlands.

The Engineer may designate a particular area or areas where the Contractor may store materials used in his operations.

2.5 Perimeter Controls and Sediment Barriers

Erosion control lines as described in Section 5 will be utilized to ensure that sedimentation does not occur outside the perimeter of the work area.

2.6 Storm Drain Inlet Protection

There are no storm drains in the work area.

2.7 Retain Sediment On-Site

The Contractor will be responsible to monitor erosion control measures. Whenever necessary the Contractor will clear sediment from the compost filter tubes that have been silted up during construction. Daily monitoring should be conducted using the attached Monitoring Form.

The following good housekeeping practices will be followed on-site during the construction project:

2.8 Material Handling and Waste Management

Materials stored on-site will be stored in a neat, orderly manner in appropriate containers. Materials will be kept in their original containers with the original manufacturer's label. Substances will not be mixed with one another unless recommended by the manufacturer.

Waste materials will be collected and stored in a securely lidded metal container from a

licensed management company. The waste and any construction debris from the site will be hauled off-site daily and disposed of properly. The contractor will be responsible for waste removal. Manufacturer's recommendations for proper use and disposal will be followed for materials. Sanitary waste will be collected from the portable units a minimum of once a week, by a licensed sanitary waste management contractor.

2.9 Designated Washout Areas

The Contractor shall use washout facilities at their own facilities, unless otherwise directed by the Engineer.

2.10 Proper Equipment/Vehicle Fueling and Maintenance Practices

On-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the risk of leakage. To ensure that leaks on stored equipment do not contaminate the site, oil-absorbing mats will be placed under oil-containing equipment during storage. Regular fueling and service of the equipment may be performed using approved methods and with care taken to minimize chance of spills. Repair of equipment or machinery within the 100' water resources area shall not be allowed without the prior approval of the Engineer. Any petroleum products will be stored in tightly sealed containers that are clearly labeled with spill control pads/socks placed under/around their perimeters.

2.11 Equipment/Vehicle Washing

The Contractor will be responsible to ensure that no equipment is washed on-site.

SECTION 3: Spill Prevention and Control Plan

The Contractor will be responsible for preventing spills in accordance with the project specifications and applicable federal, state and local regulations. The Contractor will identify a properly trained site employee, involved with the day-to-day site operations to be the spill prevention and cleanup coordinator. The name(s) of the responsible spill personnel will be posted on-site. Each employee will be instructed that all spills are to be reported to the spill prevention and cleanup coordinator.

3.1 Spill Control Equipment

Spill control/containment equipment will be kept in the Work Area. Materials and equipment necessary for spill cleanup will be kept either in the Work Area or in an otherwise accessible on-site location. Equipment and materials will include, but not be limited to, absorbent booms/mats, brooms, dust pans, mops, rags, gloves, goggles, sand, plastic and metal containers specifically for this purpose. It is the responsibility of the Contractor to ensure the inventory will be readily accessible and maintained.

3.2 Notification

Workers will be directed to inform the on-site supervisor of a spill event. The supervisor will assess the incident and initiate proper containment and response procedures immediately upon notification. Workers should avoid direct contact with spilled materials during the containment procedures. Primary notification of a spill should be made to the local Fire Department and Police Departments. Secondary Notification will be to the certified cleanup contractor if deemed necessary by Fire and/or Police personnel. The third level of notification (within 1 hour) is to the DEP or municipality's Licensed Site Professional (LSP).

The specific cleanup contractor to be used will be identified by the Contractor prior to commencement of construction activities.

3.3 Spill Containment and Clean-Up Measures

Spills will be contained with granular sorbent material, sand, sorbent pads, booms or all of the above to prevent spreading. Certified cleanup contractors should complete spill cleanup. The material manufacturer's recommended methods for spill cleanup will be clearly posted and on-site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

3.4 Hazardous Materials Spill Report

The Contractor will report and record any spill. The spill report will present a description of the release, including the quantity and type of material, date of the spill, circumstances leading to the release, location of spill, response actions and personnel, documentation of notifications and corrective measures implemented to prevent reoccurrence.

This document does not relieve the Contractor of the Federal reporting requirements of 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302 and the State requirements specified under the Massachusetts Contingency Plan (M.C.P) relating to spills or other releases of oils or hazardous substances. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302, occurs during a twenty-four (24) hour period, the Contractor is required to comply with the response requirements of the above mentioned regulations. Spills of oil or hazardous material in excess of the reportable quantity will be reported to the National Response Center (NRC).

SECTION 4: Contact Information/Responsible Parties

Owner/Operator:

Chief Engineer
Boston Parks and Recreation Department
Robert Rottenbucher
1010 Massachusetts Avenue
Boston, MA 02118
617-635-4505

Engineer:

James Pearson, PE
Weston & Sampson Engineers, Inc.
5 Centennial Drive
Peabody, MA 01960
978-532-1900

Site Inspector:

TBD

Contractor:

TBD

SECTION 5: Erosion and Sedimentation Control

Erosion and Sedimentation Control Drawings can be found in the attached project plans. In addition a technical specification (***Section 01570 Wetlands Protection and Erosion Control***) has been included as part of Appendix D, which details all Erosion and Sedimentation controls.

SECTION 6: Site Development Plan

The Site Development Plan is included in the attached plans.

SECTION 7: Operation and Maintenance of Erosion Control

The erosion control measures will be installed as detailed in the technical specification ***01570 Environmental Protection***. If there is a failure to the controls the Contractor, under the supervision of the Engineer, will be required to stop work until the failure is repaired.

Periodically throughout the work, whenever the Engineer deems it necessary, the sediment that has been deposited against the controls will be removed to ensure that the controls are working properly.

SECTION 8: Inspection Schedule

During construction, the erosion and sedimentation controls will be inspected daily. Once

the Contractor is selected, an onsite inspector will be selected to work closely with the Engineer to ensure that erosion and sedimentation controls are in place and working properly. An Inspection Form is included.

Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan

George Wright Irrigation Pump Replacement

Inspection Form

Inspected By: _____ Date: _____ Time: _____

YES	NO	DOES NOT APPLY	ITEM
			Do any erosion/siltation control measures require repair or clean out to maintain adequate function?
			Is there any evidence that sediment is leaving the site and entering the wetlands?
			Are any temporary soil stockpiles or construction materials located in non-approved areas?
			Are on-site construction traffic routes, parking, and storage of equipment and supplies located in areas not specifically designed for them?

Specific location, current weather conditions, and action to be taken:

Other Comments:

Pending the actions noted above I certify that the site is in compliance with the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan.

Signature: _____ Date: _____

APPENDIX C

Path: \\wse03\local\WSE\Dept\Water\ERMAP\GIS - Constraints\Mapping\Boston\George Wright Golf Course\Figure 1 - Locus.mxd User: Gaspara Saved: 2/4/2019 3:30:31 PM Opened: 2/4/2019 3:38:09 PM

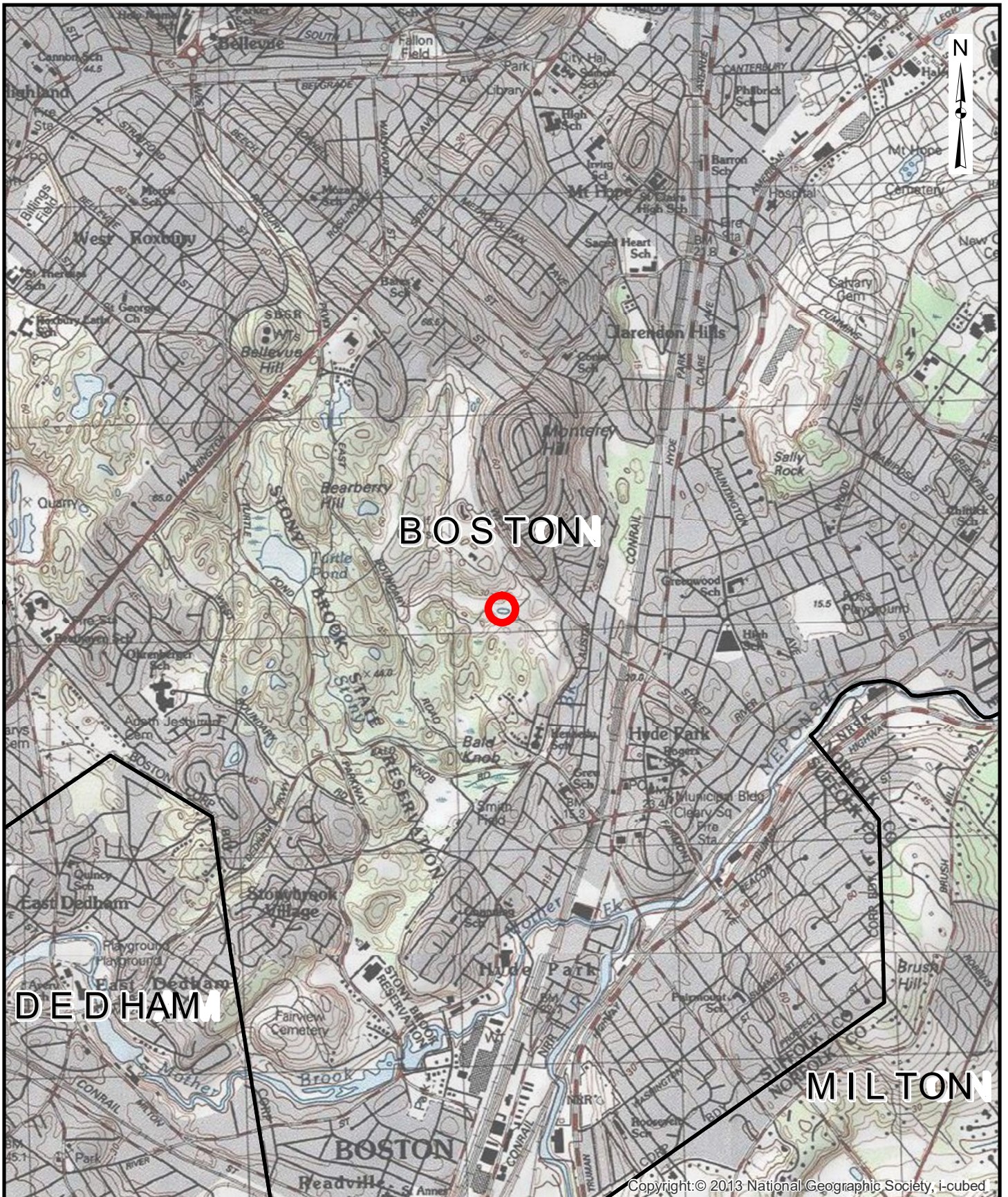
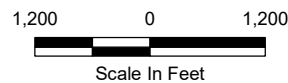


FIGURE 1
George Wright Golf Course
Boston, Massachusetts









Locus Map

 Work Area



Weston & Sampson

Copyright © 2013 National Geographic Society, i-cubed

-  Work Area
-  Perennial Stream
-  Intermittent Stream
-  NHESP Certified Vernal Pools
-  DEP Wetlands
-  NHESP Priority Habitats of Rare Species
-  NHESP Estimated Habitats of Rare Wildlife
-  ACECs

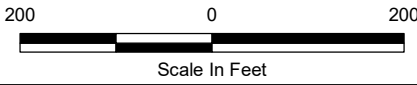


DeForest Street



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE 2
Goerge Wright Golf Course
Boston, Massachusetts
ENVIRONMENTAL RECEPTORS

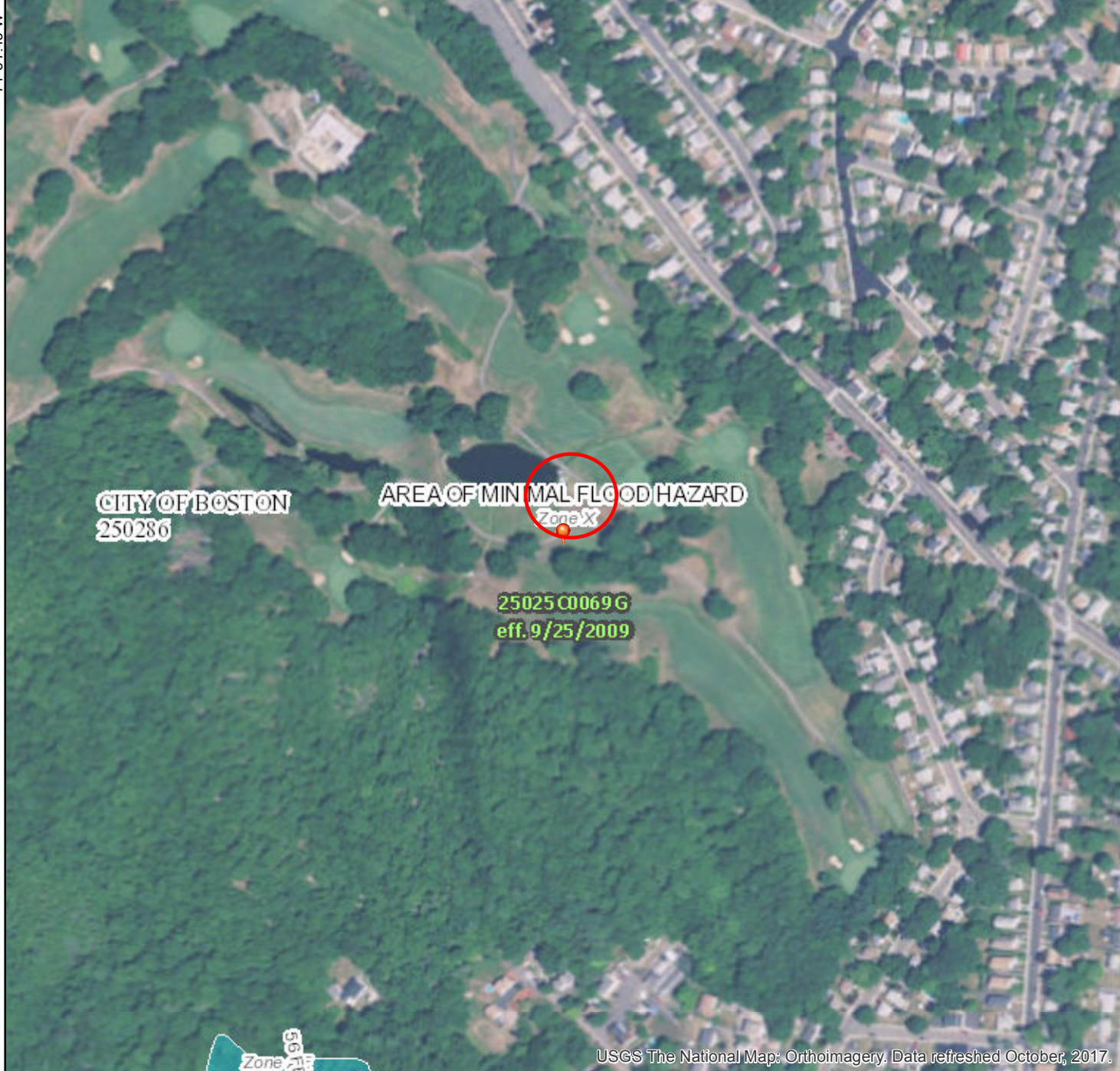


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National Flood Hazard Layer FIRMette



42° 16' 3.05" N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
		Area of Minimal Flood Hazard <i>Zone X</i>

OTHER AREAS		Effective LOMRs
		Area of Undetermined Flood Hazard <i>Zone D</i>
		NO SCREEN

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
OTHER FEATURES		Profile Baseline
		Hydrographic Feature

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **1/31/2019 at 12:33:39 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

USGS The National Map: Orthoimagery. Data refreshed October, 2017.

42° 15' 36.42" N

71° 7' 30.00" W

APPENDIX D

SECTION 01570

ENVIRONMENTAL PROTECTION

PART 1 – GENERAL

1.01 DESCRIPTION:

- A. The work covered by this section of the specifications consists of furnishing all labor, materials, tools and equipment and performing all work required for the prevention of environmental pollution during and as a result of construction operations under this contract.
- B. The requirements set forth in this section of the specifications apply to cross-country areas, river and stream crossings, and construction in and adjacent to wetlands, unless otherwise specifically stated.
- C. All work under this Contract shall be in accordance with the Conservation Commissions' Orders of Conditions as well as any conditional requirements applied, all of which are attached to Section 00890, PERMITS.
- D. Prior to commencement of work, the Contractor shall meet with representatives of the Engineer to develop mutual understandings relative to compliance of the environmental protection program.

1.02 SUBMITTALS:

- A. The Contractor shall submit for approval six sets of details and literature fully describing environmental protection methods to be employed in carrying out construction activities within 100 feet of wetlands or across areas designated as wetlands.

PART 2 – PRODUCTS

2.01 COMPOST FILTER TUBES

- A. Compost filter tubes shall be a tubular filter sock of mesh fabric. The fabric will have openings of between 1/8" to 1/4" diameter. The mesh material will either photo degrade within one year or be made of nylon with a life expectancy of 24 months. The sock shall be filled with a mix of composted leaf mulch, bark mulch and wood chips that have been composted for at least one year. The sock will have a minimum diameter of 12-inches.

PART 3- EXECUTION

3.01 NOTIFICATION AND STOPPAGE OF WORK:

- A. The Engineer will notify the Contractor in writing of any non-compliance with the provisions of the Order of Conditions. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails to act promptly, the Owner may order stoppage of all or part of the work through the Engineer until satisfactory corrective action has been taken. No claim for an extension of time or for excess costs or damage incurred by the Contractor as a result of time lost due to any stop work orders shall be made unless it was later determined that the Contractor was in compliance.

3.02 AREA OF CONSTRUCTION ACTIVITY:

- A. Insofar as possible, the Contractor shall confine his construction activities to those areas defined by the plans and specifications. All land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction at least equal to that which existed prior to work under this contract.

3.03 PROTECTION OF WATER RESOURCES:

- A. The Contractor shall not pollute streams, lakes or reservoirs with fuels, oils, bitumens, calcium chloride, acids or other harmful materials. It is the Contractor's responsibility to comply with all applicable Federal, State, County and Municipal laws regarding pollution of rivers and streams.
- B. Special measures should be taken to insure against spillage of any pollutants into public waters.

3.04 PROTECTING AND MINIMIZING EXPOSED AREAS:

- A. The Contractor shall limit the area of land which is exposed and free from vegetation during construction. In areas where the period of exposure will be greater than two (2) months, temporary vegetation, mulching or other protective measures shall be provided as specified.
- B. The Contractor shall take account of the conditions of the soil where temporary cover crop will be used to insure that materials used for temporary vegetation are adaptive to

the sediment control. Materials to be used for temporary vegetation shall be approved by the Engineer.

3.05 LOCATION OF STORAGE AREAS:

- A. The location of the Contractor's storage areas for equipment and/or materials shall be upon cleared portions of the job site or areas to be cleared as a part of this project, and shall require written approval of the Engineer. Plans showing storage facilities for equipment and materials shall be submitted for approval of the Engineer.
- B. No excavated materials or materials used in backfill operations shall be deposited within a minimum distance of one hundred (100) feet of any watercourse or any drainage facility. Adequate measures for erosion and sediment control such as the placement of compost filter tubes around the downstream perimeter of stockpiles shall be employed to protect any downstream areas from siltation.
- C. There shall be no storage of equipment or materials in areas designated as wetlands.
- D. The Engineer may designate a particular area or areas where the Contractor may store materials used in his operations.

3.06 PROTECTION OF LANDSCAPE:

- A. The Contractor shall not deface, injure, or destroy trees or shrubs nor remove or cut them without written authority from the Owner. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized by the Engineer. Excavating machinery and cranes shall be of suitable type and be operated with care to prevent injury to trees which are not to be removed, particularly overhanging branches and limbs. The Contractor shall, in any event, be responsible for any damage resulting from such use.
- B. Branches, limbs, and roots shall not be cut except by permission of the Engineer. All cutting shall be smoothly and neatly done without splitting or crushing. When there is unavoidable injury to branches, limbs and trunks of trees, the injured portions shall be neatly trimmed and covered with an application of grafting wax or tree healing paint as directed.
- C. Where, in the opinion of the Engineer, trees may possibly be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or by his blasting or other operations, the Engineer may require the Contractor to adequately protect such trees by placing boards, planks, poles or fencing around them. Any trees or landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the expense of the Contractor. The

Engineer will decide what method of restoration shall be used, and whether damaged trees shall be treated and healed or removed and disposed of.

- D. Cultivated hedges, shrubs, and plants which could be injured by the Contractor's operations shall be protected by suitable means or shall be dug up, balled and temporarily replanted and maintained. After construction operations have been substantially completed, they shall be replanted in their original positions and cared for until growth is re-established. If cultivated hedges, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced by items of a kind and quality at least equal to that existing at the start of the work.

3.07 COMPOST FILTER TUBES

- A. Compost filter tubes shall be a tubular filter sock of mesh fabric. The fabric will have openings of between 1/8" to 1/4" diameter. The mesh material will either photo degrade within one year or be made of nylon with a life expectancy of 24 months. The sock shall be filled with a mix of composted leaf mulch, bark mulch and wood chips that have been composted for at least one year. The sock will have a minimum diameter of 12-inches.

END OF SECTION

\\wse03.local\WSE\Projects\MA\Boston MA\Park Overview Engineering Services\2180447 to #8 (Phase H) - George Wright Irrigation Pumps\Permitting\NOI\Appendix D Specs\SECTION 01570 - Environmental Protection.docx

SECTION 01740

CLEANING UP

PART 1 - GENERAL

1.01 DESCRIPTION:

The Contractor must employ at all times during the progress of its work adequate cleanup measures and safety precautions to prevent injuries to persons or damage to property. The Contractor shall immediately, upon request by the Engineer provide adequate material, equipment and labor to cleanup and make safe any and all areas deemed necessary by the Engineer.

1.02 RELATED WORK:

- A. Section 00700 GENERAL CONDITIONS
- B. Section 01110 CONTROL OF WORK AND MATERIALS
- C. Section 01140 SPECIAL PROVISIONS
- D. Section 01570 ENVIRONMENTAL PROTECTION

PART 2 - PRODUCTS

Not applicable

PART 3 - EXECUTION

3.01 DAILY CLEANUP:

- A. The Contractor shall clean up, at least daily, all refuse, rubbish, scrap and surplus material, debris and unneeded construction equipment resulting from the construction operations and

sweep the area. The site of the work and the adjacent areas affected thereby shall at all times present a neat, orderly and workmanlike appearance.

- B. Upon written notification by the Engineer, the Contractor shall within 24 hours clean up those areas, which in the Engineer's opinion are in violation of this section and the above referenced sections of the specifications.
- C. If in the opinion of the Engineer, the referenced areas are not satisfactorily cleaned up, all other work on the project shall stop until the cleanup is satisfactory.

3.02 MATERIAL OR DEBRIS IN DRAINAGE FACILITIES:

- A. Where material or debris has washed or flowed into or has been placed in existing watercourses, ditches, gutters, drains, pipes, structures, such material or debris shall be entirely removed and satisfactorily disposed of during progress of the work, and the ditches, channels, drains, pipes, structures, and work shall, upon completion of the work, be left in a clean and neat condition.

3.03 REMOVAL OF TEMPORARY BUILDINGS, STRUCTURES AND EQUIPMENT:

- A. On or before completion of the work, the Contractor shall, unless otherwise specifically required or permitted in writing, tear down and remove all temporary buildings and structures it built; shall remove all temporary works, tools and machinery or other construction equipment it furnished; shall remove all rubbish from any grounds which it has occupied; shall remove silt fences and hay bales used for trapping sediment; and shall leave the roads and all parts of the property and adjacent property affected by its operations in a neat and satisfactory condition.

3.04 RESTORATION OF DAMAGED PROPERTY:

- A. The Contractor shall restore or replace, when and as required, any property damaged by its work, equipment or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk and landscaping work. Materials, equipment, and methods for such restoration shall be as approved by the Engineer.

3.05 FINAL CLEANUP:

- A. Before acceptance by the Owner, the Contractor shall perform a final cleanup to bring the construction site to its original or specified condition. This cleanup shall include removing all trash and debris off of the premises. Before acceptance, the Engineer shall approve the condition of the site.

END OF SECTION

APPENDIX E

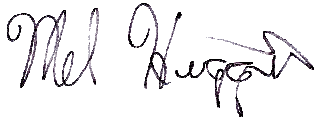
AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

I, Mel Higgins, hereby certify under the Pains and Penalties of Perjury that on May 16, 2019 I gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws, Chapter 131, Section 40, and the DEP Guide to Abutter Notification dated, April 8, 1994, in connection with the following matter:

A Notice of Intent has been filed under the Massachusetts Wetlands Protection Act by the Boston Parks and Recreation with the Boston Conservation Commission on May 16, 2019 for property located at George Wright Golf course on West Street in Boston.

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



Name: Mel Higgins
Title: Senior Environmental Scientist
Organization: Weston & Sampson Engineers, Inc

May 16, 2019
DATE

Notification to Abutters Under the Massachusetts Wetlands Protection Act

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following:

A. The name of the applicant is: **Boston Parks and Recreation Department
Robert Rottenbucher
1010 Massachusetts Avenue
Boston, MA 02118**

B. The name of the owner is: **same as above**

C. The applicant has filed a Notice of Intent with the **Boston Conservation Commission** seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40). **The Work includes the replacement of irrigation pumps at George Wright Golf Course.**

D. The address of the lot(s) where the activity is proposed: **off West Street**

E. Copies of the Notice of Intent may be examined at **1 City Hall Sq** between the hours of **8:00 AM** and **5:00 PM** on **Monday – Friday**. For more information call the Boston Conservation Commission at **617-635-3850**

F. Information regarding the project, date, time and place of the public hearing may be obtained from Weston & Sampson Engineers, by contacting Jeremy Peck at **978-532-1900** between the hours of **8:00 – 5:00** on the following days of the week: **Monday – Friday** or the Boston Conservation Commission at **617-635-3850** between the hours of **8:00 AM** and **5:00 PM** on **Monday – Friday**.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days prior to the hearing date at: <https://www.boston.gov/public-notices>

NOTE: Notice of the meeting of the Conservation Commission, including its date, time and place will be posted in the Town Hall not less than forty-eight (48) hours in advance of the meeting.

NOTE: You also may contact your local Conservation Commission or the Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act.

HONAN CHRISTOPHER M
36 WINTON ST # 1
ROSLINDALE MA 02131

YOUNGER ATIYA
624 POPLAR ST
ROSLINDALE MA 02131

NOONAN JAMES J
620 POPLAR ST
ROSLINDALE MA 02131

COMMONWEALTH OF MASS MDC
E BOUNDARY RD
ROSLINDALE MA 02131

CITY OF BOSTON
POPLAR
ROSLINDALE MA 02131

HIGH POINT VILLAGE CO
161 TREMONT ST PH
BOSTON MA 02111

COMMONWEALTH OF MASS
20 SOMERSET ST
BOSTON MA 02108

LOMBARDO MELISSA A
38 WINTON ST #2
ROSLINDALE MA 02131

MCNALLY ANNE
42 HAUTEVALE ST
ROSLINDALE MA 02131

VAZQUEZ GALO
34 HAUTEVALE ST
ROSLINDALE MA 02131

MOTAZEDIAN MAHTAB
32 HAUTEVALE ST #2
ROSLINDALE MA 02131

NICASTRO ELIZABETH A
28 HAUTEVALE ST
ROSLINDALE MA 02131

THIRTY 8 40 WINTON ST CONDO
38 WINTON ST
ROSLINDALE MA 02131

ZIOBRO HEIDI
40 WINTON ST #1
ROSLINDALE MA 02131

THIRTY 4-36 WINTON ST CONDO
34 WINTON
ROSLINDALE MA 02131

DIANGELIS WILLIAM
26 WINTON
ROSLINDALE MA 02131

HUTCHINSKI PETER P
24 HAUTEVALE ST
ROSLINDALE MA 02131

32 HAUTEVALE STREET
32 HAUTEVALE ST
ROSLINDALE MA 02131

LIEBMANN HAYLEY
32 HAUTEVALE ST #1
ROSLINDALE MA 02131

MCCULLCOCH GENEVIEVE
8 HAUTEVALE ST
ROSLINDALE MA 02131

MASOURAS GEORGE
521 POPLAR
ROSLINDALE MA 02131

GEIS STEPHANIE R
529 POPLAR ST
ROSLINDALE MA 02131

LEE ANN E
555 POPLAR ST
ROSLINDALE MA 02131

DIANGELIS WILLIAM
26 WINTON
ROSLINDALE MA 02131

DONALDSON ANTHONY E
525 POPLAR ST
ROSLINDALE MA 02131

CAPPUCCIO CAROL
551 POPLAR ST
ROSLINDALE MA 02131

HUANG JIANKANG
563 POPLAR ST
ROSLINDALE MA 02131

BOBADILLA FRANCISCO
579 POPLAR ST
ROSLINDALE MA 02131

RAHIM SHAHEED
587 POPLAR ST
ROSLINDALE MA 02131

PYKE JAMES H SR
591 POPLAR ST
ROSLINDALE MA 02131

MCCARTHY BARBARA W
599 POPLAR ST
ROSLINDALE MA 02131

CARRILLO JORGE R
603 POPLAR ST
ROSLINDALE MA 02131

MANN CARA S
623 POPLAR ST
ROSLINDALE MA 02131

BLAND DENISE
627 POPLAR ST
ROSLINDALE MA 02131

DIANGELIS WILLIAM
26 WINSTON
ROSLINDALE MA 02131

MCNEIL JAMES
535 POPLAR ST
ROSLINDALE MA 02131

PELLETIER NIRALI
567 POPLAR ST
ROSLINDALE MA 02131

DELOSH STEPHEN C JR
571 POPLAR ST
ROSLINDALE MA 02131

FELIZ YESSY
583 POPLAR ST
ROSLINDALE MA 02131

GRIFFITH JEFFREY C
595 POPLAR ST
ROSLINDALE MA 02131

MURPHY PATRICIA A
615 POPLAR ST
ROSLINDALE MA 02131

AD FINEM FIDELIS LLC
46 HAUTEVALE ST
ROSLINDALE MA 02131

FREEDMAN RICHARD D JR
4 FISHER AV
ROXBURY MA 02120

GLYNN PAULINE
575 POPLAR ST
ROSLINDALE MA 02131

CATALANO ENNIO M
619 POPLAR
ROSLINDALE MA 02131

RUDDY CLAIRE A
631 POPLAR ST
ROSLINDALE MA 02131

MOORE CARLA A
20 HAUTEVALE ST
ROSLINDALE MA 02131

MASOURAS GEORGE
521 POPLAR
ROSLINDALE MA 02131

ELIAS ANTONIOS
531 POPLAR
ROSLINDALE MA 02131

CALVILLO JONATHAN
539 POPLAR ST
ROSLINDALE MA 02131

MAHONEY TIMOTHY
547 POPLAR ST
ROSLINDALE MA 02131

MAHONEY DOROTHY L
547 POPLAR ST
ROSLINDALE MA 02131

ANTONIAK VICTOR
607 POPLAR ST
ROSLINDALE MA 02131

HOPKINS KENNETH R
611 POPLAR ST
ROSLINDALE MA 02131

CATALANO ENNIO M
619 POPLAR ST
ROSLINDALE MA 02131

TOLAND JAMES J JR
16 HAUTEVALE ST
ROSLINDALE MA 02131

CHAPSKI IRENE P
12 HAUTEVALE ST
ROSLINDALE MA 02131

SHEEHAN GEORGE M
527 POPLAR
ROSLINDALE MA 02131

NEABLE JEFFREY B
543 POPLAR ST
ROSLINDALE MA 02131

WALKER AARON C
14 HAUTEVALE ST
ROSLINDALE MA 02131

CAPPUCCIO CAROL
551 POPLAR ST
ROSLINDALE MA 02131

CHMURA DONALD J
559 POPLAR
ROSLINDALE MA 02131

SOLIS JOSE A
355 WEST ST
HYDE PARK MA 02136

PAYEN LUCIE
375 WEST ST
HYDE PARK MA 02136

PAEZ INGRID M
379 WEST ST
HYDE PARK MA 02136

FREEMAN SHARON
2 DEFOREST ST
HYDE PARK MA 02136

AUCLAIR ROSEMARIE
339 WEST
HYDE PARK MA 02136

KENDRICKEN WILLIAM M
15 ROSECLIFF TERRACE
ROSLINDALE MA 02131

SAVERIANO JOSEPH S
295 WEST ST
HYDE PARK MA 02136

DAVIS JUANITA G
371 WEST ST
HYDE PARK MA 02136

SANCHEZ CARLOS A
407 WEST ST
HYDE PARK MA 02136

MEYER ANTHONY J
307 WEST ST
HYDE PARK MA 02136

KENDRICKEN WILLIAM M
15 ROSECLIFF TE
ROSLINDALE MA 02131

LITCOF ANDREA R
351 WEST ST
HYDE PARK MA 02136

DU PHUONG L
411 WEST ST 4
HYDE PARK MA 02136

SACCO PAUL F
359 WEST
HYDE PARK MA 02136

MCKENNA JASON M
301 WEST ST
HYDE PARK MA 02136

NORBERG BERNARDEAN R
347 WEST ST
HYDE PARK MA 02136

NOVA RAFAEL
285 WEST ST
HYDE PARK MA 02136

NOVA RAFAEL
285 WEST ST
HYDE PARK MA 02136

GREEN JOHN M
363 WEST
HYDE PARK MA 02136

KWAKUMEY DOREEN M
367 WEST ST
HYDE PARK MA 02136

CHERENFANT JOSEPH R
383 WEST ST
HYDE PARK MA 02136

SCIALOIA PASQUALE J
387 WEST ST
HYDE PARK MA 02136

HIBBARD WILLIAM ROBERT
395 WEST ST
HYDE PARK MA 02136

BLAKE MICHAEL L
399 WEST ST
HYDE PARK MA 02136

EAST EDWARD J
403 WEST
HYDE PARK MA 02136

RODDY FRANCIS
71 ORCHARD HILL RD
JAMAICA PLAIN MA 02130

DESHARNAIS PAUL C
34 WINTON ST #2
ROSLINDALE MA 02131

SUAREZ ELLIOT D
523 POPLAR ST
ROSLINDALE MA 02131

VINCENT LOUIS J
259 WEST
HYDE PARK MA 02136

MCMANUS JOHN L JR
251 WEST
HYDE PARK MA 02136

ONUJIOGU NONYEM TS
27 BLAKELY CI
RANDOLPH MA 02368

HILL FREDERICK F
247 WEST
HYDE PARK MA 02136

TORRES-VEGA ADRIAN
261 WEST ST
HYDE PARK MA 02136

BORJAS MARCO A
263 WEST ST
HYDE PARK MA 02136

COMMWLTH OF MASS
57 DEDHAM
HYDE PARK MA 02136

GONZALEZ URIEL
5 MYOPIA RD
HYDE PARK MA 02136

ANDUJAR MANUEL A
33 MYOPIA RD
HYDE PARK MA 02136

ALLEN MICHAEL I
41 MYOPIA RD
HYDE PARK MA 02136

ANDUJAR MANUEL A
33 MYOPIA RD
HYDE PARK MA 02136

GOFF MARY C
49 MYOPIA RD
HYDE PARK MA 02136

RIVERA LUZ D
67 MYOPIA RD
HYDE PARK MA 02136

GUERRIER EMILE
59 MYOPIA RD
HYDE PARK MA 02136

PORTSCHER LISA M
15 BRAEBURN RD
HYDE PARK MA 02136

FONTANEZ NATHALIE
43 BRAEBURN RD
HYDE PARK MA 02136

DUBOIS WILNER
23 BRAEBURN RD
HYDE PARK MA 02136

BACON FRANCIS
45 MYOPIA RD
HYDE PARK MA 02136

RILEY JAMES M
53 MYOPIA RD
HYDE PARK MA 02136

BRUNACHE ANDERSON
1 BRAEBURN RD
HYDE PARK MA 02136

DYNES-COVENEY FAMILY
5 BRAEBURN RD
HYDE PARK MA 02136

YU PERSIS
31 BRAEBURN ROAD
HYDE PARK MA 02136

CHAVEZ GEORGEANN
39 BRAEBURN RD
HYDE PARK MA 02136

DYNES-COVENEY FAMILY
5 BRAEBURN RD
HYDE PARK MA 02136

CAZEAU ELSIE
19 BRAEBURN RD
HYDE PARK MA 02136

SAUCIER LYNN ANN
27 BRAEBURN RD
HYDE PARK MA 02136

PECKHAM ROBERT F
63 MYOPIA RD
HYDE PARK MA 02136

CUNNINGHAM MARGARET A
11 BRAEBURN RD
HYDE PARK MA 02136

HEARN ELSBETH N
35 BRAEBURN RD
HYDE PARK MA 02136

COMMONWEALTH OF MASS
20 SOMERSET ST
BOSTON MA 02108

COMMONWEALTH OF MASS MDC
STONY BROOK RESERVATION
HYDE PARK MA 02136

COMM OF MASS---MDC
20 SOMERSET ST
BOSTON MA 02108

COMM OF MASS---MDC
20 SOMERSET ST
BOSTON MA 02108

METROPOLITAN DISTRICT COMMIS
GORDON AV
HYDE PARK MA 02136

LARSEN CHARLES E
318 WEST ST
HYDE PARK MA 02136

ROWELL GENEVIEVE A
298 WEST ST
HYDE PARK MA 02136

REMY MARIE
7 MYOPIA RD
HYDE PARK MA 02136

DELUCA JOSEPH
326 WEST ST
HYDE PARK MA 02136

FRIEDLAND BRIAN
252 WEST ST
HYDE PARK MA 02136

310 WEST STREET REALTY TRUST
310 WEST ST
HYDE PARK MA 02136

DEMARTINO LIDIA TS
338 WEST ST
HYDE PARK MA 02136

DICARLO MICHAEL
330 WEST
HYDE PARK MA 02136

JOSEPH DAWN
290 WEST ST
HYDE PARK MA 02136

OLOUGHLIN JAMES M
25 MYOPIA RD
HYDE PARK MA 02136

NILES FRANK R
322 WEST ST
HYDE PARK MA 02136

LOMBARDI PETER J
11 MYOPIA RD
HYDE PARK MA 02136

HOULE LAURIE R
28 CLIFFORD ST
HYDE PARK MA 02136

MODI NIDHI D
29 MYOPIA RD
HYDE PARK MA 02136

CITY OF BOSTON
420 WEST
HYDE PARK MA 02136

DICARLO MICHAEL
330 WEST
HYDE PARK MA 02136

OSTER ALEXANDRA L
306 WEST ST
HYDE PARK MA 02136

CLEARY KEVIN K
294 WEST ST
HYDE PARK MA 02136

GIANNETTI JANET E
256 WEST ST
HYDE PARK MA 02136

FOLEY FAMILY TRUST
17 MYOPIA RD
HYDE PARK MA 02136

COMMONWEALTH OF MASS
4740 WASHINGTON
WEST ROXBURY MA 02132

APPENDIX F

Wetland Delineation Report



January 2019

TOWN OF
Hyde Park
MASSACHUSETTS

George Wright Golf Course
420 West Street



WETLAND DELINEATION REPORT
GEORGE WRIGHT GOLF COURSE
HYDE PARK, MA

Prepared for
BOSTON PARKS AND RECREATION DEPARTMENT

Prepared by
Weston & Sampson Engineers, Inc.
5 Centennial Drive
Peabody, MA 01960
978.532.1900

01/30/2019

Project #: 2180447.H

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APPENDICES

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Figure 1.....	Wetlands Field Map
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Figure 3.....	Environmental Resources Map
Figure 4.....	FEMA FIRM Map
Figure 5.....	Topography Map

1.0 SITE DESCRIPTION

On January 30, 2019, the presence of wetland resources was investigated at 420 West Street, Hyde Park, Massachusetts. The delineation was conducted under the direction of a nationally certified Professional Wetlands Scientist (PWS). The area under consideration is located on the property of the George Wright Golf Course between hole 12 and hole 13, adjacent to a pump station situated next to a pond. The space around the pond consists of manicured fairways typical of golf courses and large old growth oak trees between open spaces. The golf course itself is situated within an urban residential neighborhood. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) in Appendix B of this report for the investigation area.

Wetland resource areas including pond and intermittent stream banks were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is trained in the wetland delineation process using the Massachusetts Department of Environmental Protection (MassDEP) and the US Army Corps of Engineers methodology. A further description of these wetland resource areas is presented, below.

.....

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

The Weston & Sampson wetland scientist, trained in the U.S. Army Corp of Engineers Wetland Delineation Manual and Massachusetts Department of Environmental Protection (MassDEP) Delineating Bordering Vegetated Wetlands Under the Massachusetts Protection Act guidance document, observed the following protected wetland resources at the site:

- Pond Bank
- Intermittent Stream Bank

See Appendix A for site photographs.

According to the site's FEMA Flood Insurance Rate map (FIRM) the site is not within a floodzone. See Appendix B for FIRM map.

2.2 Wetland Delineation Methodology

Wetland delineation assessment was conducted in accordance to the Massachusetts Wetland Protection Act Regulations (310 CMR 10.55(2)(c)), Massachusetts Department of Environmental Protection (MassDEP) Delineating Bordering Vegetated Wetlands Under the Massachusetts Protection Act (March 1995), and ACOE Wetland Manual (Technical Report Y-87-1).

The methodology included the characterization of vegetation, soil any hydrologic conditions in both wetland and upland areas to identify the transitional area, which was used as the BVW limit. Pink flags with distinct flag numbers were left in the field to show wetland resource area limits.

Intermittent Stream Bank

An intermittent stream was flagged between hole 12 and hole 13. The stream runs east to west and drains into an unnamed pond (See Figure 1, Wetlands Field Map). At the time of the investigation, the channel was filled with water approximately 6 inches deep. The USGS StreamStats program notes that the catchment area of the stream is 0.13 square miles, and it is subsequently considered intermittent according to the Massachusetts Wetlands Protection Act (310 CMR 10.58 (2)1.c.). Both the northern and southern banks of the stream were flagged. The top of bank was determined using the first break

in slope. Flags left in the field included TOB-A1 through TOB-A3 along the southern bank and TOB-B1 through TOB-B3 along the northern bank.

Because this is considered a intermittent stream, the bank locations should be used to determine the 100-foot riverfront area associated with this stream.

Pond Bank

The top of bank associated with an unnamed pond between hole 12 and hole 13 at the George Wright Golf Course was flagged using flag numbers TOB-1 through TOB-12. Gradients of the bank varied around the pond, but because the site was well manicured and thoroughly developed, transitions between the pond and upland areas were almost immediate with no bordering vegetated wetlands (See Photos Below).

A 100-foot buffer zone is associated with the top of bank of this water body.

2.3 Other Protected Areas

Besides what was noted above, Weston & Sampson created an environmental receptors map of the site to determine the presence of other protected areas (Appendix B, Figure 3). The data source of these map layers was the Massachusetts Geographic Information System (MassGIS). These areas included:

- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Verified and Estimated Vernal Pools
- Areas of Critical Environmental Concern

A FEMA Flood Insurance Rate Map (FIRM) was created online from the FEMA website to determine if there is a 100-year flood zone at the site. See Appendix B for FIRM map.

According to MassGIS data, there are no areas where endangered plant or animal species exist within working limits. The site is also located outside of any floodzone according to a current FEMA data.

3.0 SUMMARY

On January, 30, 2019, the presence of wetland resources was investigated at the George Wright Golf Course between hole 12 and hole 13. Wetland resource areas including pond and intermittent stream banks were identified and flagged in the field. Additional MassGIS and FEMA FIRM mapping indicated that the site does not contain any rare or endangered wildlife and is also located outside of any floodzone.

This wetlands delineation document has been reviewed and approved by a nationally certified Professional Wetlands Scientist (PWS).

4.0 REFERENCES

Jackson, Scott. 1995. "Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act." Massachusetts Department of Environmental Protection.

Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program. Massachusetts Natural Heritage Atlas, 13th Edition with 2017 web updates. Accessed on 01/31/2019.

Massachusetts Geographic Information System. January 2009. Outstanding Resource Waters. Massachusetts Department of Environmental Protection. Accessed on 01/31/2019.

Massachusetts Geographic Information System. December 2003. Areas of Critical Environmental Concern. Massachusetts Department of Environmental Protection. Accessed on 01/31/2019.

FEMA Flood Map Service Center, online at msc.fema.gov/portal Assessed on 01/31/2019.

APPENDIX A

Site Photographs



Photo 1: Pump House and Unnamed Pond in January 2019



.....

Photo 2: Intermittent Stream to the East of Unnamed Pond in January 2019



APPENDIX B

Figures



FIGURE 1

Wetlands Field Map



Legend

— Top of Bank



POND

INTERMITTENT
STREAM

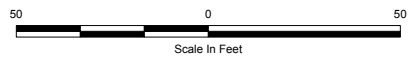


FIGURE 1	
CITY OF BOSTON, MASSACHUSETTS GEORGE WRIGHT GOLF COURSE	
WETLANDS FIELD MAP	
JANUARY, 2019	SCALE: NOTED

FIGURE 2

USGS Topographic Map

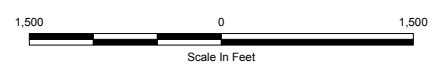
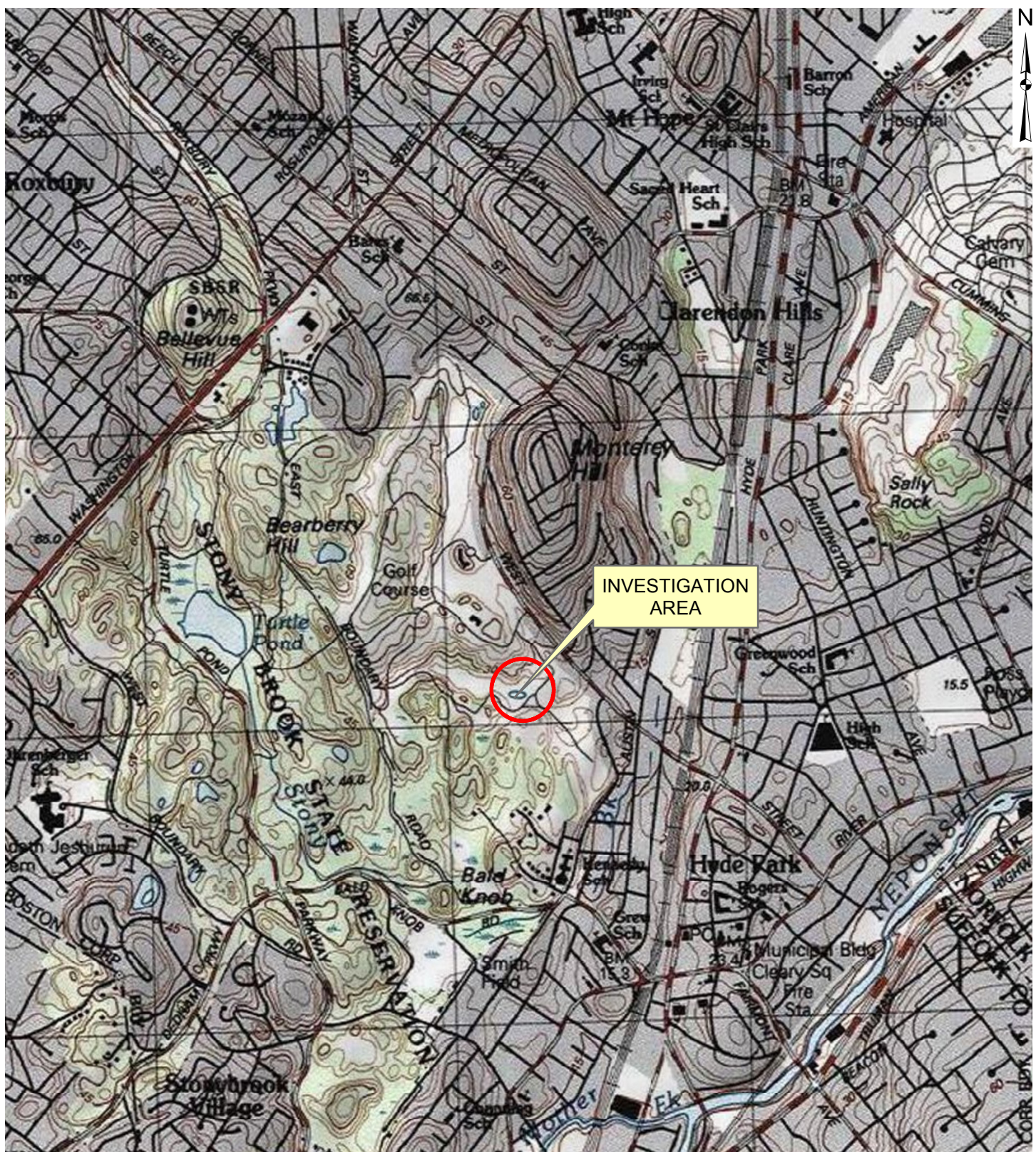






FIGURE 2
CITY OF BOSTON, MASSACHUSETTS
GEORGE WRIGHT GOLF COURSE
USGS TOPOGRAPHIC MAP
JANUARY, 2019 SCALE: NOTED

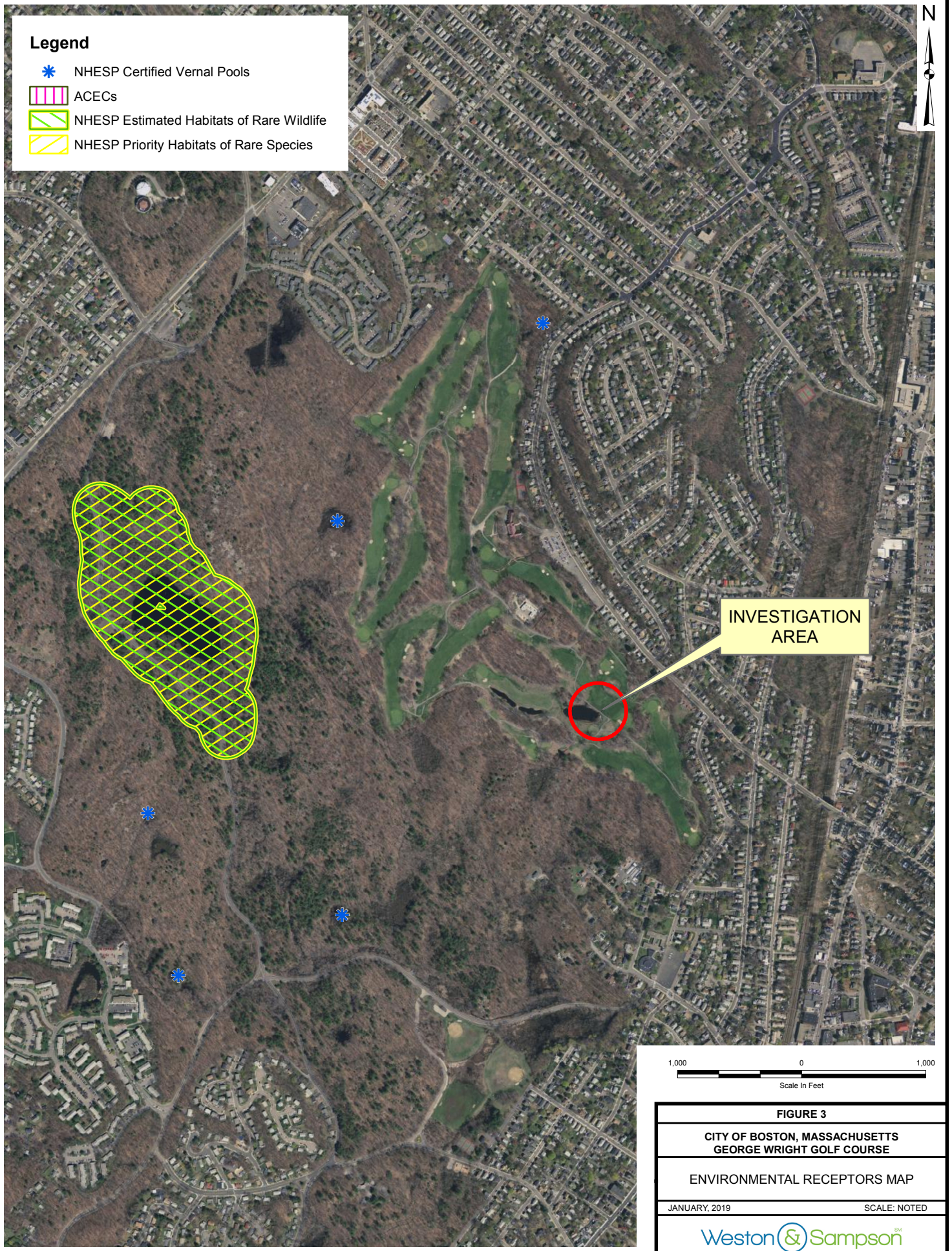
FIGURE 3

Environmental Resources Map



Legend

-  NHESP Certified Vernal Pools
-  ACECs
-  NHESP Estimated Habitats of Rare Wildlife
-  NHESP Priority Habitats of Rare Species



INVESTIGATION
AREA

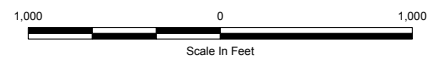



FIGURE 3	
CITY OF BOSTON, MASSACHUSETTS GEORGE WRIGHT GOLF COURSE	
ENVIRONMENTAL RECEPTORS MAP	
JANUARY, 2019	SCALE: NOTED
	

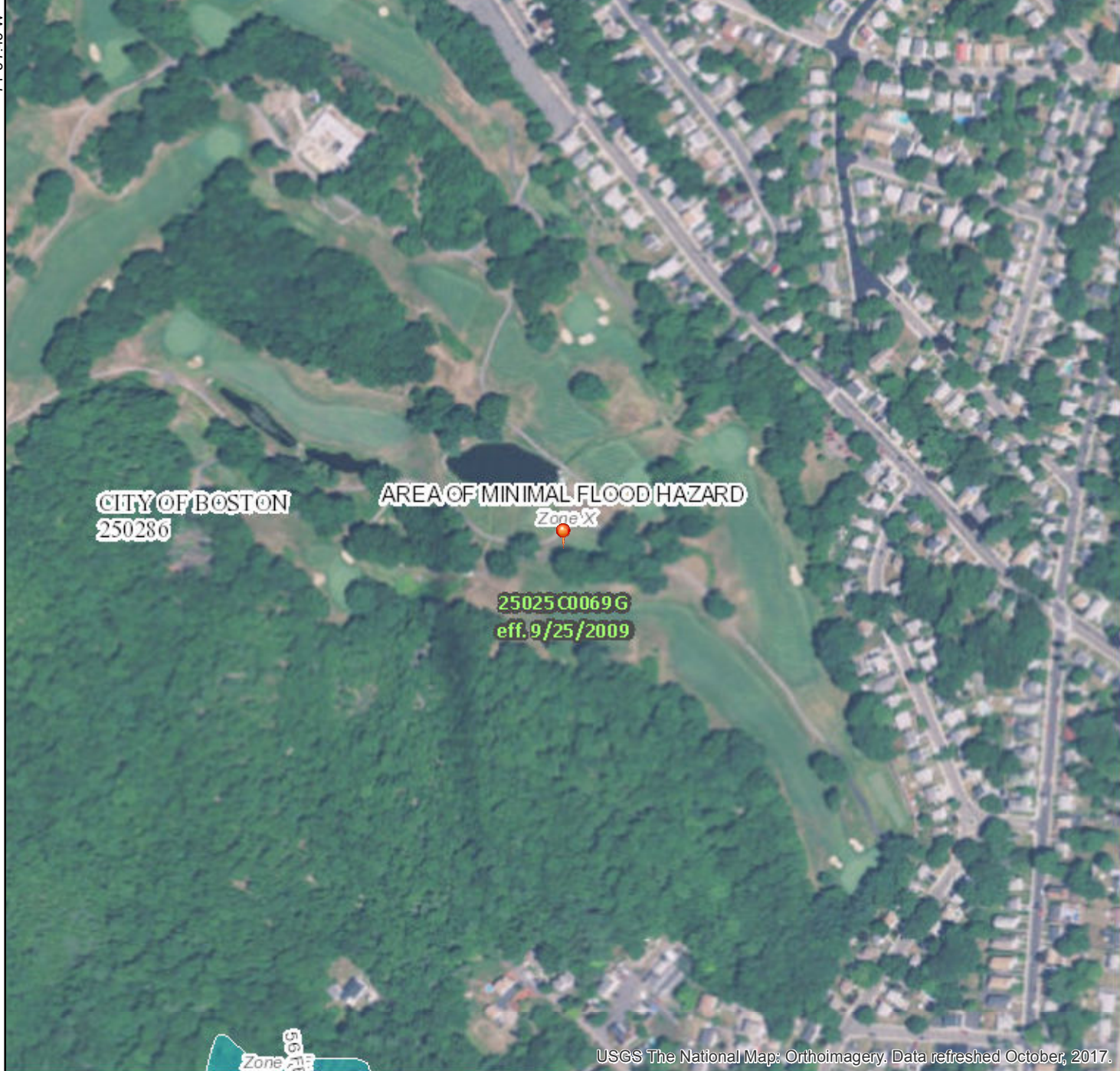
FIGURE 4

FEMA FIRM Map

National Flood Hazard Layer FIRMette



42° 16' 3.05" N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|------------------------------------|----------------------|--|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i> |
| | | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
| | | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> |
| | | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i> |
| | | Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS | | Area of Minimal Flood Hazard <i>Zone X</i> |
| | | Effective LOMRs |
| | | Area of Undetermined Flood Hazard <i>Zone D</i> |
| GENERAL STRUCTURES | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | | Profile Baseline |
| | Hydrographic Feature | |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **1/31/2019 at 12:33:39 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

USGS The National Map: Orthoimagery. Data refreshed October, 2017.

42° 15' 36.42" N

71° 7' 30.00" W

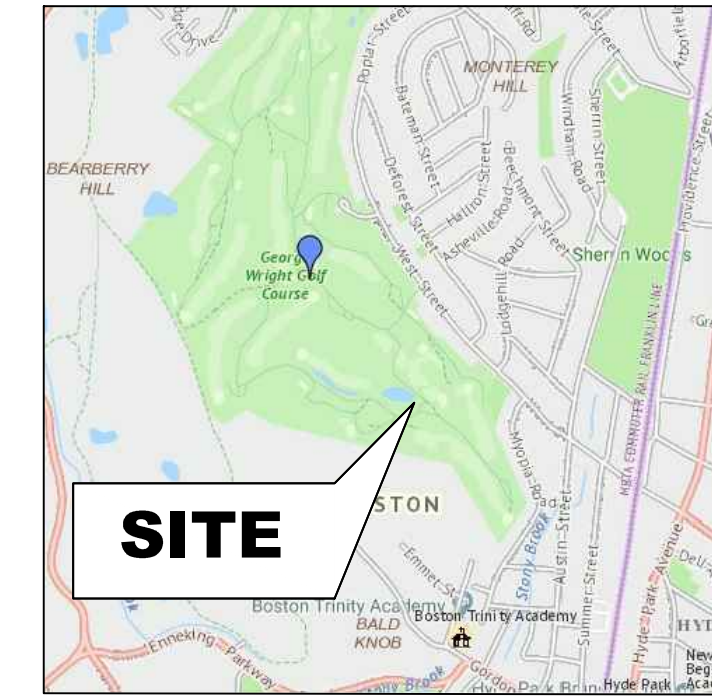
PLANS

CITY OF BOSTON

THE HONORABLE MARTIN J. WALSH, MAYOR

PREPARED BY:

Weston & SampsonSM
 100 Foxborough Boulevard, Suite 205
 Foxborough, MA 02035
 508.698.3034 800.SAMPSON
 www.westonandsampson.com



LOCATION MAP
420 WEST STREET

PARKS & RECREATION DEPARTMENT
CHRISTOPHER COOK, COMMISSIONER

DRAWING INDEX

1. COVER SHEET
2. SITE PLAN
3. PROFILE
4. DETAILS
5. DETAILS (CONTINUED)

GEORGE WRIGHT GOLF COURSE PUMPING SYSTEM

BOSTON, MASSACHUSETTS

FEBRUARY 2019
REVISED: MAY 2019

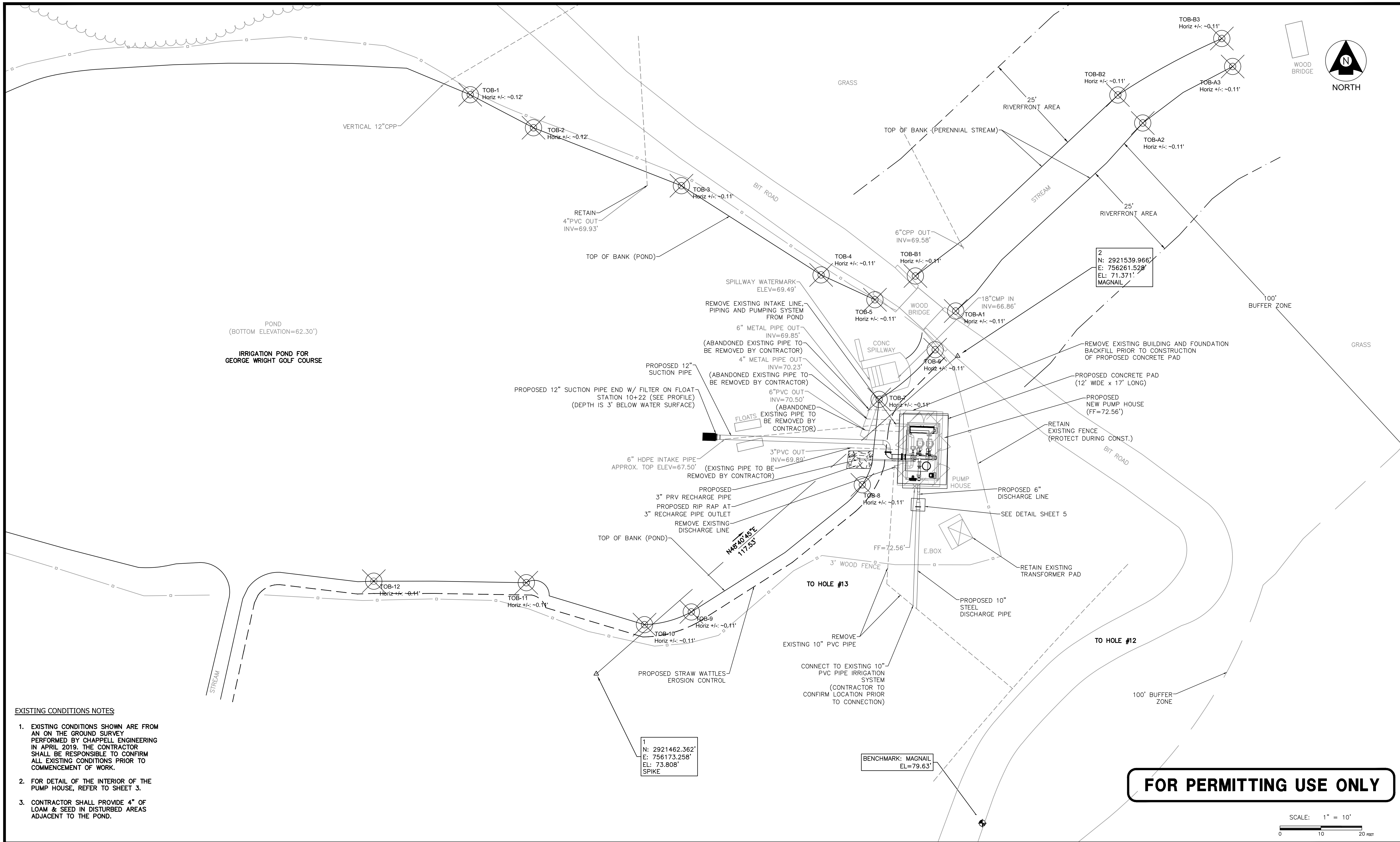
FUNDED BY THE CITY OF BOSTON
COMMUNITY PRESERVATION FUND



Laurence F. Keegan, Jr.
 5.1.19

FOR PERMITTING USE ONLY

Sheet No.:	1
Sheet Name:	Cover Sheet
BPRD Project No.:	
Date:	FEBRUARY 2019
Scale:	REVISED: MAY 2019
Drawn:	N/A
Checked:	LMW
	JLP/EFK
Project Name:	GEORGE WRIGHT GOLF COURSE PUMPING SYSTEM



EXISTING CONDITIONS NOTES:

- EXISTING CONDITIONS SHOWN ARE FROM AN ON THE GROUND SURVEY PERFORMED BY CHAPPELL ENGINEERING IN APRIL 2019. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- FOR DETAIL OF THE INTERIOR OF THE PUMP HOUSE, REFER TO SHEET 3.
- CONTRACTOR SHALL PROVIDE 4\"/>

1
N: 2921462.362'
E: 756173.258'
EL: 73.808'
SPIKE

BENCHMARK: MAGNAIL
EL=79.63'

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SCALE: 1" = 10'
0 10 20 feet



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Consultant Project No. 2180447



No.	Date	Revision

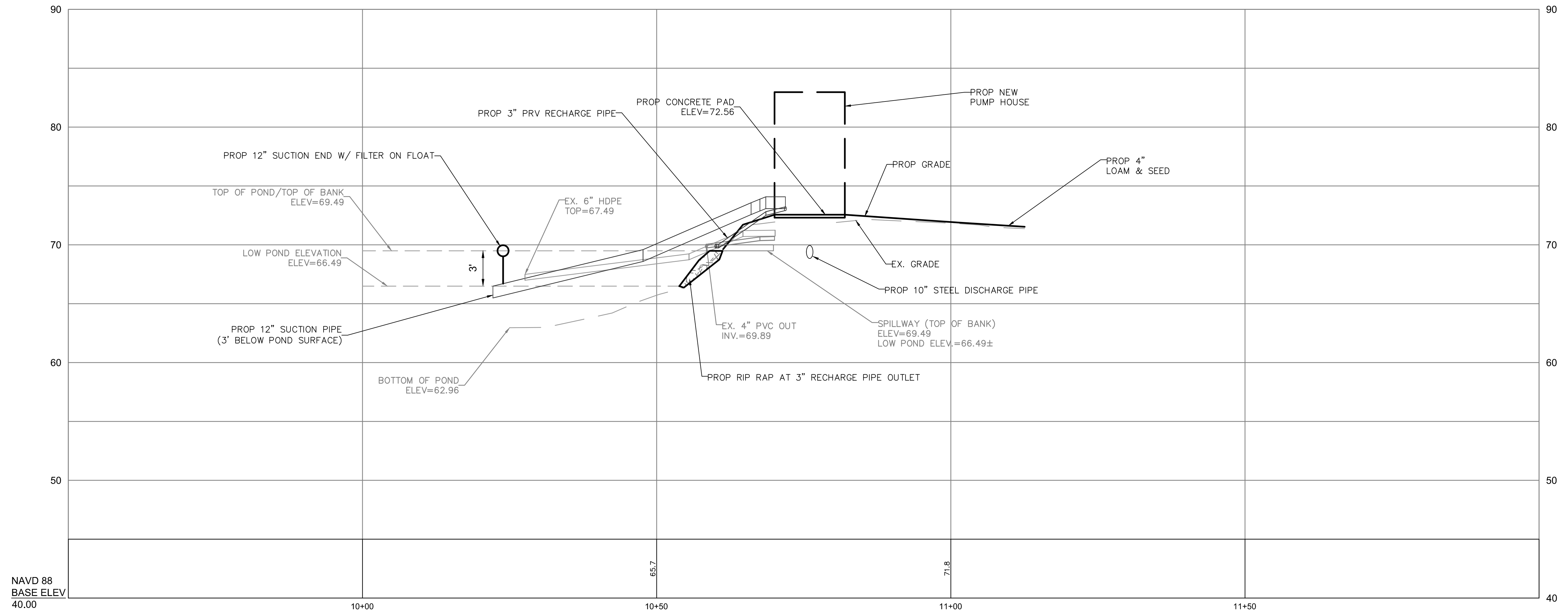
Project Name.:
GEORGE WRIGHT GOLF COURSE PUMPING SYSTEM

BPRD Project No.	
Date	FEBRUARY 2019 REVISED: MAY 2019
Scale	AS SHOWN
Drawn	LMW
Checked	JLPLFK

Sheet Name.:
Site Plan

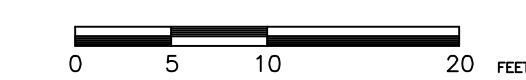
Sheet No.:
2

GEORGE WRIGHT PUMP SYSTEM



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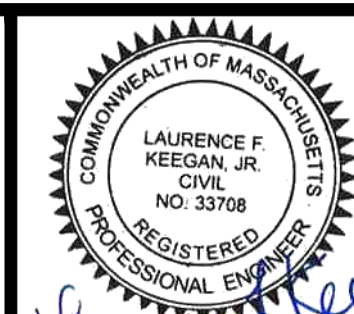
HORIZONTAL SCALE: 1" = 10'



VERTICAL SCALE: 1" = 5'



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5.1.19

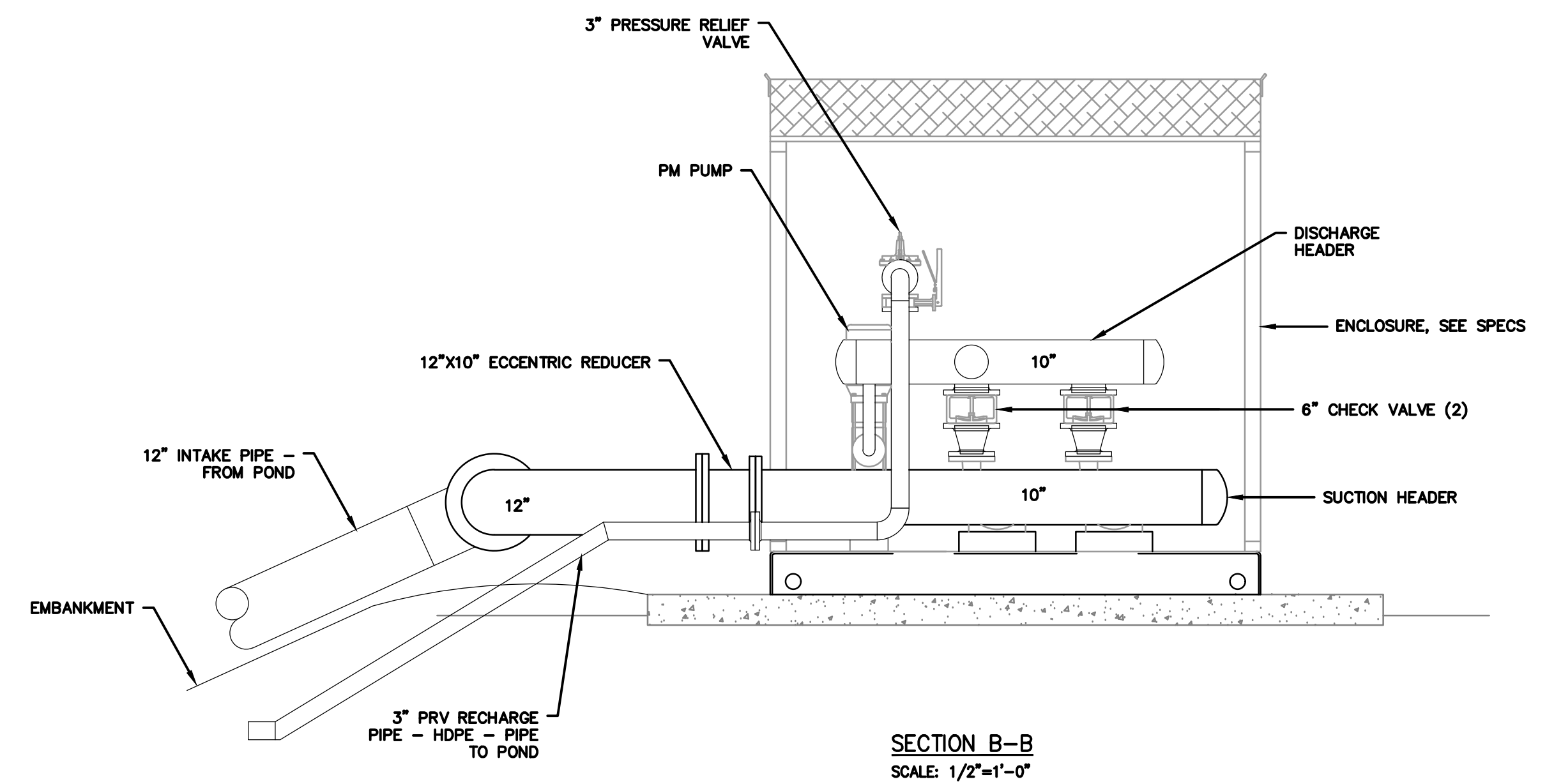
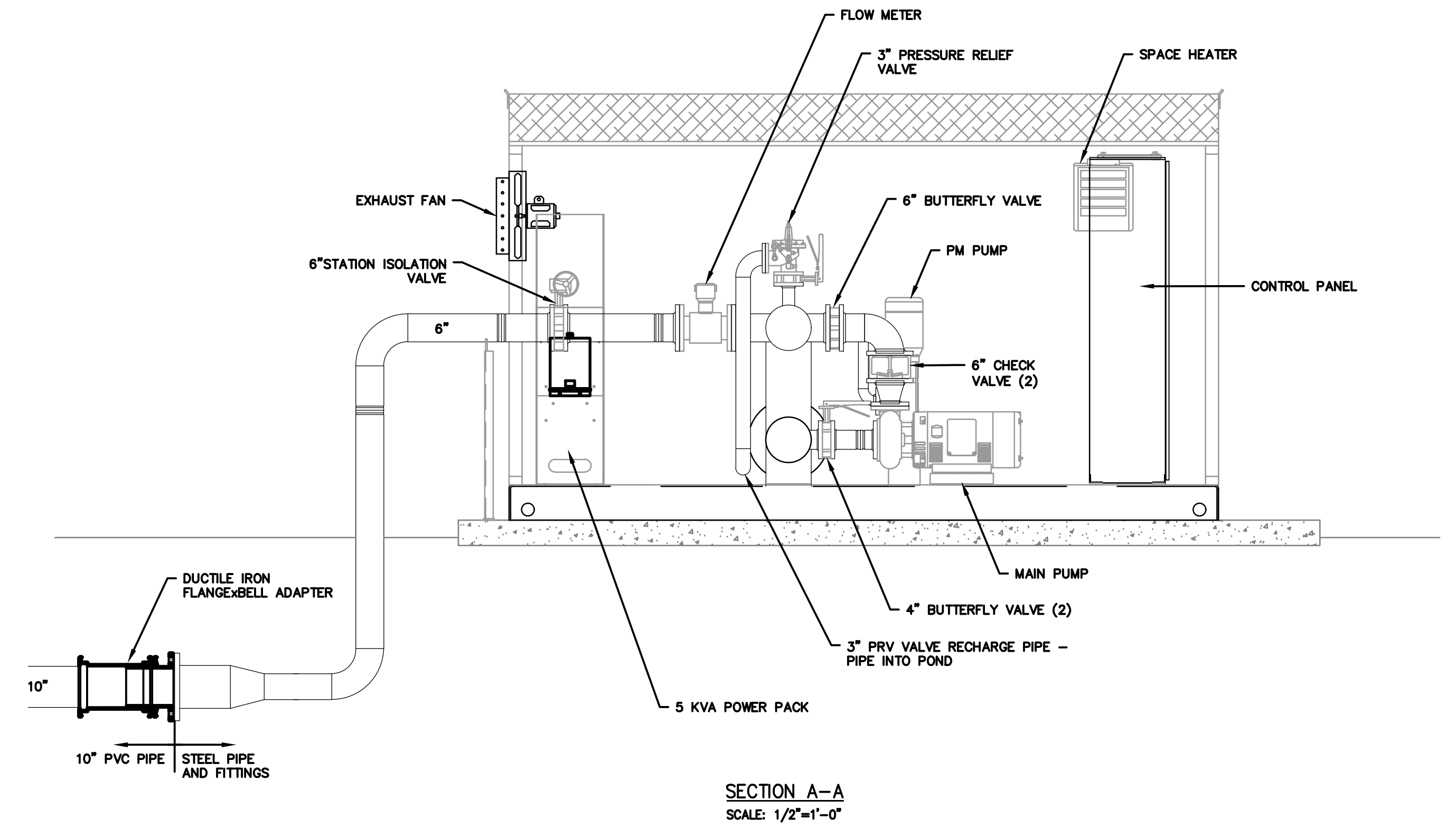
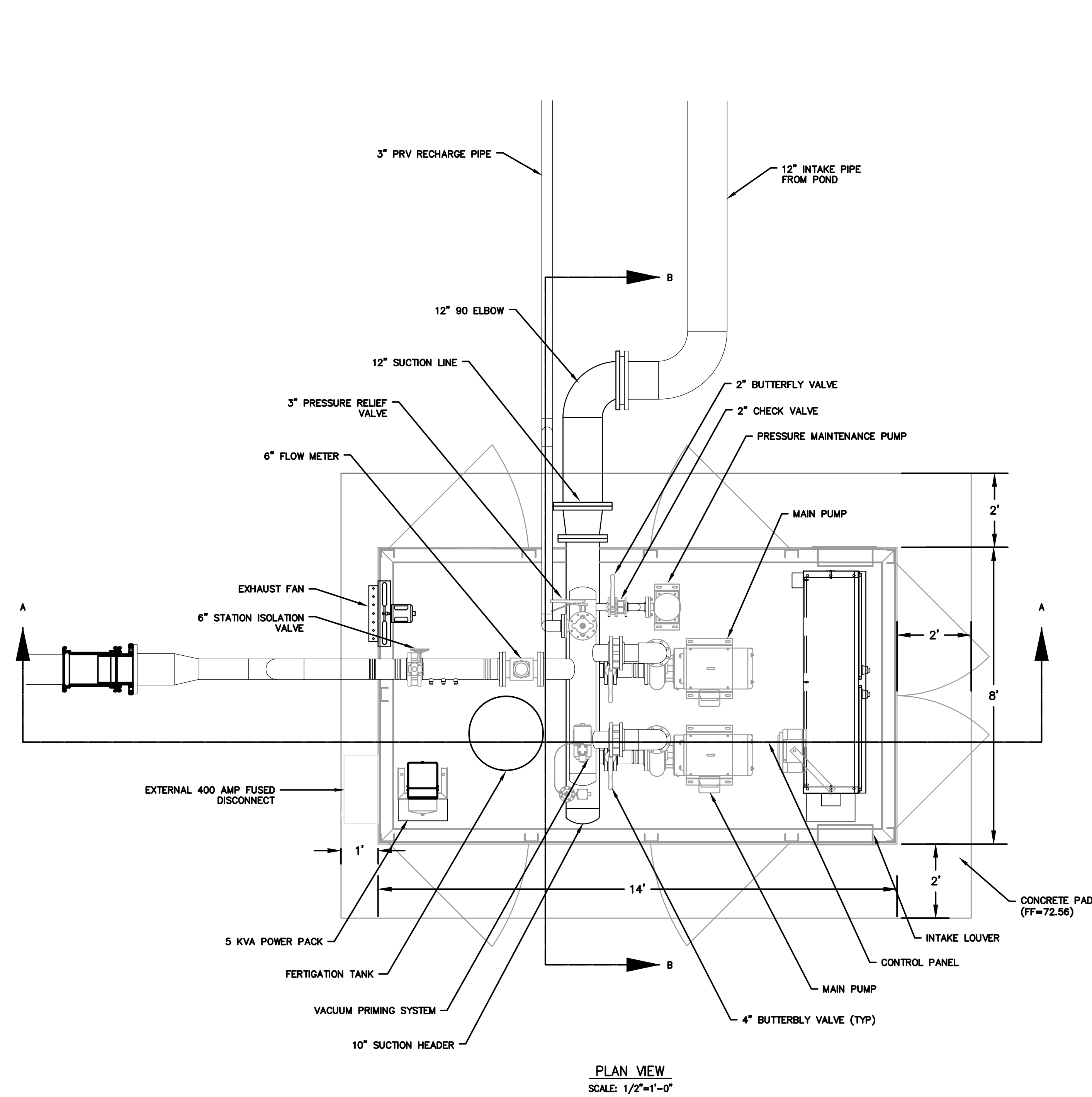
No.	Date	Revision

Project Name.:
GEORGE WRIGHT GOLF COURSE PUMPING SYSTEM

BPRD Project No.	
Date	FEBRUARY 2019 REVISED: MAY 2019
Scale	AS SHOWN
Drawn	MD
Checked	JLPLFK

Sheet Name.:
Profile

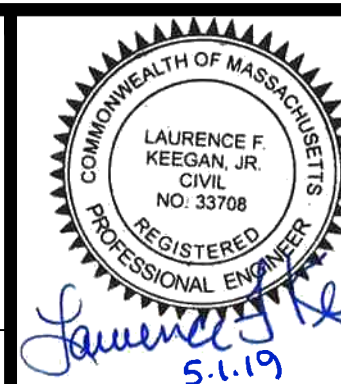
Sheet No.:
3



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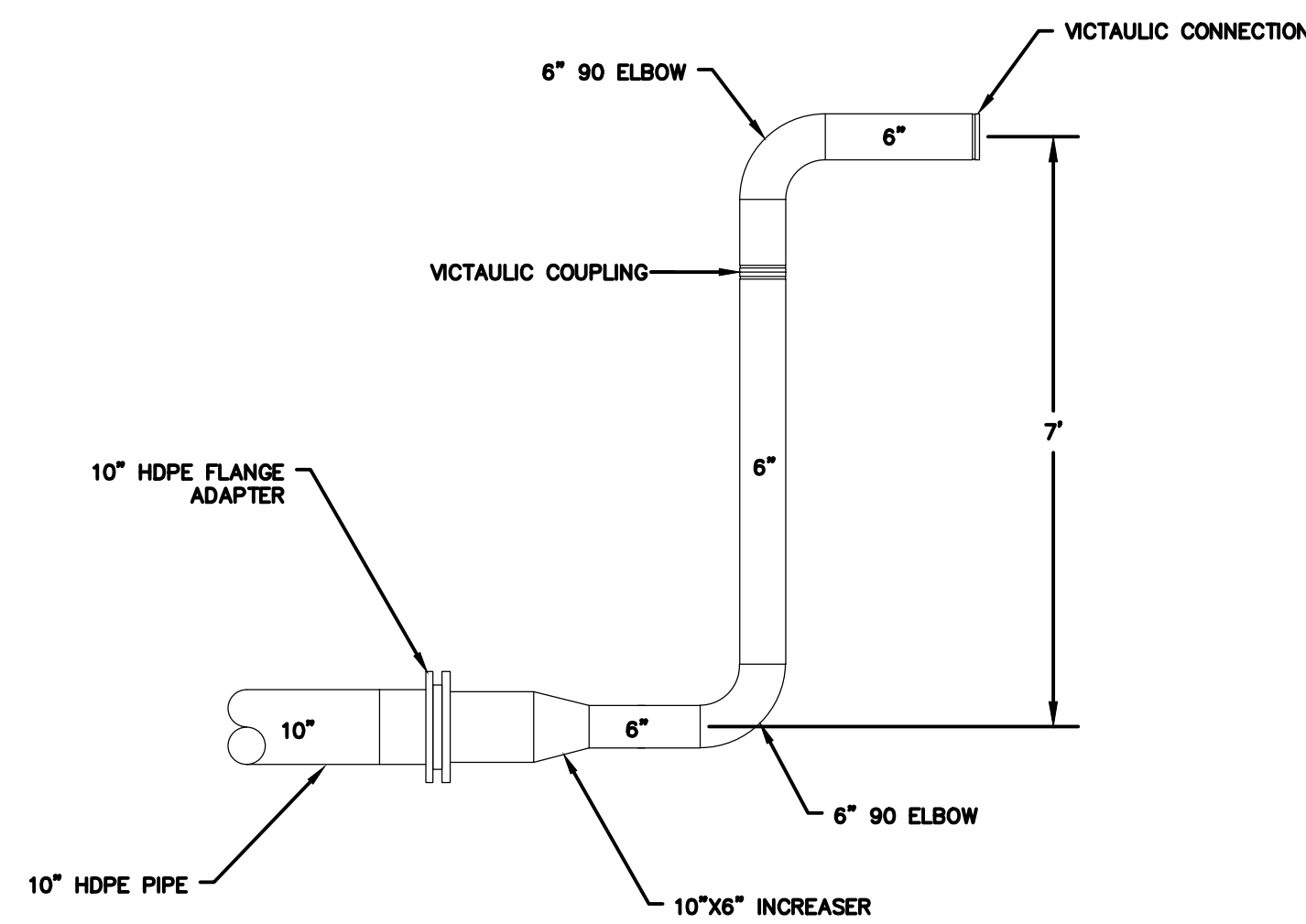
No.	Date	Revision

Project Name.:
GEORGE WRIGHT GOLF COURSE PUMPING SYSTEM

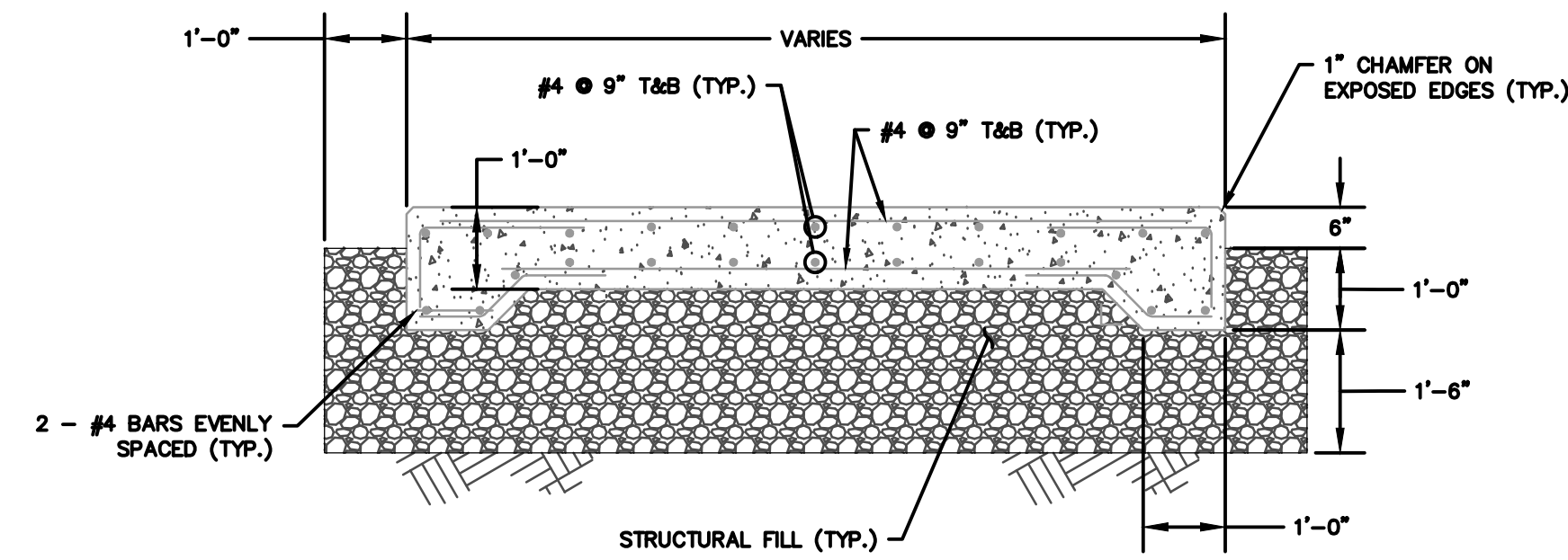
BPRD Project No.	
Date	FEBRUARY 2019
	REVISED: MAY 2019
Scale	AS SHOWN
Drawn	LMW
Checked	JLPLFK

Sheet Name.:
Details

Sheet No.:
4



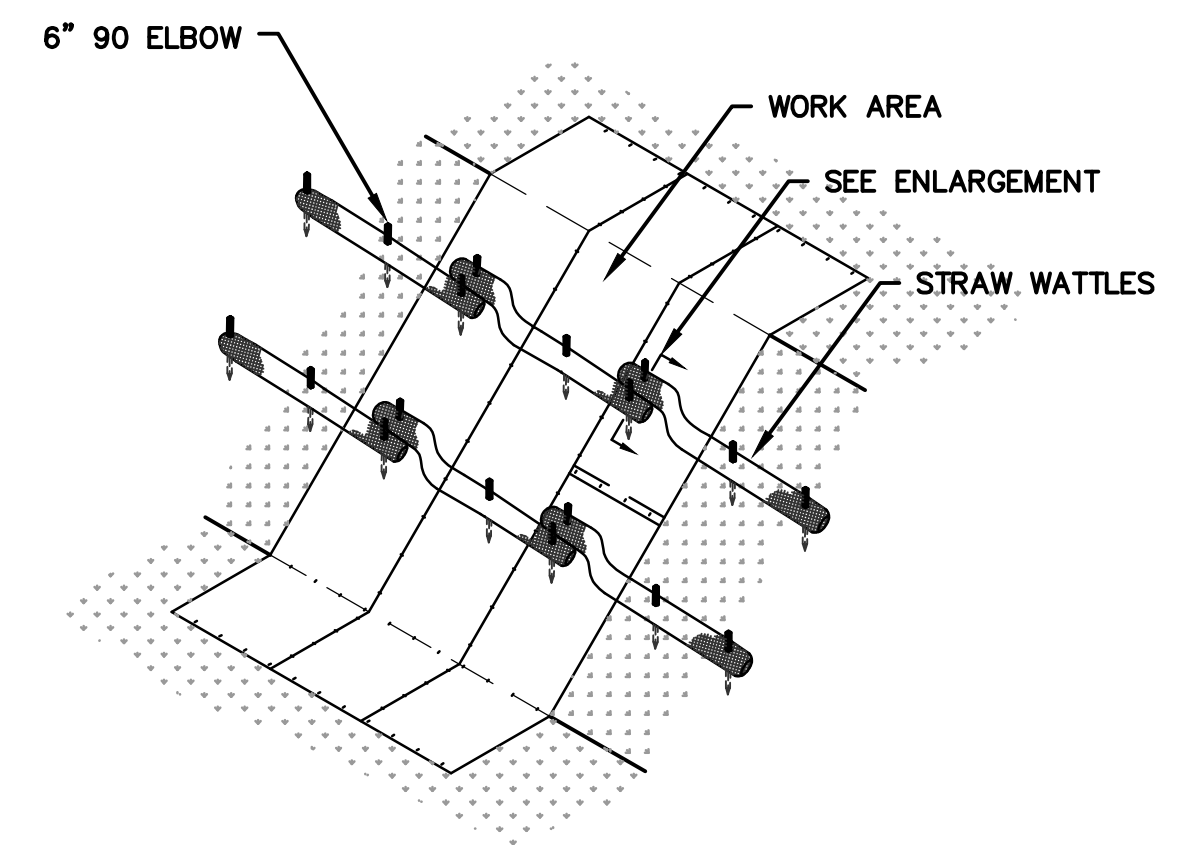
DISCHARGE DROP PIPE DETAIL
SCALE: 1/2"=1'-0"



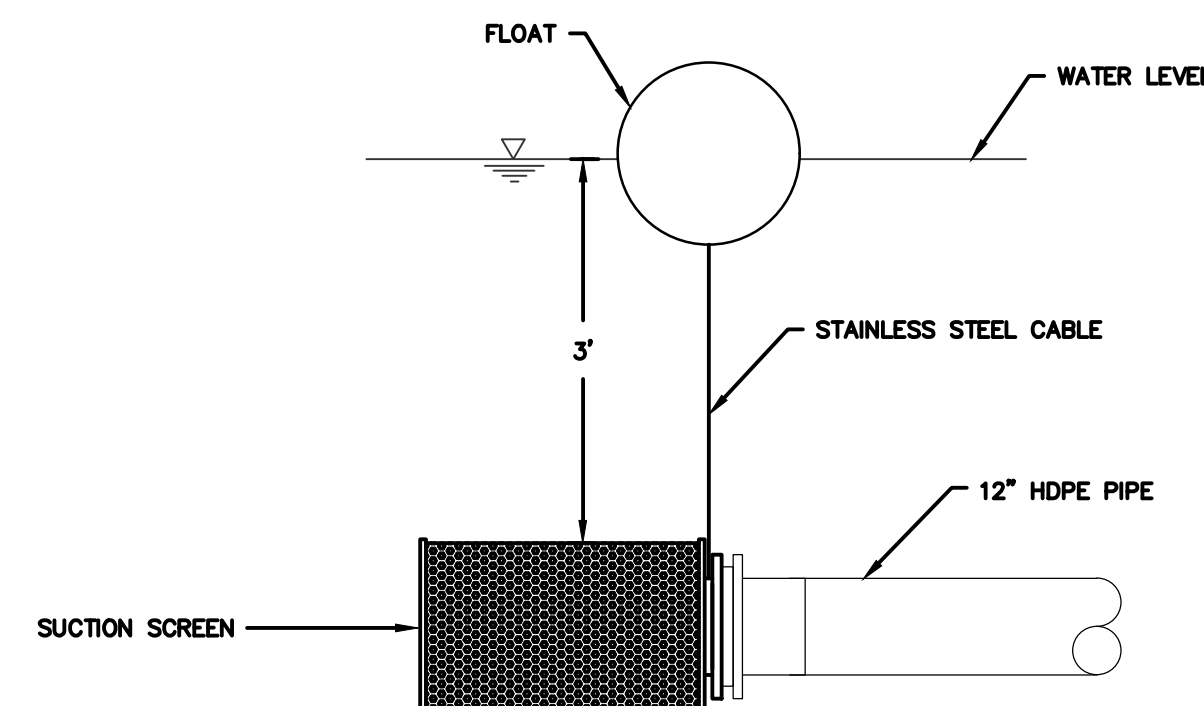
CONCRETE SLAB WITH HAUNCHED EDGES
SCALE: 1/2"=1'-0"

EROSION CONTROL NOTES:

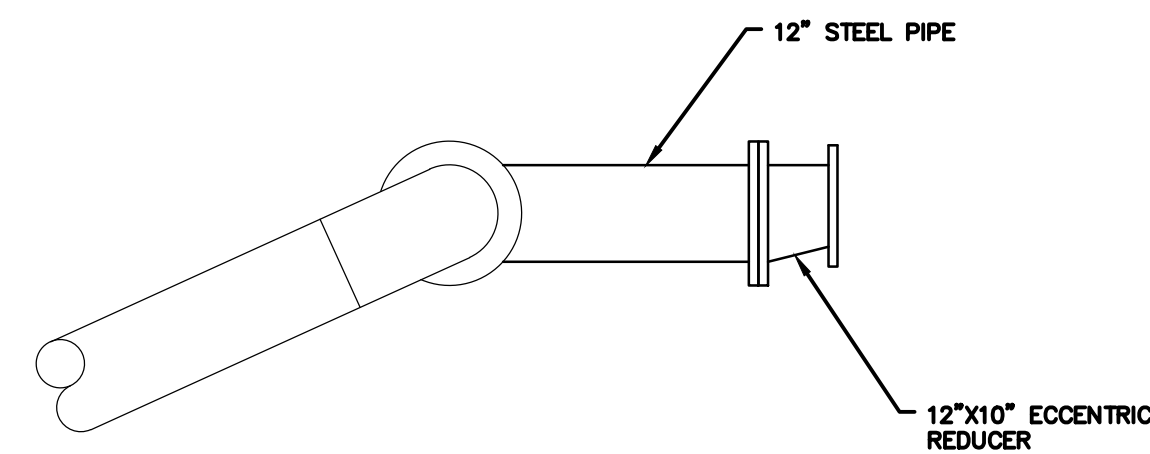
1. EROSION CONTROL MEASURES SHALL BE INCORPORATED IN THE SEQUENCE OF CONSTRUCTION TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
2. AREAS SUBJECT TO EROSION SHALL BE MINIMIZED IN TERMS OF TIME AND AREA.
3. IN GENERAL, WORK REQUIRING EROSION CONTROL INCLUDES EXCAVATIONS, FILLS, DRAINAGE, SWALES AND DITCHES, ROUGH AND FINISH GRADING, AND STOCKPILING OF EARTH.
4. DO NOT DISTURB VEGETATION AND TOPSOIL BEYOND THE PROPOSED LIMIT OF SILT FENCE ACTIVITIES.
5. TEMPORARY SILT CONTROLS SHALL BE PLACED AS SHOWN ON THE PLAN. PERMANENTLY STABILIZE EACH COMPLETED SEGMENT OF CONSTRUCTION.
6. THE CONTRACTOR SHALL REMOVE TEMPORARY SILT CONTROLS AND ALL ACCUMULATED SILT AND DEBRIS AFTER COMPLETION OF CONSTRUCTION OPERATIONS.
7. SILT CONTROLS SHALL BE IN PLACE AT ALL TIMES DURING CONSTRUCTION.
8. THE CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF ALL SILT AND DEBRIS FROM EACH DRAINAGE STRUCTURE UPON COMPLETION OF THE PROJECT.
9. OBJECTS AND/OR AREAS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
10. ALL DISTURBED AREAS SHALL BE RESTORED TO EXISTING GRADE. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE AS NEEDED.
11. SILT CONTROLS SHALL BE REMOVED UPON THE SATISFACTORY COMPLETION OF ALL WORK SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
12. SITE PERIMETER SHALL HAVE STRAW WATTLES INSTALLED AT THE LIMIT OF WORK.



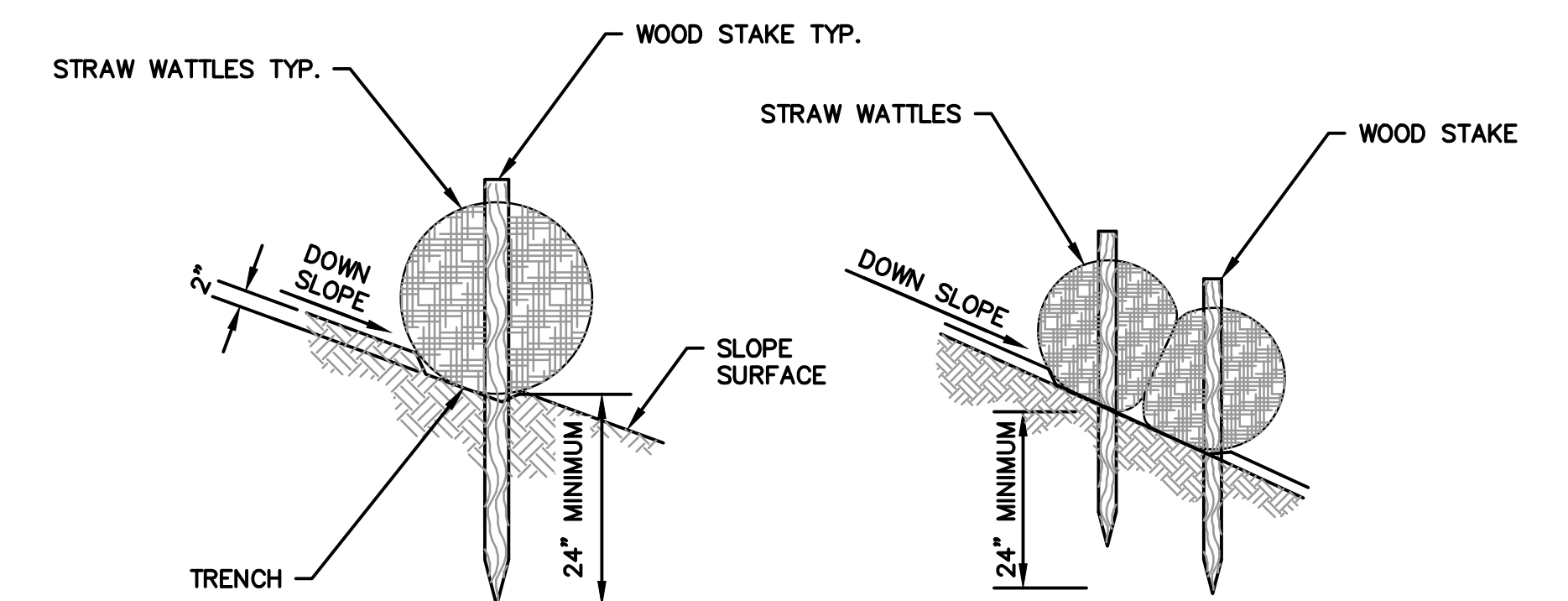
STRAW WATTLE LAYOUT ON SLOPE
SCALE: NONE



SUCTION SCREEN AND FLOAT DETAIL
SCALE: 1/2"=1'-0"



SUCTION PIPE DETAIL
SCALE: 1/2"=1'-0"



STRAW WATTLE STAKING DETAILS
SCALE: NONE

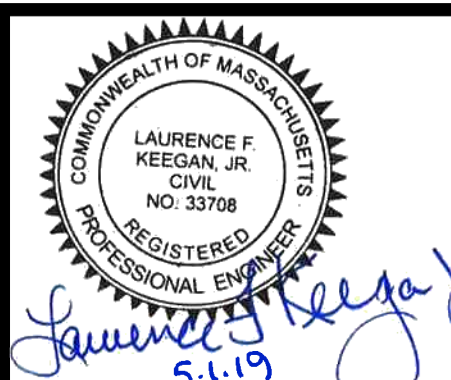
NOTE:

1. AT ITS DEEPEST POINT, THE POND IS APPROXIMATELY 7' DEEP. ONCE THE POND GOES BELOW 4' DEEP, BPRD PUMPS MWRA DRINKING WATER INTO THE POND TO IRRIGATE

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5