

P-0616-005
July 27, 2022

NH Department of Environmental Services
Wetlands Bureau
Attn: Kristin Duclos
29 Hazen Drive
PO Box 95
Concord, NH 03302-0095

Re: **Amendment to Minor Impact Permit Application**
File Number 2022-01782
Portsmouth Regional Hospital Satellite Parking Lot
Borthwick Avenue
Portsmouth, New Hampshire

Dear Ms. Duclos:

Tighe & Bond is pleased to submit the following information to support an Amendment Request for the above referenced Minor Impact Permit Application:

- One (1) copy of the Amendment Request Form for a Wetlands Application or Permit;
- One (1) copy of the Standard Dredge and Fill Wetlands Permit Application, last revised July 27, 2022;
- One (1) copy of the check for the adjusted fee;
- One (1) copy of the Wetland 2 Functional Assessment, last revised July 27, 2022;
- One (1) copy of the Wetland 5 Functional Assessment, last revised July 27, 2022; and
- One (1) copy of the Site Plans, last revised July 21, 2022.

The proposed project is located at the northeast corner of the intersection of Borthwick Avenue and Eileen Dondero Foley Avenue in Portsmouth, New Hampshire. The parcel is identified as Tax Map 234, Lot 7-4A.

Project Updates

The proposed changes since the initial application submission were the result of comments received through the local review process and the Alteration of Terrain application review. The relevant changes to the project are highlighted below.

- The vehicular access aisle connecting the two parking lots shifted closer to the property line to lessen the permanent impacts to the existing wetland, identified as Wetland 2.
- The two proposed retaining walls along the northwest corner of the parcel have been removed, resulting in increased permanent impact to Wetland 5.
- Other changes include the completed design development of the multiuse path along Borthwick Avenue and drainage updates associated with the technical review comments previously referenced which result in no significance to this application.

Wetland Description and Functions

Two (2) of the five wetlands delineated within the property are being proposed to be partially impacted by this project (Wetlands 2 and 5).

Wetland 2 is a small (approximately 4,460 square feet) hydrologically isolated scrub-shrub wetland (PSS1E) located within a small clearing in an area with signs of significant past disturbances. This wetland exhibits low Ecological Integrity (New Hampshire Method average



score of 4.4), has a small watershed, and does not retain any standing water. While the low grade, hydric soils, and dense vegetation could potentially support some minimal flood storage, groundwater recharge, or nutrient trapping/retention, the low quality, invasive species, small size, and landscape position of Wetland 2 leave it providing no real function or value to the surrounding landscape.

Wetland 5 is a larger (approximately 9,200 square feet) hydrologically isolated scrub-shrub wetland (PSS1E) located within an electric utility right-of-way with signs of significant past disturbances. Wetland 5 exhibits low Ecological Integrity (New Hampshire Method average score of 3.6). The low grade, location, and hydric soils appear to support a minimal amount of flood storage during extremely heavy precipitation. However, the low quality, invasive species, small size, and lack of vegetative diversity of Wetland 5 leave it providing no substantial or principal function or value to the surrounding landscape.

Additional information is provided on the previously submitted Wetland Determination Data Forms and the updated Functional Assessment Worksheets enclosed herein.

Avoidance & Minimization Measures

The parking expansion will result in approximately 425 square feet of impact to Wetland 2 and approximately 9,210 square feet of impact to Wetland 5. However, given the location of existing facilities and available constructable area for expanding parking, and limited available land, this is the only practicable option for a parking expansion. Actual impacts to wetland functions will be negligible due to the overall lack of function or value, low quality, and presence of invasive species. What minimal function is present in the wetlands to be impacted (flood storage) will be offset with engineered solutions which will provide higher function and value than the existing conditions.

Other adjacent parcels to the Hospital facility are not practicable for this use as it would require larger impacts to wetland areas than what is proposed at this location.

We trust the enclosed information addresses the requirements for an Amended Wetland Application – Minor Impact. If you have any questions or require any additional information, please feel free to contact me at 603-433-8818 or asellar@tighebond.com.

Sincerely,
TIGHE & BOND, INC.



Alexander Sellar, PE
Project Engineer



Patrick M. Crimmins, PE
Vice President

Enclosures

Copy: Portsmouth Regional Hospital
Portsmouth City Clerk
Portsmouth Conservation Commission
Portsmouth Planning Board



**AMENDMENT REQUEST FORM
FOR A WETLANDS APPLICATION OR PERMIT
Water Division/Land Resources Management
Wetlands Bureau**



RSA/Rule: RSA 482-A:3, XIV(e)/ Env-Wt 311.13; Env-Wt 314.07

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

Any request for an amendment to a wetlands application or permit must be submitted to the Department on this form. An applicant may request an amendment to a pending permit application or an existing permit, provided the proposed change does not constitute a **“significant amendment.”** A **“significant amendment”** means an amendment which changes the proposed or previously approved acreage of the permitted fill or dredge area by 20 percent or more, includes a prime wetland, or elevates the project’s impact classification. This meaning of "significant amendment" shall not apply to an application amendment that is in response to a request from the Department (RSA 482-A:3, XIV(e)).

SECTION 1 - REQUESTED AMENDMENT TYPE AND AMENDMENT CRITERIA
<p>Does the proposed change constitute a “significant amendment” as provided in RSA 482-A:3, XIV(e) and described above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If you answered “yes” to the previous question, then you cannot request an amendment using this form and must file a new permit application.</p> <p><input checked="" type="checkbox"/> AMENDMENT TO PENDING PERMIT APPLICATION, NHDES FILE NUMBER: 2022-01782 (proceed to Section 2)</p> <p><input type="checkbox"/> AMENDMENT TO EXISTING PERMIT NUMBER: [] (proceed to Section 3)</p>
SECTION 2 - AMENDMENT TO A PENDING PERMIT APPLICATION
<p><input type="checkbox"/> Not applicable</p> <p>To request an amendment to a pending permit application, the applicant must:</p> <ul style="list-style-type: none"> • Submit the information required by Env-Wt 311.03, showing the changes prior to the Department’s issuance of a final decision on the application, including but not limited to, a revised set of plans and revised application fees for any additional square footage of impacts calculated pursuant to RSA 482-A:3, I(b) or (c) as applicable, and • Provide notice to each person to whom notice of the original application was sent prior to filing the amended application with the Department (Env-Wt 311.13). <p><input checked="" type="checkbox"/> By checking this box, you confirm that you have provided all information required pursuant to Env-Wt 311.03 to the Department and provided the required notice(s) as described above.</p>

SECTION 3 - AMENDMENT TO AN EXISTING PERMIT

Not applicable

To request an amendment to an existing permit, the permittee must:

- Submit the information required and filed with the original permit application, including but not limited to a revised set of plans, and revised application fees for any additional square footage of impacts calculated pursuant to RSA 482-A:3, I(b) or (c) as applicable, and
- Provide notice to all who received notice of the original application prior to filing the amended application with the Department (Env-Wt 314.07).

By checking this box, you confirm that you have provided all necessary information to the Department and provided the required notice(s) as described above.

irm@des.nh.gov or (603) 271-2147

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**STANDARD DREDGE AND FILL
WETLANDS PERMIT APPLICATION**
Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: Portsmouth Regional Hospital **TOWN NAME:** Portsmouth

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the [Waiver Request Form](#).

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))	
Please use the Wetland Permit Planning Tool (WPPT) , the Natural Heritage Bureau (NHB) DataCheck Tool , the Aquatic Restoration Mapper , or other sources to assist in identifying key features such as: priority resource areas (PRAs) , protected species or habitats , coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the property contain a PRA? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04. 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Protected species or habitat? <ul style="list-style-type: none"> ○ If yes, species or habitat name(s): <input type="text"/> ○ NHB Project ID #: NHB22-1544 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Bog?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Designated prime wetland or duly-established 100-foot buffer?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Name of Local River Management Advisory Committee (LAC): <input type="text"/> • A copy of the application was sent to the LAC on Month: <input type="text"/> Day: <input type="text"/> Year: <input type="text"/> 	

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For dredging projects, is the subject property contaminated? • If yes, list contaminant: [redacted]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
For stream crossing projects, provide watershed size (see WPPT or Stream Stats): n/a	
SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))	
Provide a brief description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.	
<p>The existing Portsmouth Regional Hospital building is operating with 783 parking spaces, which the facility has outgrown and is 32% less than the minimum required by local zoning. The proposed project includes the construction of a new 501 space satellite parking lot across the street from the existing hospital. This additional parking is necessary to support Portsmouth Regional Hospital's existing facility and to allow for future growth in patient care.</p> <p>The project proposes 9,635 sf of permanent impacts to on site wetlands.</p>	
SECTION 3 - PROJECT LOCATION	
Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.	
ADDRESS: TBD - Borthwick Avenue	
TOWN/CITY: Portsmouth	
TAX MAP/BLOCK/LOT/UNIT: Map 234 Lot 7-4A	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: [redacted]	
<input type="checkbox"/> N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	
	[redacted] ° North
	[redacted] ° West

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SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))		
If the applicant is a trust or a company, then complete with the trust or company information.		
NAME: Portsmouth Regional Hospital		
MAILING ADDRESS: 333 Borthwick Avenue		
TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: Matthew.Larkin@hcahealthcare.com		
FAX: [REDACTED]	PHONE: 603 436 5110	
ELECTRONIC COMMUNICATION: By initialing here: [REDACTED], I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c))		
<input type="checkbox"/> N/A		
LAST NAME, FIRST NAME, M.I.: Patrick M Crimmins		
COMPANY NAME: Tighe & Bond		
MAILING ADDRESS: 177 Corporate Drive		
TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: pmcrimmins@tighebond.com		
FAX: [REDACTED]	PHONE: 603 433 8818	
ELECTRONIC COMMUNICATION: By initialing here PMC, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b))		
If the owner is a trust or a company, then complete with the trust or company information.		
<input checked="" type="checkbox"/> Same as applicant		
NAME: Portsmouth Regional Hospital is a subsidiary of HCA Healthcare Inc.		
MAILING ADDRESS: [REDACTED]		
TOWN/CITY: [REDACTED]	STATE: [REDACTED]	ZIP CODE: [REDACTED]
EMAIL ADDRESS: [REDACTED]		
FAX: [REDACTED]	PHONE: [REDACTED]	
ELECTRONIC COMMUNICATION: By initialing here [REDACTED], I hereby authorize NHDES to communicate all matters relative to this application electronically.		

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SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

The resource-specific criteria in Env-Wt 600, 700, and 900 do not apply to this project as there will be no coastal or tidal impacts, no prime wetlands are present within the project area, and there will be no stream crossings associated with this project. This project does not qualify for a project-type exception under Env-Wt 407.04.

This project is not located within a Priority Resource Area and there will be no fill in public waters to make land.

Jeremy Degler, CWB, CWS, PWS, of Tighe & Bond delineated wetlands within the project parcel on September 17, 2021 utilizing the criteria specified in Env-Wt 406.01.

The wetland impact is necessary to accommodate the parking needed for the existing Hospital facility. Small pocket wetlands are impacted, though the project does not propose to impact the larger wetland complex and its 100 ft buffer. There is no practical alternative that would have less adverse impact of the area per Env-Wt 313.03.

SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#) and the [Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet](#). For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the [Avoidance and Minimization Checklist](#), the [Avoidance and Minimization Narrative](#), or your own avoidance and minimization narrative.

*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation [pre-application meeting](#) must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: Day: Year:

(N/A - Mitigation is not required)

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: I confirm submittal.

(N/A – Compensatory mitigation is not required)

SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/ivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Scrub-shrub Wetland	9635		<input type="checkbox"/>			<input type="checkbox"/>
	Emergent Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Wet Meadow			<input type="checkbox"/>			<input type="checkbox"/>
	Vernal Pool			<input type="checkbox"/>			<input type="checkbox"/>
	Designated Prime Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Duly-established 100-foot Prime Wetland Buffer			<input type="checkbox"/>			<input type="checkbox"/>
Surface Water	Intermittent / Ephemeral Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Perennial Stream or River			<input type="checkbox"/>			<input type="checkbox"/>
	Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - River			<input type="checkbox"/>			<input type="checkbox"/>
Banks	Bank - Intermittent Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Bank - Perennial Stream / River			<input type="checkbox"/>			<input type="checkbox"/>
	Bank / Shoreline - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
Tidal	Tidal Waters			<input type="checkbox"/>			<input type="checkbox"/>
	Tidal Marsh			<input type="checkbox"/>			<input type="checkbox"/>
	Sand Dune			<input type="checkbox"/>			<input type="checkbox"/>
	Undeveloped Tidal Buffer Zone (TBZ)			<input type="checkbox"/>			<input type="checkbox"/>
	Previously-developed TBZ			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Tidal Water			<input type="checkbox"/>			<input type="checkbox"/>
TOTAL		9635					

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)

<input type="checkbox"/> MINIMUM IMPACT FEE: Flat fee of \$400.	
<input type="checkbox"/> NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION: Flat fee of \$400 (refer to RSA 482-A:3, 1(c) for restrictions).	
<input checked="" type="checkbox"/> MINOR OR MAJOR IMPACT FEE: Calculate using the table below:	
Permanent and temporary (non-docking): 9635 SF	× \$0.40 = \$ 3,854
Seasonal docking structure: <input type="checkbox"/> SF	× \$2.00 = \$ <input type="checkbox"/>
Permanent docking structure: <input type="checkbox"/> SF	× \$4.00 = \$ <input type="checkbox"/>
Projects proposing shoreline structures (including docks) add \$400 =	\$ <input type="checkbox"/>
Total =	\$ 3,854
The application fee for minor or major impact is the above calculated total or \$400, whichever is greater = \$ 3,854	

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SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)

Indicate the project classification.

Minimum Impact Project

Minor Project

Major Project

SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)

Initial each box below to certify:

Initials: [Redacted] PMC [Redacted]	To the best of the signer's knowledge and belief, all required notifications have been provided.
--	--

Initials: [Redacted] PMC [Redacted]	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.
--	--

Initials: [Redacted] PMC [Redacted]	The signer understands that: <ul style="list-style-type: none"> • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: <ol style="list-style-type: none"> 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. • The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. • The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.
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Initials: [Redacted] PMC [Redacted]	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.
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SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)

SIGNATURE (OWNER): [Redacted]	PRINT NAME LEGIBLY: [Redacted]	DATE: [Redacted]
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): [Redacted]	PRINT NAME LEGIBLY: [Redacted]	DATE: [Redacted]
SIGNATURE (AGENT, IF APPLICABLE): [Handwritten Signature]	PRINT NAME LEGIBLY: Patrick M Crimmins	DATE: 7/27/2022

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

TOWN/CITY CLERK SIGNATURE: [Redacted]	PRINT NAME LEGIBLY: [Redacted]
TOWN/CITY: [Redacted]	DATE: [Redacted]

NHDES-W-06-012

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to "Treasurer – State of NH".

irm@des.nh.gov or (603) 271-2147

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**WETLANDS FUNCTIONAL ASSESSMENT
WORKSHEET**
Water Division/Land Resource Management
Wetlands Bureau



[Check the Status of your Application](#)

RSA/Rule: RSA 482-A / Env-Wt 311.03(b)(10); Env-Wt 311.10

APPLICANT LAST NAME, FIRST NAME, M.I.: **Portsmouth Regional Hospital c/o Matthew Larkin**

As required by Env-Wt 311.03(b)(10), an application for a standard permit for minor and major projects must include a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10. This worksheet will help you compile data for the functional assessment needed to meet federal (US Army Corps of Engineers (USACE); if applicable) and NHDES requirements. Additional requirements are needed for projects in tidal area; please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.

Both a desktop review and a field examination are needed to accurately determine surrounding land use, hydrology, hydroperiod, hydric soils, vegetation, structural complexity of wetland classes, hydrologic connections between wetlands or stream systems or wetland complex, position in the landscape, and physical characteristics of wetlands and associated surface waters. The results of the evaluation are to be used to select the location of the proposed project having the least impact to wetland functions and values (Env-Wt 311.10). This worksheet can be used in conjunction with the [Avoidance and Minimization Written Narrative \(NHDES-W-06-089\)](#) and the [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to address Env-Wt 313.03 (Avoidance and Minimization). If more than one wetland/ stream resource is identified, multiple worksheets can be attached to the application. All wetland, vernal pools, and stream identification (ID) numbers are to be displayed and located on the wetlands delineation of the subject property.

SECTION 1 - LOCATION (USACE HIGHWAY METHODOLOGY)	
ADJACENT LAND USE: Forested undeveloped, paved roadway (Borthwick Avenue), residential	
CONTIGUOUS UNDEVELOPED BUFFER ZONE PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DISTANCE TO NEAREST ROADWAY OR OTHER DEVELOPMENT (in feet): Approximately 25	
SECTION 2 - DELINEATION (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
CERTIFIED WETLAND SCIENTIST (if in a non-tidal area) or QUALIFIED COASTAL PROFESSIONAL (if in a tidal area) who prepared this assessment: Jeremy Degler (NH CWS #301)	
DATE(S) OF SITE VISIT(S): 9/17/2021, 11/22/2021	DELINEATION PER ENV-WT 406 COMPLETED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CONFIRM THAT THE EVALUATION IS BASED ON: <input checked="" type="checkbox"/> Office and <input checked="" type="checkbox"/> Field examination.	
METHOD USED FOR FUNCTIONAL ASSESSMENT (check one and fill in blank if "other"): <input checked="" type="checkbox"/> USACE Highway Methodology. <input checked="" type="checkbox"/> Other scientifically supported method (enter name/ title): NH Method (for Ecological Integrity)	

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SECTION 3 - WETLAND RESOURCE SUMMARY (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
WETLAND ID: Wetland 2	LOCATION: (LAT/ LONG) 43.067359/-70.783336
WETLAND AREA: Approximately 4,460 square feet (SF)	DOMINANT WETLAND SYSTEMS PRESENT: Scrub-shrub
HOW MANY TRIBUTARIES CONTRIBUTE TO THE WETLAND? None	COWARDIN CLASS: PSS1E
IS THE WETLAND A SEPARATE HYDRAULIC SYSTEM? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No if not, where does the wetland lie in the drainage basin? 	IS THE WETLAND PART OF: <input checked="" type="checkbox"/> A wildlife corridor or <input type="checkbox"/> A habitat island? IS THE WETLAND HUMAN-MADE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
IS THE WETLAND IN A 100-YEAR FLOODPLAIN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE VERNAL POOLS PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, complete the Vernal Pool Table)
ARE ANY WETLANDS PART OF A STREAM OR OPEN-WATER SYSTEM? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE ANY PUBLIC OR PRIVATE WELLS DOWNSTREAM/ DOWNGRADIENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
PROPOSED WETLAND IMPACT TYPE: Parking lot	PROPOSED WETLAND IMPACT AREA: Approx. 425 SF
SECTION 4 - WETLANDS FUNCTIONS AND VALUES (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
<p>The following table can be used to compile data on wetlands functions and values. The reference numbers indicated in the "Functions/ Values" column refer to the following functions and values:</p> <ol style="list-style-type: none"> 1. Ecological Integrity (from RSA 482-A:2, XI) 2. Educational Potential (from USACE Highway Methodology: Educational/Scientific Value) 3. Fish & Aquatic Life Habitat (from USACE Highway Methodology: Fish & Shellfish Habitat) 4. Flood Storage (from USACE Highway Methodology: Floodflow Alteration) 5. Groundwater Recharge (from USACE Highway Methodology: Groundwater Recharge/Discharge) 6. Noteworthiness (from USACE Highway Methodology: Threatened or Endangered Species Habitat) 7. Nutrient Trapping/Retention & Transformation (from USACE Highway Methodology: Nutrient Removal) 8. Production Export (Nutrient) (from USACE Highway Methodology) 9. Scenic Quality (from USACE Highway Methodology: Visual Quality/Aesthetics) 10. Sediment Trapping (from USACE Highway Methodology: Sediment /Toxicant Retention) 11. Shoreline Anchoring (from USACE Highway Methodology: Sediment/Shoreline Stabilization) 12. Uniqueness/Heritage (from USACE Highway Methodology) 13. Wetland-based Recreation (from USACE Highway Methodology: Recreation) 14. Wetland-dependent Wildlife Habitat (from USACE Highway Methodology: Wildlife Habitat) <p>First, determine if a wetland is suitable for a particular function and value ("Suitability" column) and indicate the rationale behind your determination ("Rationale" column). Please use the rationale reference numbers listed in Appendix A of USACE <i>The Highway Methodology Workbook Supplement</i>. Second, indicate which functions and values are principal ("Principal Function/value?" column). As described in <i>The Highway Methodology Workbook Supplement</i>, "functions and values can be principal if they are an important physical component of a wetland ecosystem (function only) and/or are considered of special value to society, from a local, regional, and/or national perspective". "Important Notes" are to include characteristics the evaluator used to determine the principal function and value of the wetland.</p>	

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FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE (Reference #)	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Average Ecological Integrity Score = 4.4 (1, 5, 10, 1, 5, 1, 5, 1, 5, 10)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Ecological Integrity (from NHM)
2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Education Potential
3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fish & Aquatic Life
4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3, 5, 7, 9, 18	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flood Storage
5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2, 4, 5, 15	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Groundwater (Recharge Only)
6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Highest ranked habitat in NH & region plus supporting landscape. Priority habitat block, conservation land	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Noteworthiness (RTE)
7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5, 6, 7, 8, 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Nutrient Trapping/Retention
8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1, 2, 7, 12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Production Export
9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6, 9, 12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Scenic Quality
10	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 (road salt), 4, 7, 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sediment Trapping
11	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Shoreline Anchoring
12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2, 8, 13, 17	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Uniqueness/Heritage
13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10, 12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wetland-Based Recreation
14	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3, 7, 8, 13, 19	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wetland-Dependent Wildlife

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SECTION 5 - VERNAL POOL SUMMARY (Env-Wt 311.10)

Delineations of vernal pools shall be based on the characteristics listed in the definition of “vernal pool” in Env-Wt 104.44. To assist in the delineation, individuals may use either of the following references:

- *Identifying and Documenting Vernal Pools in New Hampshire 3rd Ed.*, 2016, published by the New Hampshire Fish and Game Department; or
- The USACE *Vernal Pool Assessment* draft guidance dated 9-10-2013 and form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

All vernal pool ID numbers are to be displayed and located on the wetland delineation of the subject property.

“Important Notes” are to include documented reproductive and wildlife values, landscape context, and relationship to other vernal pools/wetlands.

Note: For projects seeking federal approval from the USACE, please attach a completed copy of The USACE “Vernal Pool Assessment” form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

VERNAL POOL ID NUMBER	DATE(S) OBSERVED	PRIMARY INDICATORS PRESENT (LIST)	SECONDARY INDICATORS PRESENT (LIST)	LENGTH OF HYDROPERIOD	IMPORTANT NOTES
1	N/A	N/A	N/A	N/A	No vernal pools associated with this wetland.
2					
3					
4					
5					

SECTION 6 - STREAM RESOURCES SUMMARY

DESCRIPTION OF STREAM: N/A	STREAM TYPE (ROSGEN): N/A
HAVE FISHERIES BEEN DOCUMENTED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	DOES THE STREAM SYSTEM APPEAR STABLE? <input type="checkbox"/> Yes <input type="checkbox"/> No
OTHER KEY ON-SITE FUNCTIONS OF NOTE: N/A	

The following table can be used to compile data on stream resources. “Important Notes” are to include characteristics the evaluator used to determine principal function and value of each stream. The functions and values reference number are defined in Section 4.

FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	No streams associated with this wetland.
2	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION 7 - ATTACHMENTS (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)

- Wildlife and vegetation diversity/abundance list.
- Photograph of wetland.
- Wetland delineation plans showing wetlands, vernal pools, and streams in relation to the impact area and surrounding landscape. Wetland IDs, vernal pool IDs, and stream IDs must be indicated on the plans.
- For projects in tidal areas only: additional information required by Env-Wt 603.03/603.04. Please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.



**WETLANDS FUNCTIONAL ASSESSMENT
WORKSHEET**
Water Division/Land Resource Management
Wetlands Bureau



[Check the Status of your Application](#)

RSA/Rule: RSA 482-A / Env-Wt 311.03(b)(10); Env-Wt 311.10

APPLICANT LAST NAME, FIRST NAME, M.I.: **Portsmouth Regional Hospital c/o Matthew Larkin**

As required by Env-Wt 311.03(b)(10), an application for a standard permit for minor and major projects must include a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10. This worksheet will help you compile data for the functional assessment needed to meet federal (US Army Corps of Engineers (USACE); if applicable) and NHDES requirements. Additional requirements are needed for projects in tidal area; please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.

Both a desktop review and a field examination are needed to accurately determine surrounding land use, hydrology, hydroperiod, hydric soils, vegetation, structural complexity of wetland classes, hydrologic connections between wetlands or stream systems or wetland complex, position in the landscape, and physical characteristics of wetlands and associated surface waters. The results of the evaluation are to be used to select the location of the proposed project having the least impact to wetland functions and values (Env-Wt 311.10). This worksheet can be used in conjunction with the [Avoidance and Minimization Written Narrative \(NHDES-W-06-089\)](#) and the [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to address Env-Wt 313.03 (Avoidance and Minimization). If more than one wetland/ stream resource is identified, multiple worksheets can be attached to the application. All wetland, vernal pools, and stream identification (ID) numbers are to be displayed and located on the wetlands delineation of the subject property.

SECTION 1 - LOCATION (USACE HIGHWAY METHODOLOGY)	
ADJACENT LAND USE: Forested undeveloped, paved roadway (Borthwick Avenue), commercial, electric substation	
CONTIGUOUS UNDEVELOPED BUFFER ZONE PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DISTANCE TO NEAREST ROADWAY OR OTHER DEVELOPMENT (in feet): Approximately 15	
SECTION 2 - DELINEATION (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
CERTIFIED WETLAND SCIENTIST (if in a non-tidal area) or QUALIFIED COASTAL PROFESSIONAL (if in a tidal area) who prepared this assessment: Jeremy Degler (NH CWS #301)	
DATE(S) OF SITE VISIT(S): 9/17/2021, 11/22/2021	DELINEATION PER ENV-WT 406 COMPLETED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CONFIRM THAT THE EVALUATION IS BASED ON: <input checked="" type="checkbox"/> Office and <input checked="" type="checkbox"/> Field examination.	
METHOD USED FOR FUNCTIONAL ASSESSMENT (check one and fill in blank if "other"): <input checked="" type="checkbox"/> USACE Highway Methodology. <input checked="" type="checkbox"/> Other scientifically supported method (enter name/ title): NH Method (for Ecological Integrity)	

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SECTION 3 - WETLAND RESOURCE SUMMARY (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
WETLAND ID: Wetland 5	LOCATION: (LAT/ LONG) 43.066164/-70.785497
WETLAND AREA: Approximately 9,200 square feet (SF)	DOMINANT WETLAND SYSTEMS PRESENT: Scrub-shrub
HOW MANY TRIBUTARIES CONTRIBUTE TO THE WETLAND? None	COWARDIN CLASS: PSS1E
IS THE WETLAND A SEPARATE HYDRAULIC SYSTEM? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No if not, where does the wetland lie in the drainage basin? 	IS THE WETLAND PART OF: <input checked="" type="checkbox"/> A wildlife corridor or <input type="checkbox"/> A habitat island? IS THE WETLAND HUMAN-MADE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
IS THE WETLAND IN A 100-YEAR FLOODPLAIN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE VERNAL POOLS PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, complete the Vernal Pool Table)
ARE ANY WETLANDS PART OF A STREAM OR OPEN-WATER SYSTEM? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE ANY PUBLIC OR PRIVATE WELLS DOWNSTREAM/ DOWNGRADIENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
PROPOSED WETLAND IMPACT TYPE: Parking lot	PROPOSED WETLAND IMPACT AREA: Approx. 9,210 SF
SECTION 4 - WETLANDS FUNCTIONS AND VALUES (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
<p>The following table can be used to compile data on wetlands functions and values. The reference numbers indicated in the "Functions/ Values" column refer to the following functions and values:</p> <ol style="list-style-type: none"> 1. Ecological Integrity (from RSA 482-A:2, XI) 2. Educational Potential (from USACE Highway Methodology: Educational/Scientific Value) 3. Fish & Aquatic Life Habitat (from USACE Highway Methodology: Fish & Shellfish Habitat) 4. Flood Storage (from USACE Highway Methodology: Floodflow Alteration) 5. Groundwater Recharge (from USACE Highway Methodology: Groundwater Recharge/Discharge) 6. Noteworthiness (from USACE Highway Methodology: Threatened or Endangered Species Habitat) 7. Nutrient Trapping/Retention & Transformation (from USACE Highway Methodology: Nutrient Removal) 8. Production Export (Nutrient) (from USACE Highway Methodology) 9. Scenic Quality (from USACE Highway Methodology: Visual Quality/Aesthetics) 10. Sediment Trapping (from USACE Highway Methodology: Sediment /Toxicant Retention) 11. Shoreline Anchoring (from USACE Highway Methodology: Sediment/Shoreline Stabilization) 12. Uniqueness/Heritage (from USACE Highway Methodology) 13. Wetland-based Recreation (from USACE Highway Methodology: Recreation) 14. Wetland-dependent Wildlife Habitat (from USACE Highway Methodology: Wildlife Habitat) <p>First, determine if a wetland is suitable for a particular function and value ("Suitability" column) and indicate the rationale behind your determination ("Rationale" column). Please use the rationale reference numbers listed in Appendix A of USACE <i>The Highway Methodology Workbook Supplement</i>. Second, indicate which functions and values are principal ("Principal Function/value?" column). As described in <i>The Highway Methodology Workbook Supplement</i>, "functions and values can be principal if they are an important physical component of a wetland ecosystem (function only) and/or are considered of special value to society, from a local, regional, and/or national perspective". "Important Notes" are to include characteristics the evaluator used to determine the principal function and value of the wetland.</p>	

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FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE (Reference #)	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Average Ecological Integrity Score = 3.6 (1, 1, 10, 1, 1, 1, 5, 1, 5, 10)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Ecological Integrity (from NHM)
2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Education Potential
3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fish & Aquatic Life
4	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3, 5, 6, 7, 8, 9, 18	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flood Storage
5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2, 5, 15	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Groundwater (Recharge Only)
6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Highest ranked habitat in NH & region plus supporting landscape. Priority habitat block, conservation land	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Noteworthiness (RTE)
7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5, 6, 7, 8, 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Nutrient Trapping/Retention
8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2, 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Production Export
9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6, 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Scenic Quality
10	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 (road salt), 4, 7, 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sediment Trapping
11	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Shoreline Anchoring
12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2, 8, 13, 17	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Uniqueness/Heritage
13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10, 12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wetland-Based Recreation
14	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3, 7, 8, 13, 19	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wetland-Dependent Wildlife

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SECTION 5 - VERNAL POOL SUMMARY (Env-Wt 311.10)

Delineations of vernal pools shall be based on the characteristics listed in the definition of “vernal pool” in Env-Wt 104.44. To assist in the delineation, individuals may use either of the following references:

- *Identifying and Documenting Vernal Pools in New Hampshire 3rd Ed.*, 2016, published by the New Hampshire Fish and Game Department; or
- The USACE *Vernal Pool Assessment* draft guidance dated 9-10-2013 and form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

All vernal pool ID numbers are to be displayed and located on the wetland delineation of the subject property.

“Important Notes” are to include documented reproductive and wildlife values, landscape context, and relationship to other vernal pools/wetlands.

Note: For projects seeking federal approval from the USACE, please attach a completed copy of The USACE “Vernal Pool Assessment” form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

VERNAL POOL ID NUMBER	DATE(S) OBSERVED	PRIMARY INDICATORS PRESENT (LIST)	SECONDARY INDICATORS PRESENT (LIST)	LENGTH OF HYDROPERIOD	IMPORTANT NOTES
1	N/A	N/A	N/A	N/A	No vernal pools associated with this wetland.
2					
3					
4					
5					

SECTION 6 - STREAM RESOURCES SUMMARY

DESCRIPTION OF STREAM: N/A	STREAM TYPE (ROSGEN): N/A
HAVE FISHERIES BEEN DOCUMENTED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	DOES THE STREAM SYSTEM APPEAR STABLE? <input type="checkbox"/> Yes <input type="checkbox"/> No
OTHER KEY ON-SITE FUNCTIONS OF NOTE: N/A	

The following table can be used to compile data on stream resources. “Important Notes” are to include characteristics the evaluator used to determine principal function and value of each stream. The functions and values reference number are defined in Section 4.

FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	No streams associated with this wetland.
2	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION 7 - ATTACHMENTS (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)

- Wildlife and vegetation diversity/abundance list.
- Photograph of wetland.
- Wetland delineation plans showing wetlands, vernal pools, and streams in relation to the impact area and surrounding landscape. Wetland IDs, vernal pool IDs, and stream IDs must be indicated on the plans.
- For projects in tidal areas only: additional information required by Env-Wt 603.03/603.04. Please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.

PROPOSED SATELLITE PARKING LOT

PORTSMOUTH, NEW HAMPSHIRE

444 BORTHWICK AVENUE

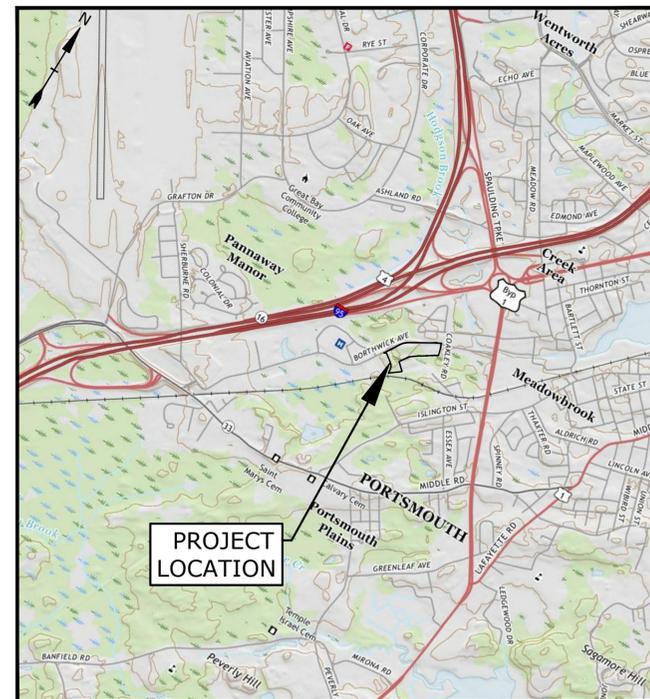
PERMIT DRAWINGS

MARCH 22, 2022

LAST REVISED JULY 21, 2022

LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	07/21/2022
1 OF 2	EXISTING CONDITIONS PLAN	07/13/2022
2 OF 2	EXISTING CONDITIONS PLAN	07/13/2022
G-101	GENERAL NOTES, ABBREVIATIONS, & LEGEND SHEET	07/21/2022
C-101	DEMOLITION PLAN	07/21/2022
C-102	OVERALL PARKING PLAN	07/21/2022
C-102.1	SITE PLAN	07/21/2022
C-103	GRADING, DRAINAGE, AND EROSION CONTROL PLAN	07/21/2022
C-104	UTILITY PLAN	07/21/2022
C-105	LANDSCAPE PLAN	07/21/2022
C-106	PHOTOMETRICS PLAN	07/21/2022
C-501	EROSION CONTROL NOTES & DETAILS SHEET	07/21/2022
C-502	DETAILS SHEET	07/21/2022
C-503	DETAILS SHEET	07/21/2022
C-504	DETAILS SHEET	07/21/2022
C-505	DETAILS SHEET	07/21/2022
C-506	DETAILS SHEET	07/21/2022
C-507	DETAILS SHEET	07/21/2022
C-508	DETAILS SHEET	07/21/2022
C-509	DETAILS SHEET	07/21/2022
C-510	DETAILS SHEET	07/21/2022

LIST OF PERMITS		
FEDERAL	STATUS	DATE
CONSTRUCTION GENERAL PERMIT (CGP) & NOI		
LOCAL		
SITE PLAN REVIEW PERMIT		
ZONING BOARD OF ADJUSTMENT - SPECIAL EXCEPTION & VARIANCE	APPROVED	2/23/2022
STATE		
NHDES STANDARD DREDGE AND FILL WETLAND IMPACT PERMIT	PENDING	
NHDES ALTERATION OF TERRAIN	PENDING	



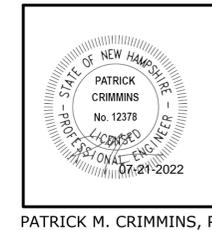
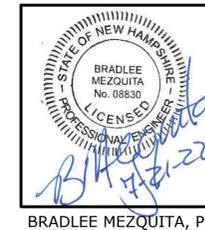
LOCATION MAP
SCALE: 1" = 2,000'

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A REQUIRED DIMENSION IS NOT PROVIDED ON THE PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOUT CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.
3. TIGHE & BOND, ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE & BOND.

PREPARED BY:

Tighe & Bond
177 Corporate Drive
Portsmouth, NH 03801
(603) 433-8818



APPLICANT:

Portsmouth Regional Hospital
333 Borthwick Avenue
Portsmouth, NH 03801

SURVEY CONSULTANT:



Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857 (603) 659-6560
2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4060
10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005
http://www.doucetsurvey.com

OWNER:

HCA Realty Inc.
c/o Ducharme Mcmillen & Assoc - HCA NH
PO Box 80610
Indianapolis, IN 46280

WILDLIFE PROTECTION NOTES:

1. ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV; EMAIL SUBJECT LINE: NHB22-1544, PRH SATELLITE PARKING LOT, WILDLIFE SPECIES OBSERVATION.
2. PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHFG IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE;
3. IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHFG AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHFG, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04
4. THE NHFG, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.



COMPLETE SET 21 SHEETS



NOTES:

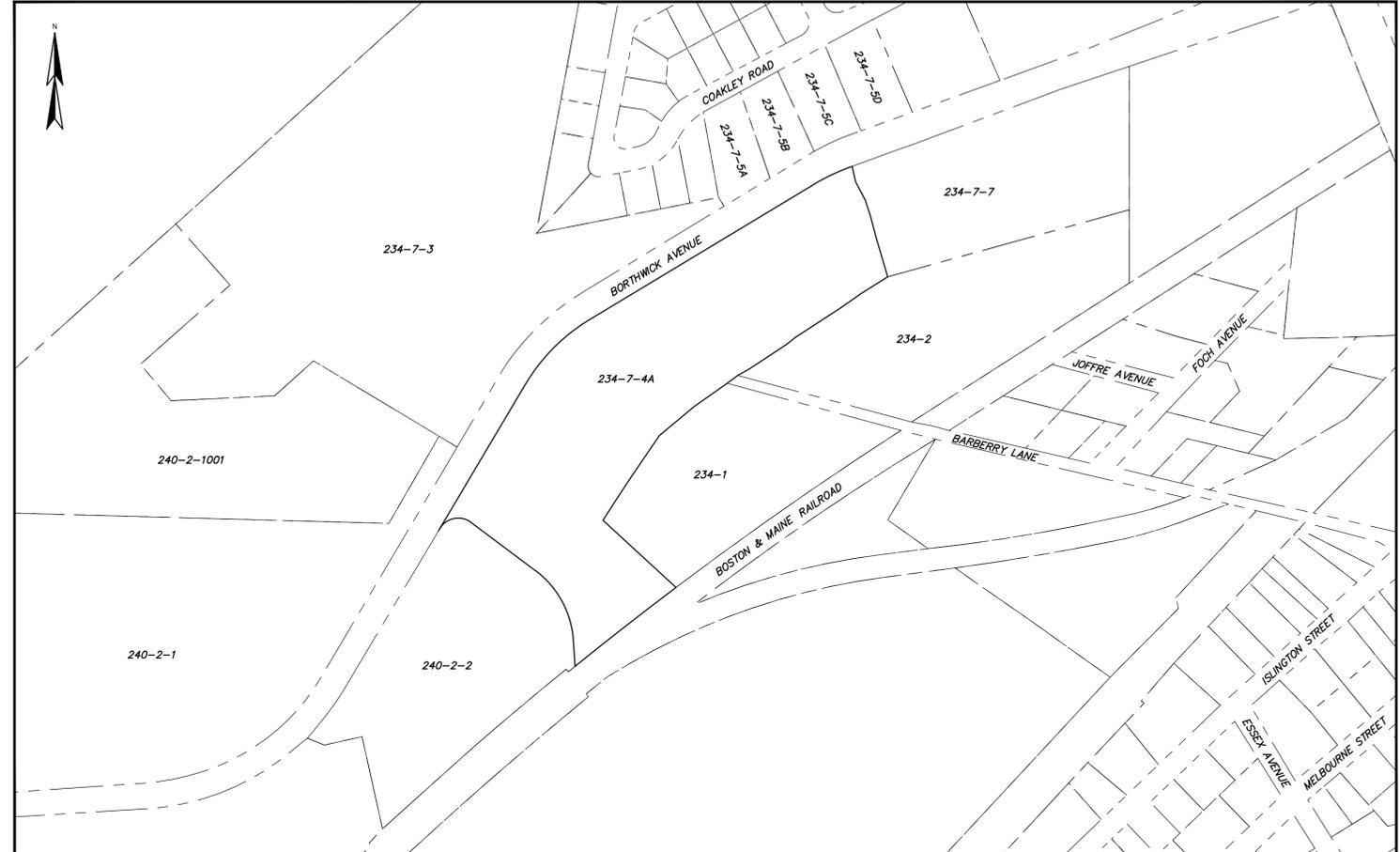
- REFERENCE: TAX MAP 234, LOT 7-4A
BORTHWICK AVENUE EXTENSION
PORTSMOUTH, NEW HAMPSHIRE
D.S. PROJECT NO. 2826
- TOTAL PARCEL AREA: 395,745 SQ. FT. OR 9.09 AC.
- OWNER OF RECORD: HCA REALTY INC.
C/O DUCHARME MCMILLEN & ASSOC. - HCA NH
PO BOX 80610
INDIANAPOLIS, IN 46280
R.C.R.D BOOK 4400 PAGE 2048, BOOK 4639 PAGE 2128.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A COMBINATION OF AERIAL MAPPING BY EASTERN TOPOGRAPHICS IN 5/03 AND CONVENTIONAL SURVEY BY DOUCET SURVEY, SEE NOTE 5. EXCEPT FOR THE NOTED AREA, NO ADDITIONAL UPDATES WERE DONE TO THE AERIAL TOPOGRAPHY FROM 2003.
- FIELD SURVEY PERFORMED BY DOUCET SURVEY AT VARIOUS TIMES BETWEEN 2003 & 2022.
- JURISDICTIONAL WETLANDS DELINEATED BY JEREMY DEGLER (CWS #301, PWS #2809) OF TIGHE & BOND, ON SEPTEMBER 17, 2021 IN ACCORDANCE WITH 1987 US ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION (JANUARY 2012).
- FLOOD HAZARD ZONE: "X", PER FIRM MAP #33015C0260F, DATED 1/29/2021.
- HORIZONTAL DATUM IS BASED ON NH STATE PLANE COORDINATE SYSTEM. AS ESTABLISHED BY JAMES VERRA & ASSOCIATES IN MAY 2003.
- VERTICAL DATUM IS BASED ON NGVD 29.
- THE PARCEL IS SUBJECT TO, AND/OR IN BENEFIT OF THE FOLLOWING EASEMENTS, RESTRICTIONS, ETC.
 - SUBJECT TO AN ELECTRIC EASEMENT GRANTED BY SAN ANTONIO ET AL TO NH ELECTRIC CO, SEE R.C.R.D. BOOK 1230, PAGE 222.
 - SUBJECT TO A GAS LINE EASEMENT RESERVED BY NORTHERN UTILITIES, INC., SEE R.C.R.D. BK. 4392 PG. 110
 - SUBJECT TO AN ACCESS AND UTILITY EASEMENT RESERVED BY ISLINGTON WOODS, LLC, SEE R.C.R.D. BOOK 4639 PAGE 2128.
 - SUBJECT TO THE RIGHTS OF THE CITY OF PORTSMOUTH TO CONSTRUCT & MAINTAIN A SEWER LINE, SEE R.C.R.D. BOOK 4685, PAGE 553.
 - SUBJECT TO AN "AGREEMENT REGARDING PROHIBITED USES", SEE R.C.R.D. BOK. 4400 PG. 2051.
 - ALL OTHER RIGHTS OR EASEMENTS OF RECORD OR OTHERWISE. THIS PLAN DOES NOT REPRESENT A TITLE EXAMINATION, AND NONE WAS PROVIDED.
- PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 2' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY, INC. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVED PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
- ALL UNDERGROUND UTILITIES (ELECTRIC, GAS, TEL. WATER, SEWER DRAIN SERVICES) ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.

REFERENCE PLANS:

- "LOT LINE REVISION PLAN FOR PORTSMOUTH HOSPITAL OFFICE BUILDING ASSOCIATION, ISLINGTON WOODS, LLC AND HCA REALTY, INC. (TAX MAP 234, LOTS 7-4A & 7-4B) (TAX MAP 240, LOT 2-2) BORTHWICK AVENUE EXTENSION PORTSMOUTH, NEW HAMPSHIRE" DATED 1/13/06 BY DOUCET SURVEY, INC., R.C.R.D. PLAN D-33642.
- "SUBDIVISION & LOT LINE REVISION PLAN BETWEEN NORTHERN UTILITIES, INC. AND ISLINGTON WOODS, LLC," BY DOUCET SURVEY, INC., DATED FEBRUARY 25, 2004, R.C.R.D. PLAN D-31871.
- "GAS LINE AS-BUILT EASEMENT AND CONSERVATION EASEMENT PLAN," BY KIMBALL CHASE COMPANY, INC. DATED 10/31/85, R.C.R.D. PLAN D-15830.
- "PLAT OF PROPERTY AND IMPROVEMENTS FOR HCA REALTY, INC.," BY CESP, INC. DATED DECEMBER 12, 1986, R.C.R.D. PLAN D-15831.
- "EASEMENT PLAN FOR ISLINGTON WOODS, LLC AND BOSTON & MAINE CORPORATION BETWEEN ISLINGTON ST. & BORTHWICK AVE. EXT. (TAX MAP 223 LOT 113 & TAX MAP 234 LOT 7-4B) PORTSMOUTH, NEW HAMPSHIRE" DATED 10/20/2005 BY DOUCET SURVEY, INC., R.C.R.D. PLAN D-33500.
- "LOT LINE REVISION PLAN LAND OF SEARAY REALTY, LLC TAX AMP 234 LOTS 2, 3, & 7-7 US ROUTE 1 BY-PASS & BARBERRY LANE PORTSMOUTH, NEW HAMPSHIRE. DATED 3/12/2014 BY DOUCET SURVEY, INC., R.C.R.D. PLAN D-38435.
- "SUBDIVISION & EASEMENT PLAN LAND OF BORTHWICK FOREST, LLC (TAX MAP 241, LOT 25) AND SHOWING LAND OF HCA REALTY, INC. (TAX MAP 234, LOT 7-4A) (TAX MAP 240 LOT 2-202) BORTHWICK AVE. & ISLINGTON ST. PORTSMOUTH, NH" DATED 11/12/2019 BY DOUCET SURVEY, INC., R.C.R.D. PLAN D-42049



LOCATION MAP (n.t.s.)



KEY MAP



LEGEND: AERIAL DATA

- BUILDINGS
- STRUCTURE
- TREELINE
- TRAIL/WALK
- DRIVEWAY
- DRIVEWAY OBSCURED
- CURBING
- PAVED ROAD
- PAVED ROAD OBSCURED
- GRAVEL ROAD
- DRAINAGE OBSCURED
- FENCE OBSCURED
- FENCE
- PIPELINE
- PILE LIMIT
- STONE WALL
- DITCH
- TRAIL/WALK OBSCURED
- HEADWALL
- CONCRETE
- RAILROAD
- RAILROAD OBSCURED

- U.P.?
- UTILITY POLE
- UTILITY POLE OBSCURED
- HYDRANT
- MEDIUM LONE TREE
- SMALL LONE TREE
- SIGN
- POST
- SIGN

LEGEND

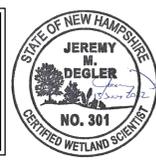
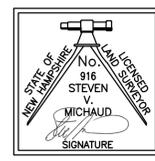
- LOT LINE
- APPROXIMATE ABUTTERS LOT LINE
- EXISTING EASEMENT LINE
- STONE WALL
- REMNANT STONE WALL
- OVERHEAD WIRE
- SS SEWER LINE
- SD DRAIN LINE
- CULVERT
- G GAS LINE
- 100 MAJOR CONTOUR LINE (SEE NOTE 5)
- 98 MINOR CONTOUR LINE (SEE NOTE 5)
- TREE LINE
- EDGE OF WETLAND (SEE NOTE 6)
- EDGE OF WETLAND AS PROVIDED BY CLIENT (NOT SURVEY LOCATED)
- WETLAND AREA
- CONCRETE
- RIP RAP
- LANDSCAPED AREA
- LEDGE OUTCROP
- REFERENCED WATER LINE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- UTILITY POLE W/LIGHT

- SIGN
- SIGN (TWO POSTS)
- DRILL HOLE FOUND
- IRON PIPE/ROD FOUND
- FIRE HYDRANT
- WATER GATE VALVE
- IRRIGATION CONTROL VALVE
- GAS GATE VALVE
- CATCH BASIN
- DRAIN MANHOLE
- FLARED END SECTION
- SEWER MANHOLE
- HAND HOLE
- DECIDUOUS TREE
- MAST ARM
- RAIL ROAD SIGNAL
- DRILL HOLE FOUND
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- VERTICAL GRANITE CURB
- SINGLE WHITE LINE
- DOUBLE YELLOW LINE
- ELECTRIC METER

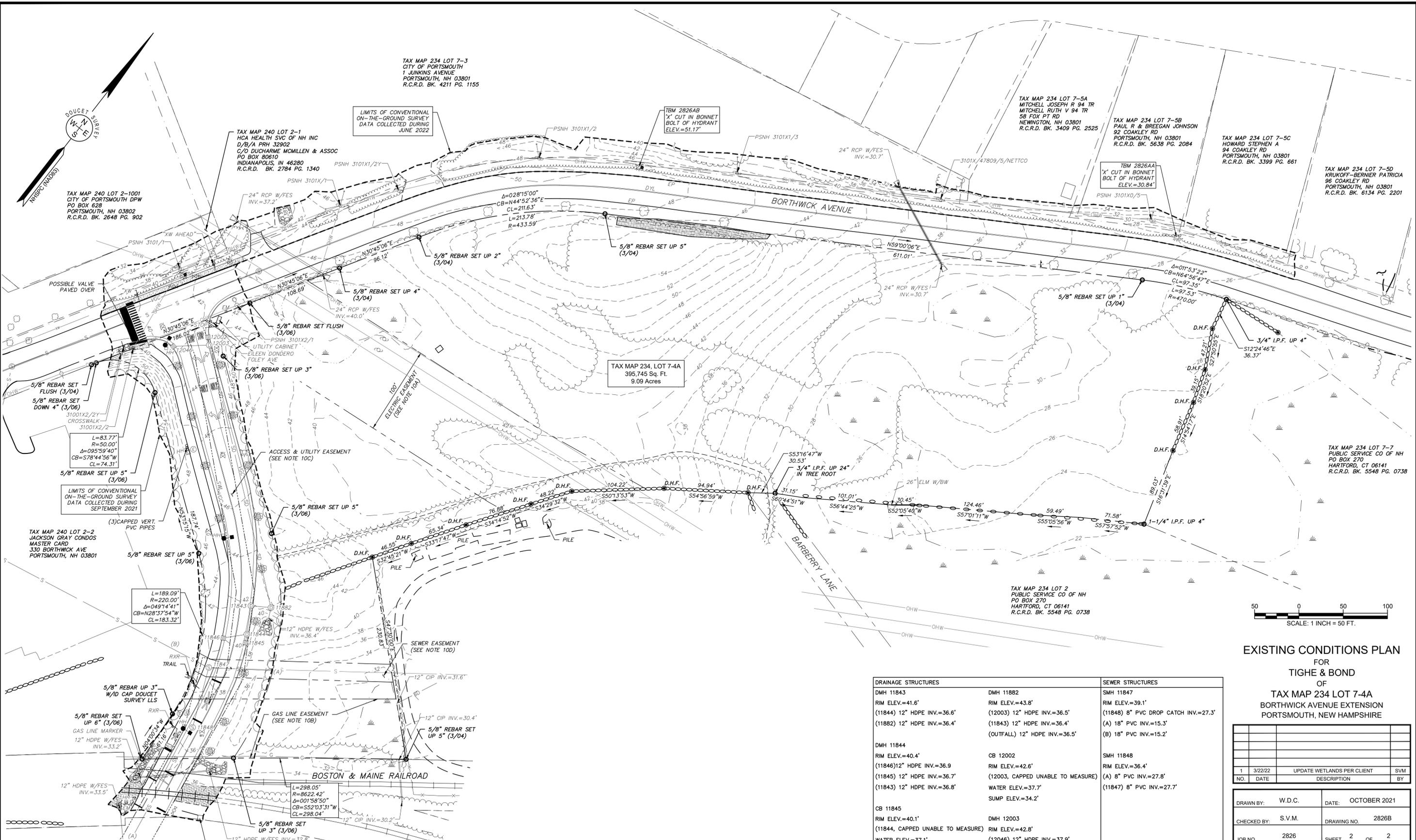
EXISTING CONDITIONS PLAN
FOR
TIGHE & BOND
OF
TAX MAP 234 LOT 7-4A
BORTHWICK AVENUE EXTENSION
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY
1	3/22/22	UPDATE WETLANDS PER CLIENT	SVM

DRAWN BY:	W.D.C.	DATE:	OCTOBER 2021
CHECKED BY:	S.V.M.	DRAWING NO.	2826B
JOB NO.	2826	SHEET	1 OF 2



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TAX MAP 234 LOT 7-3
CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, NH 03801
R.C.R.D. BK. 4211 PG. 1155

TAX MAP 234 LOT 7-5A
MITCHELL JOSEPH R 94 TR
MITCHELL RUTH V 94 TR
58 FOX PT RD
NEWINGTON, NH 03801
R.C.R.D. BK. 3409 PG. 2525

TAX MAP 234 LOT 7-5B
PAUL R & BREGAN JOHNSON
92 COAKLEY RD
PORTSMOUTH, NH 03801
R.C.R.D. BK. 5638 PG. 2084

TAX MAP 234 LOT 7-5C
HOWARD STEPHEN A
94 COAKLEY RD
PORTSMOUTH, NH 03801
R.C.R.D. BK. 3399 PG. 661

TAX MAP 234 LOT 7-5D
KRUKOFF-BERNIER PATRICIA
96 COAKLEY RD
PORTSMOUTH, NH 03801
R.C.R.D. BK. 6134 PG. 2201

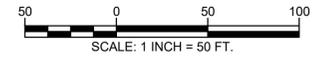
TAX MAP 240 LOT 2-1001
CITY OF PORTSMOUTH DPW
PO BOX 628
PORTSMOUTH, NH 03802
R.C.R.D. BK. 2648 PG. 902

TAX MAP 240 LOT 2-1
HCA HEALTH SVC OF NH INC
D/B/A PRH 32902
C/O DUCHARME MCMILLEN & ASSOC
PO BOX 80610
INDIANAPOLIS, IN 46280
R.C.R.D. BK. 2784 PG. 1340

TAX MAP 234, LOT 7-4A
395,745 Sq. Ft.
9.09 Acres

TAX MAP 240 LOT 2-2
JACKSON GRAY CONDOS
MASTER CARD
330 BORTHWICK AVE
PORTSMOUTH, NH 03801

TAX MAP 234 LOT 2
PUBLIC SERVICE CO OF NH
PO BOX 270
HARTFORD, CT 06141
R.C.R.D. BK. 5548 PG. 0738



EXISTING CONDITIONS PLAN
FOR
TIGHE & BOND
OF
TAX MAP 234 LOT 7-4A
BORTHWICK AVENUE EXTENSION
PORTSMOUTH, NEW HAMPSHIRE

DRAINAGE STRUCTURES		SEWER STRUCTURES	
DMH 11843 RIM ELEV.=41.6' (11844) 12" HDPE INV.=36.6' (11882) 12" HDPE INV.=36.4'	DMH 11882 RIM ELEV.=43.8' (12003) 12" HDPE INV.=36.5' (11843) 12" HDPE INV.=36.4' (OUTFALL) 12" HDPE INV.=36.5'	SMH 11847 RIM ELEV.=39.1' (11848) 8" PVC DROP CATCH INV.=27.3' (A) 18" PVC INV.=15.3' (B) 18" PVC INV.=15.2'	SMH 11848 RIM ELEV.=36.4' (A) 8" PVC INV.=27.8' (11847) 8" PVC INV.=27.7'
DMH 11844 RIM ELEV.=40.4' (11846) 12" HDPE INV.=36.9 (11845) 12" HDPE INV.=36.7' (11843) 12" HDPE INV.=36.8'	CB 12002 RIM ELEV.=42.6' (12003, CAPPED UNABLE TO MEASURE) WATER ELEV.=37.7' SUMP ELEV.=34.2'		
CB 11845 RIM ELEV.=40.1' (11844, CAPPED UNABLE TO MEASURE) WATER ELEV.=37.1' SUMP ELEV.=32.9'	DMH 12003 RIM ELEV.=42.8' (12046) 12" HDPE INV.=37.9' (12002) 12" HDPE INV.=37.9' (11882) 12" HDPE INV.=37.9'		
CB 11846 RIM ELEV.=40' (11844, CAPPED UNABLE TO MEASURE) WATER ELEV.=37.2' SUMP ELEV.=33'	CB 12046 RIM ELEV.=41.6' (12003, CAPPED UNABLE TO MEASURE) WATER ELEV.=38.2' SUMP ELEV.=34'		

NO.	DATE	DESCRIPTION	BY
1	3/22/22	UPDATE WETLANDS PER CLIENT	SVM

DRAWN BY:	W.D.C.	DATE:	OCTOBER 2021
CHECKED BY:	S.V.M.	DRAWING NO.	2826B
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STATE OF NEW HAMPSHIRE
JEREMY M. DEGLER
No. 301
CERTIFIED WETLAND SCIENTIST

STATE OF NEW HAMPSHIRE
No. 916
STEVEN MICHAUD
LICENSED SURVEYOR

GENERAL NOTES:

- THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
- COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH.
- THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES.
- THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES AND COMPLY WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR AND COMPLY WITH ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED BUTTTER.
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES & SPECIFICATIONS.
- ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
- CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
- CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- SEE EXISTING CONDITIONS PLAN FOR BENCH MARK INFORMATION.

DEMOLITION NOTES:

- EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
- ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
- COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
- ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
- UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER THE UTILITY COMPANY AND CITY OF PORTSMOUTH STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
- PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES AND PAVEMENT WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, BUILDING SLABS, FOUNDATION, TREES AND LANDSCAPING.
- REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
- CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
- PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS/CURB INLETS WITHIN CONSTRUCTION LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INLET PROTECTION BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE "HIGH FLOW SILT SACK" BY ACF ENVIRONMENTAL OR EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN EVENT OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED OR SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE BARRIER.
- THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
- SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.

SITE NOTES:

- PAVEMENT MARKINGS SHALL BE INSTALLED AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, FIRE LANES, CROSS WALKS, ARROWS, LEGENDS AND CENTERLINES. ALL MARKINGS EXCEPT CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING WHITE PAVEMENT MARKINGS. ALL THERMOPLASTIC PAVEMENT MARKINGS INCLUDING LEGENDS, ARROWS, CROSSWALKS AND STOP BARS SHALL MEET THE REQUIREMENTS OF AASHTO M249. ALL PAINTED PAVEMENT MARKINGS INCLUDING CENTERLINES, LANE LINES AND PAINTED MEDIANS SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F".
- ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS.
- SEE DETAILS FOR PAVEMENT MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS.
- CENTERLINES SHALL BE FOUR (4) INCH WIDE YELLOW LINES.
- PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE LINES.
- STOP BARS SHALL BE EIGHTEEN (18) INCHES WIDE, WHITE THERMOPLASTIC AND CONFORM TO CURRENT MUTCD STANDARDS.
- CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1

- EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
- ALL WORK WITHIN THE CITY OF PORTSMOUTH RIGHT OF WAY IS SUBJECT TO REVIEW AND APPROVAL BY THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING RETAINING WALL DESIGN FROM STRUCTURAL ENGINEER AND/OR WALL MANUFACTURER. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO CONSTRUCT WALL IN ACCORDANCE WITH DESIGN APPROVED BY THE ENGINEER. RETAINING WALL SHALL BE SEGMENTAL BLOCK WALL SYSTEM AS OUTLINED IN THE DETAILS.
- ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
- THE APPLICANT SHALL HAVE A SITE SURVEY CONDUCTED BY A RADIO COMMUNICATIONS CARRIER APPROVED BY THE CITY'S COMMUNICATIONS DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE POLICE AND RADIO CONFIGURATION. IF THE SITE SURVEY INDICATES IT IS NECESSARY TO INSTALL A SIGNAL REPEATER EITHER ON OR NEAR THE PROPOSED PROJECT, THOSE COSTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR THE CITY.
- ALL TREES PLANTED ARE TO BE INSTALLED UNDER THE SUPERVISION OF THE CITY OF PORTSMOUTH DPW USING STANDARD INSTALLATION METHODS.
- THE APPLICANT SHALL PREPARE A CONSTRUCTION MITIGATION AND MANAGEMENT PLAN (CMMP) FOR REVIEW AND APPROVAL BY THE CITY'S LEGAL AND PLANNING DEPARTMENTS.

SITE RECORDING NOTES:

- THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESSED APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
- THIS IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED AS SUCH.

GRADING AND DRAINAGE NOTES:

- COMPACTION REQUIREMENTS:
BELOW PAVED OR CONCRETE AREAS 95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95%
BELOW LOAM AND SEED AREAS 90%
* ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
- ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED.
- ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
- CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
- ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS AND NHDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
- ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.

EROSION CONTROL NOTES:

- SEE SHEET C-501 FOR GENERAL EROSION CONTROL NOTES AND DETAILS.

UTILITY NOTES:

- COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
•NATURAL GAS - UNITIL
•WATER - CITY OF PORTSMOUTH
•SEWER - CITY OF PORTSMOUTH
•ELECTRIC - EVERSOURCE
•COMMUNICATIONS - FAIRPOINT AND COMCAST
- EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE DEPARTMENT OF PUBLIC WORKS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
- ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
- THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANIES.
- ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
- SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN
- CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
- SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.

LANDSCAPE NOTES:

- THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS IN QUANTITIES AS SHOWN ON THIS PLAN. NO SUBSTITUTIONS WILL BE PERMITTED UNLESS APPROVED BY OWNER. ALL PLANTS SHALL BE NURSERY GROWN.
- ALL PLANTS SHALL BE NURSERY GROWN AND PLANTS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS, INCLUDING BUT NOT LIMITED TO SIZE, HEALTH, SHAPE, ETC., AND SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO ARRIVAL ON-SITE AND AFTER PLANTING.
- PLANT STOCK SHALL BE GROWN WITHIN THE HARDINESS ZONES 4 THRU 7 ESTABLISHED BY THE PLANT HARDINESS ZONE MAP, MISCELLANEOUS PUBLICATIONS NO. 814, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT AGRICULTURE, LATEST REVISION.
- PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.
- THE NUMBER OF EACH INDIVIDUAL PLANT TYPE AND SIZE PROVIDED IN THE PLANT LIST OR ON THE PLAN IS FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS ON THE LABEL AND THE NUMBER OF SYMBOLS SHOWN ON THE DRAWINGS, THE GREATER NUMBER SHALL APPLY.
- NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL LOCATE, VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTING AND UTILITIES SHALL IMMEDIATELY BE REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, SHALL RECEIVE 6" OF LOAM AND SEED. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
- THREE INCHES (3") OF NON-COMBUSTIBLE MULCH IS TO BE USED AROUND THE TREE AND

- SHRUB PLANTING AS SPECIFIED IN THE DETAILS. WHERE MULCH IS TO BE USED IN A CURBED ISLAND THE MULCH SHALL MEET THE TOP INSIDE EDGE OF THE CURB. ALL OTHER AREAS SHALL RECEIVE 6" INCHES OF LOAM AND SEED.
- SEE PLANTING DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- TREE STAKES SHALL REMAIN IN PLACE FOR NO LESS THAN 6 MONTHS AND NO MORE THAN 1 YEAR.
- PLANTING SHALL BE COMPLETED FROM APRIL 15TH THROUGH OCTOBER 1ST. NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR DROUGHT.
- TREES SHALL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 'TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON. LANDSCAPE CONTRACTOR SHALL COORDINATE WATERING SCHEDULE WITH OWNER DURING THE ONE (1) YEAR GUARANTEE PERIOD.
- EXISTING TREES AND SHRUBS SHOWN ON THE PLAN ARE TO REMAIN UNDISTURBED. ALL EXISTING TREES AND SHRUBS SHOWN TO REMAIN ARE TO BE PROTECTED WITH A 4-FOOT SNOW FENCE PLACED AT THE DRIP LINE OF THE BRANCHES OR AT 8 FEET MINIMUM FROM THE TREE TRUNK. ANY EXISTING TREE OR SHRUB SHOWN TO REMAIN, WHICH IS REMOVED DURING CONSTRUCTION, SHALL BE REPLACED BY A TREE OF COMPARABLE SIZE AND SPECIES TREE OR SHRUB.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING AND ACCEPTABLE CONDITION FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION. ALL GRASSES, TREES AND SHRUBS THAT, IN THE OPINION OF THE LANDSCAPE ARCHITECT, SHOW LESS THAN 80% HEALTHY GROWTH AT THE END OF ONE YEAR PERIOD SHALL BE REPLACED BY THE CONTRACTOR.
- UPON EXPIRATION OF THE CONTRACTOR'S ONE YEAR GUARANTEE PERIOD, THE OWNER SHALL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE INCLUDING WATERING DURING PERIODS OF DROUGHT
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTING AND LAWNS AGAINST DAMAGE FROM ONGOING CONSTRUCTION. THIS PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL THE FORMAL ACCEPTANCE OF ALL THE PLANTINGS.
- PRE-PURCHASE PLANT MATERIAL AND ARRANGE FOR DELIVERY TO MEET PROJECT SCHEDULE AS REQUIRED IT MAY BE NECESSARY TO PRE-DIG CERTAIN SPECIES WELL IN ADVANCE OF ACTUAL PLANTING DATES.

EXISTING CONDITIONS PLAN NOTES:

- EXISTING CONDITIONS ARE BASED ON A FIELD SURVEY BY DOUCET SURVEY, DATED OCTOBER 2021.
- WETLAND DELINEATION BY TIGHE & BOND, ON SEPTEMBER 17, 2021, AND FIELD LOCATED BY DOUCET SURVEY.

REFERENCE PLANS:

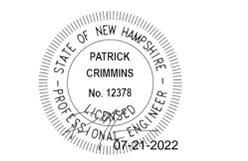
- SEE EXISTING CONDITIONS PLAN, BY DOUCET SURVEY.

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS	NHDES	NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
AC	ACRES	NRCC	NORTHEAST REGIONAL CLIMATE CENTER
ADA	AMERICANS WITH DISABILITIES ACT	NRCS	NATURAL RESOURCES CONSERVATION SERVICE
AGGR	AGGREGATE	OC	ON CENTER
AOT	ALTERATION OF TERRIAN	OD	OUTSIDE DIAMETER
BLDG	BUILDING	PAD	PROPOSED AREA DRAIN
BMP(S)	BEST MANAGEMENT PRACTICE(S)	PC	POINT OF CURVATURE
BOC	BOTTOM OF CURB	PCB	PROPOSED CATCH BASIN
BOW	BOTTOM OF WALL	PDMH	PROPOSED DRAINAGE MANHOLE
CB	CATCH BASIN	PI	POINT OF INTERSECTION
CCB	CAPE COD BERM	POS	PROPOSED OUTLET STRUCTURE
CMP	CORRUGATED METAL PIPE	PROP	PROPOSED
CONST	CONSTRUCT	PSMH	PROPOSED SEWER MANHOLE
COORD	COORDINATE	PT	POINT OF TANGENCY
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE
DIP	DUCTILE IRON PIPE	PVMT	PAVEMENT
DMH	DRAINAGE MANHOLE	PYD	PROPOSED YARD DRAIN
DH	DOGHOUSE	R	RADIUS
DWG	DRAWING	RCP	REINFORCED CONCRETE PIPE
ELEV	ELEVATION	RL	ROOF LEADER
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EXIST	EXISTING	SF	SQUARE FEET
FES	FLARED END SECTION	SSSNNNE	SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND STANDARD
FF	FINISHED FLOOR	STD	STANDARD
HDPE	HIGH DENSITY POLYETHYLENE	TBR	TO BE REMOVED
HMA	HOT MIX ASPHALT	TOC	TOP OF CURB
HMP	HOT MIX PAVEMENT	TOW	TOP OF WALL
HW	HEADWALL	TYP	TYPICAL
HYD	HYDRANT	UD	UNDERDRAIN
ID	INSIDE DIAMETER	USCS	UNIFIED SOIL CLASSIFICATION SYSTEM
INV	INVERT	USDA	UNITED STATES DEPARTMENT OF AGRICULTURE
L	LENGTH	W	WIDTH
LF	LINEAR FEET	W/	WITH
MAX	MAXIMUM	YD	YARD DARIN
MIN	MINIMUM		
NCS	NATIONAL COOPERATIVE SURVEY		

LEGEND

	EXISTING LOT LINE
	PROPOSED LEASE LINE
	APPROXIMATE LIMIT OF WORK
	APPROXIMATE LIMIT OF SAWCUT
	EXISTING RIGHT-OF-WAY LINE
	EXISTING CHAIN LINK FENCE
	EXISTING OVERHEAD WIRE
	EXISTING SEWER LINE
	PROPOSED SEWER LINE
	EXISTING DRAIN LINE
	PROPOSED DRAIN LINE
	PROPOSED DRAIN LINE
	EXISTING GAS LINE
	PROPOSED GAS LINE
	EXISTING TELEPHONE LINE
	PROPOSED COMMUNICATIONS LINE
	PROPOSED ELECTRIC LINE
	APPROXIMATE LIMITS OF UTILITY LINE REMOVAL
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING MAJOR CONTOUR LINE
	EXISTING MINOR CONTOUR LINE
	PROPOSED CONTOUR LINE
	EXISTING TREE LINE
	PROPOSED TREE LINE
	EXISTING EDGE OF WETLAND
	EXISTING WETLAND AREA
	WETLAND BUFFER
	EXISTING CONCRETE
	PROPOSED CONCRETE
	EXISTING CRUSHED STONE
	APPROXIMATE LIMIT OF TREE CLEARING
	EXISTING PAVEMENT/CONCRETE TO BE REMOVED
	PROPOSED STANDARD DUTY PAVEMENT SECTION
	PROPOSED HEAVY DUTY PAVEMENT SECTION
	PROPOSED BITUMINOUS SIDEWALK
	PROPOSED SNOW STORAGE AREA
	PROPOSED BUFFER ENHANCEMENT AREA
	APPROXIMATE LIMIT OF WORK
	APPROXIMATE LIMIT OF SAWCUT
	PROPOSED SILT SOCK
	EXISTING UTILITY POLE
	EXISTING UTILITY POLE & GUY WIRE
	EXISTING UTILITY POLE W/LIGHT
	EXISTING UTILITY POLE STUMP
	PROPOSED LIGHT POLE BASE
	EXISTING SIGN
	PROPOSED SIGN
	EXISTING IRON PIPE/ROD FOUND
	EXISTING POST
	EXISTING BOLLARD
	PROPOSED BOLLARD
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	WATER GATE VALVE
	PROPOSED WATER GATE VALVE
	EXISTING GAS GATE VALVE
	EXISTING GAS REGULATOR
	EXISTING VENT PIPE
	EXISTING TELEPHONE BOX
	EXISTING UTILITY BOX
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	EXISTING DRAIN MANHOLE
	PROPOSED DRAIN MANHOLE
	EXISTING ELECTRIC MANHOLE
	EXISTING SEWER MANHOLE
	EXISTING DECIDUOUS TREE
	PROPOSED LANDSCAPING
	BORING LOCATION
	TEST PIT LOCATION
	EXISTING SURVEYED SPOT GRADE
	APPROX EXISTING SPOT GRADE
	PROPOSED SPOT GRADE
	CONCRETE
	APPROXIMATE CUT AND CAP LOCATION OF EXISTING UTILITY
	VERTICAL GRANITE CURB
	SLOPED BITUMINOUS BERM
	SINGLE WHITE LINE
	DOUBLE YELLOW LINE



Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

MARK	DATE	DESCRIPTION
F	07/21/2022	REV PER AOT & PEER REVIEW
E	06/29/2022	PB SUBMISSION
D	05/23/2022	AOT SUBMISSION
C	05/12/2022	TAC RESUBMISSION 2
B	04/21/2022	TAC RESUBMISSION
A	03/22/2022	TAC SUBMISSION

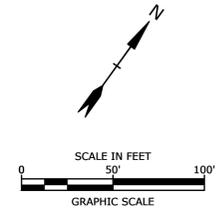
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DATE:	3/22/22
FILE:	P0616-005_C-DSGN.DWG
DRAWN BY:	AFS
CHECKED:	PMC
APPROVED:	BLM

GENERAL NOTES, ABBREVIATIONS, AND LEGEND SHEET

SCALE: AS SHOWN

G-101

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 Plot Date: Thursday, July 21, 2022 Plotted By: Alexander Sellar
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**Proposed
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Portsmouth Regional
Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

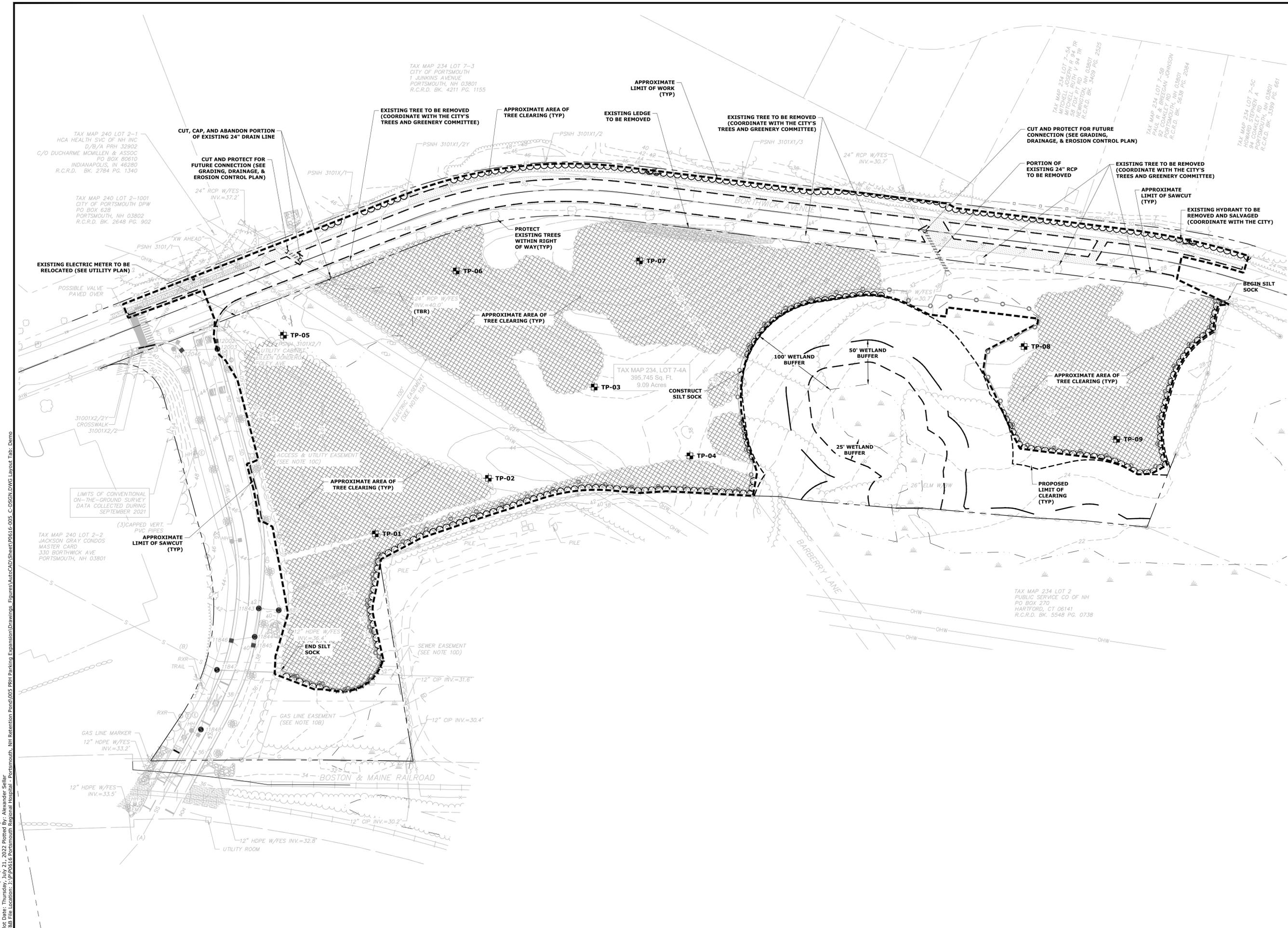
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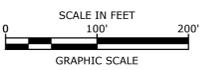
DEMOLITION PLAN

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**Proposed
Satellite
Parking Lot**

Portsmouth Regional
Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

	REQUIRED	PROPOSED
PARKING REQUIREMENTS:		
PARKING STALL LAYOUT:		
• STANDARD 90°	8.5' X 19'	8.5' X 19'
DRIVE AISLE WIDTH:		
• 90° (2-WAY TRAFFIC)	24 FT	24 FT
MINIMUM SETBACKS:		
• FRONT:	50 FT	35.4 FT ⁽¹⁾
PARKING SPACE REQUIREMENTS:		
MEDICAL OFFICE:		
1 SPACE / 250 GFA		
= ±46,665 SF / 250 SF/SPACE =	187 SPACES	
HOSPITAL:		
PER PARKING DEMAND ANALYSIS ⁽²⁾	965 SPACES	
MINIMUM PARKING:	1,152 SPACES	
MAXIMUM PARKING⁽³⁾:	1,382 SPACES	783 EXISTING SPACES 501 PROPOSED SPACES ⁽⁴⁾ 1,284 TOTAL SPACES
ACCESSIBLE PARKING REQUIREMENTS:		
PROPOSED SATELLITE PARKING LOT	11 SPACES	11 SPACES

(1) - A VARIANCE WAS GRANTED BY THE ZONING BOARD OF ADJUSTMENT ON FEBRUARY 23, 2022 FROM SECTION 10.113.41 TO ALLOW A 35 FOOT FRONT SETBACK FOR A PARKING LOT WHERE 50 FEET IS REQUIRED
 (2) - PARKING DEMAND BASED ON GFA OF THE EXISTING HOSPITAL (±430,495 SF)
 (3) - MAXIMUM PARKING EQUALS 120% OF MINIMUM
 (4) - INCLUDING 11 ADA SPACES IN THE SATELLITE PARKING LOT PER ADA STANDARDS SECTION 208

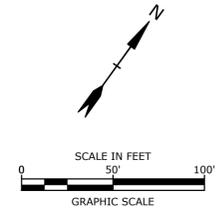
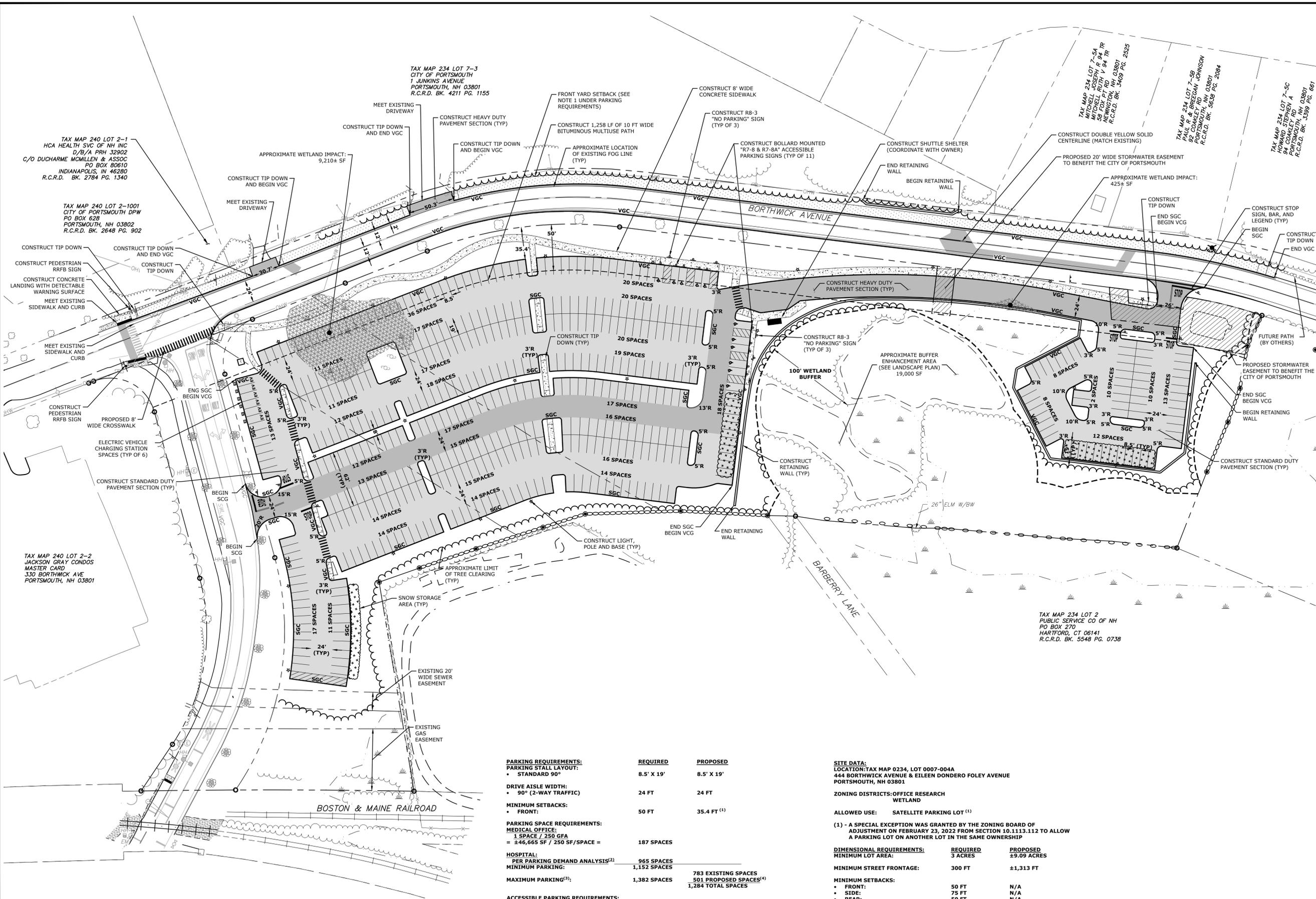
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OVERALL PARKING PLAN

SCALE: AS SHOWN

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Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

	REQUIRED	PROPOSED
PARKING REQUIREMENTS:		
PARKING STALL LAYOUT:		
• STANDARD 90°	8.5' X 19'	8.5' X 19'
DRIVE AISLE WIDTH:		
• 90° (2-WAY TRAFFIC)	24 FT	24 FT
MINIMUM SETBACKS:		
• FRONT:	50 FT	35.4 FT ⁽¹⁾
PARKING SPACE REQUIREMENTS:		
MEDICAL OFFICE:		
1 SPACE / 250 GFA		
= 1,46,665 SF / 250 SF/SPACE =	187 SPACES	
HOSPITAL:		
PER PARKING DEMAND ANALYSIS ⁽²⁾	965 SPACES	
MINIMUM PARKING:	1,152 SPACES	
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ACCESSIBLE PARKING REQUIREMENTS:		
PROPOSED SATELLITE PARKING LOT	11 SPACES	11 SPACES

- (1) - A VARIANCE WAS GRANTED BY THE ZONING BOARD OF ADJUSTMENT ON FEBRUARY 23, 2022 FROM SECTION 10.113.41 TO ALLOW A 35 FOOT FRONT SETBACK FOR A PARKING LOT WHERE 50 FEET IS REQUIRED
- (2) - PARKING DEMAND BASED ON GFA OF THE EXISTING HOSPITAL (1,430,495 SF)
- (3) - MAXIMUM PARKING EQUALS 120% OF MINIMUM
- (4) - INCLUDING 11 ADA SPACES IN THE SATELLITE PARKING LOT PER ADA STANDARDS SECTION 208

SITE DATA:
LOCATION: TAX MAP 0234, LOT 0007-004A
444 BORTHWICK AVENUE & EILEEN DONDERO FOLEY AVENUE
PORTSMOUTH, NH 03801

ZONING DISTRICTS: OFFICE RESEARCH
WETLAND

ALLOWED USE: SATELLITE PARKING LOT⁽¹⁾

(1) - A SPECIAL EXCEPTION WAS GRANTED BY THE ZONING BOARD OF ADJUSTMENT ON FEBRUARY 23, 2022 FROM SECTION 10.113.112 TO ALLOW A PARKING LOT ON ANOTHER LOT IN THE SAME OWNERSHIP

	REQUIRED	PROPOSED
MINIMUM LOT AREA:	3 ACRES	±9.09 ACRES
MINIMUM STREET FRONTAGE:	300 FT	±1,313 FT
MINIMUM SETBACKS:		
• FRONT:	50 FT	N/A
• SIDE:	75 FT	N/A
• REAR:	50 FT	N/A
MAXIMUM BUILDING HEIGHT:	30 FT	N/A
MAXIMUM BUILDING COVERAGE:	30%	0%
MINIMUM OPEN SPACE:	25%	±56.5%

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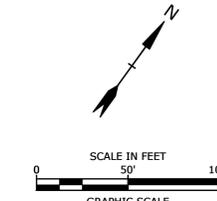
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SITE PLAN

SCALE: AS SHOWN

C-102.1

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**Proposed
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Portsmouth Regional
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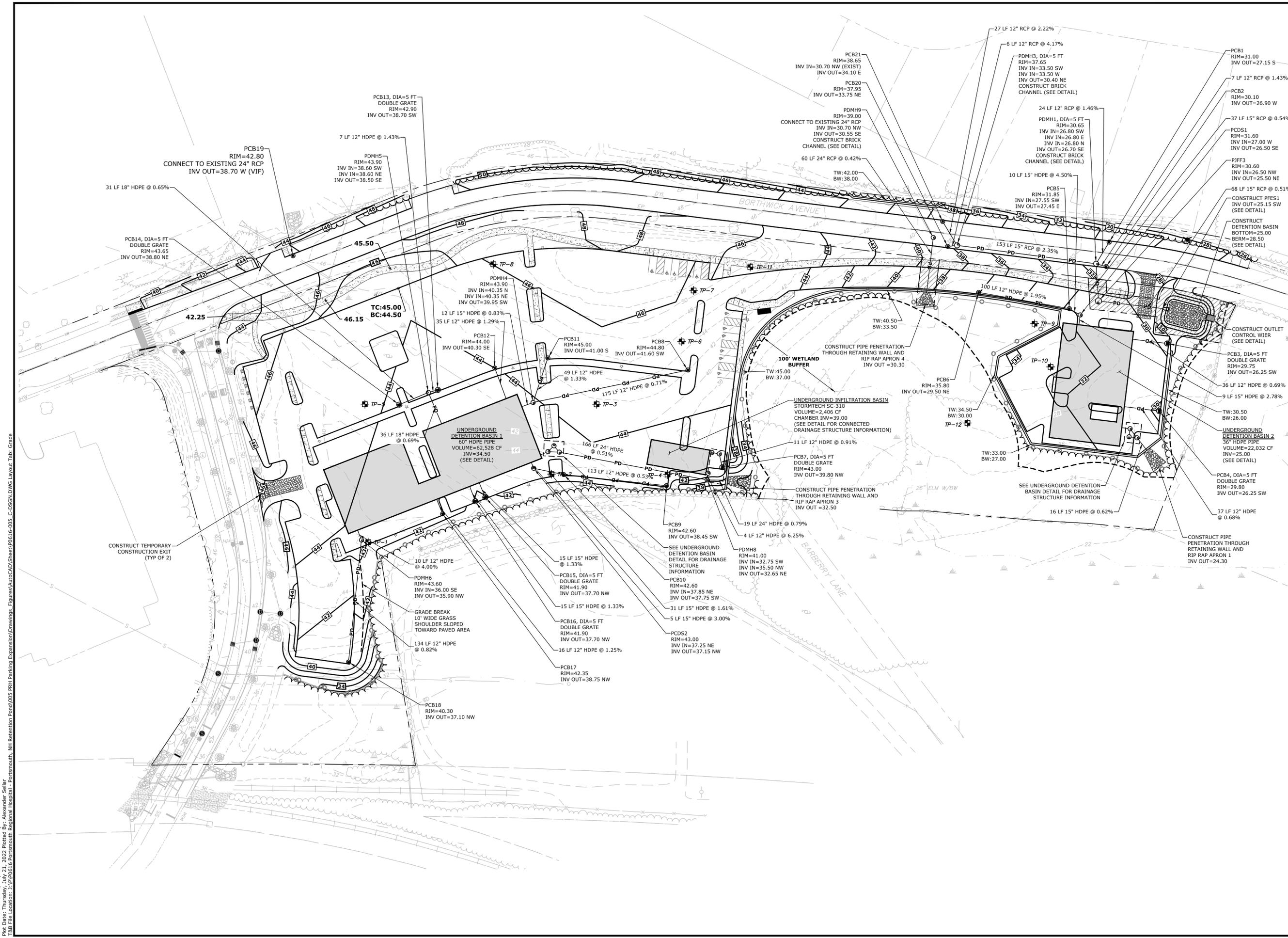
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A	03/22/2022	TAC SUBMISSION

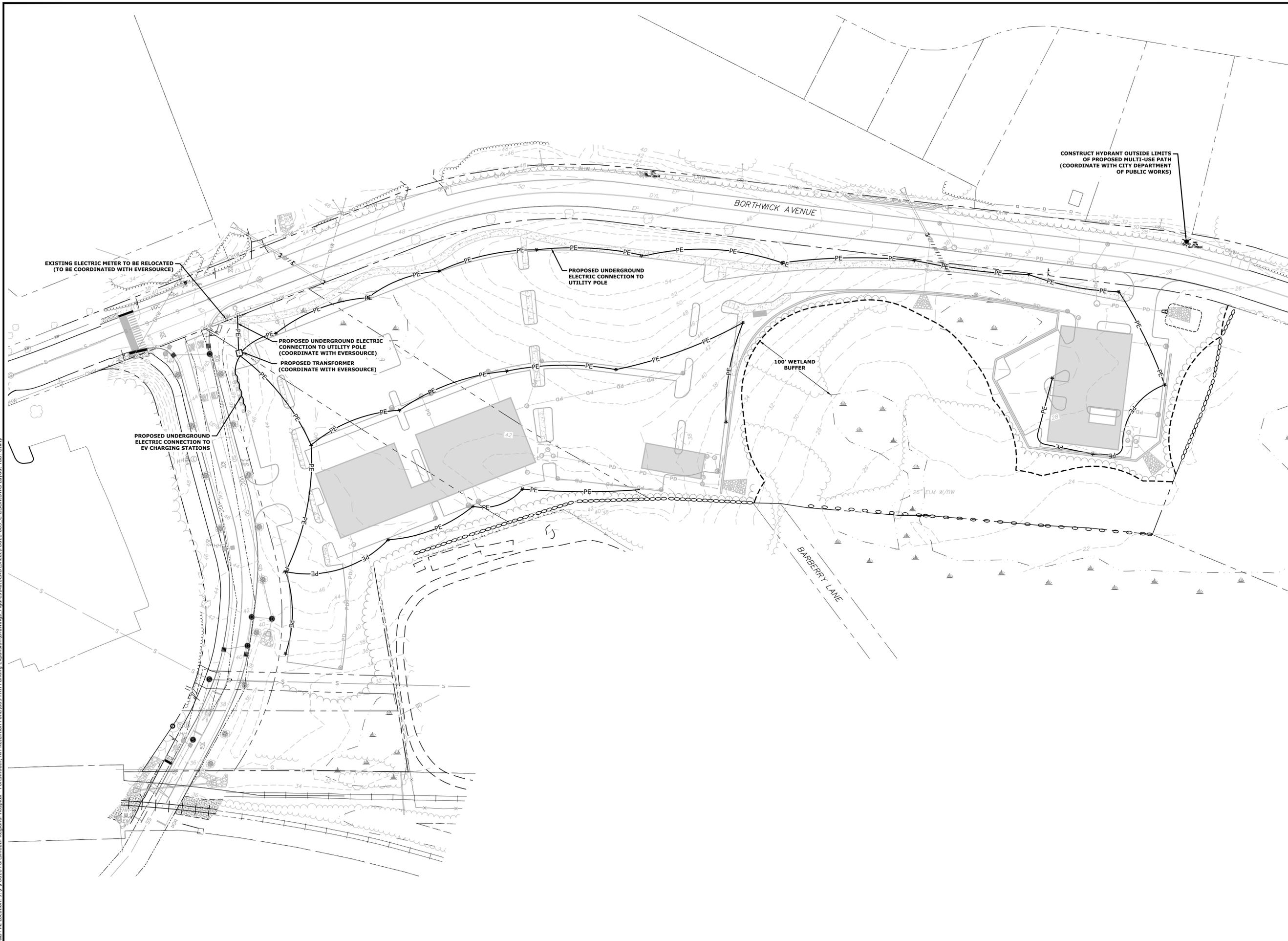
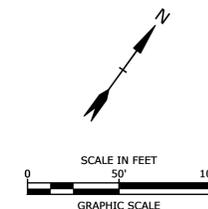
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APPROVED:	BLM

GRADING, DRAINAGE, &
EROSION CONTROL PLAN

SCALE: AS SHOWN



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**Proposed
Satellite
Parking Lot**

Portsmouth Regional
Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

MARK	DATE	DESCRIPTION
F	07/21/2022	REV PER AOT & PEER REVIEW
E	06/29/2022	PB SUBMISSION
D	05/23/2022	AOT SUBMISSION
C	05/12/2022	TAC RESUBMISSION 2
B	04/21/2022	TAC RESUBMISSION
A	03/22/2022	TAC SUBMISSION

PROJECT NO: P0616-001
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UTILITY PLAN

SCALE: AS SHOWN

C-104

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TAX MAP 234 LOT 7-3
CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, NH 03801
R.C.R.D. BK. 4211 PG. 1155

TAX MAP 240 LOT 2-1
HCA HEALTH SVC OF NH INC
D/B/A PRH 32902
C/O DUCHARME MCMILLEN & ASSOC
PO BOX 80610
INDIANAPOLIS, IN 46280
R.C.R.D. BK. 2784 PG. 1340

TAX MAP 240 LOT 2-1001
CITY OF PORTSMOUTH DPW
PO BOX 628
PORTSMOUTH, NH 03802
R.C.R.D. BK. 2648 PG. 902

TAX MAP 234 LOT 7-5A
MITCHELL RUTLEDGE R 94 TR
59 FENNELL PT RD
NEWINGTON, NH 03801
R.C.R.D. BK. 3409 PG. 2925

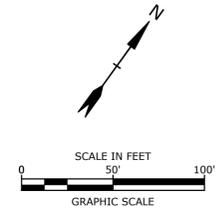
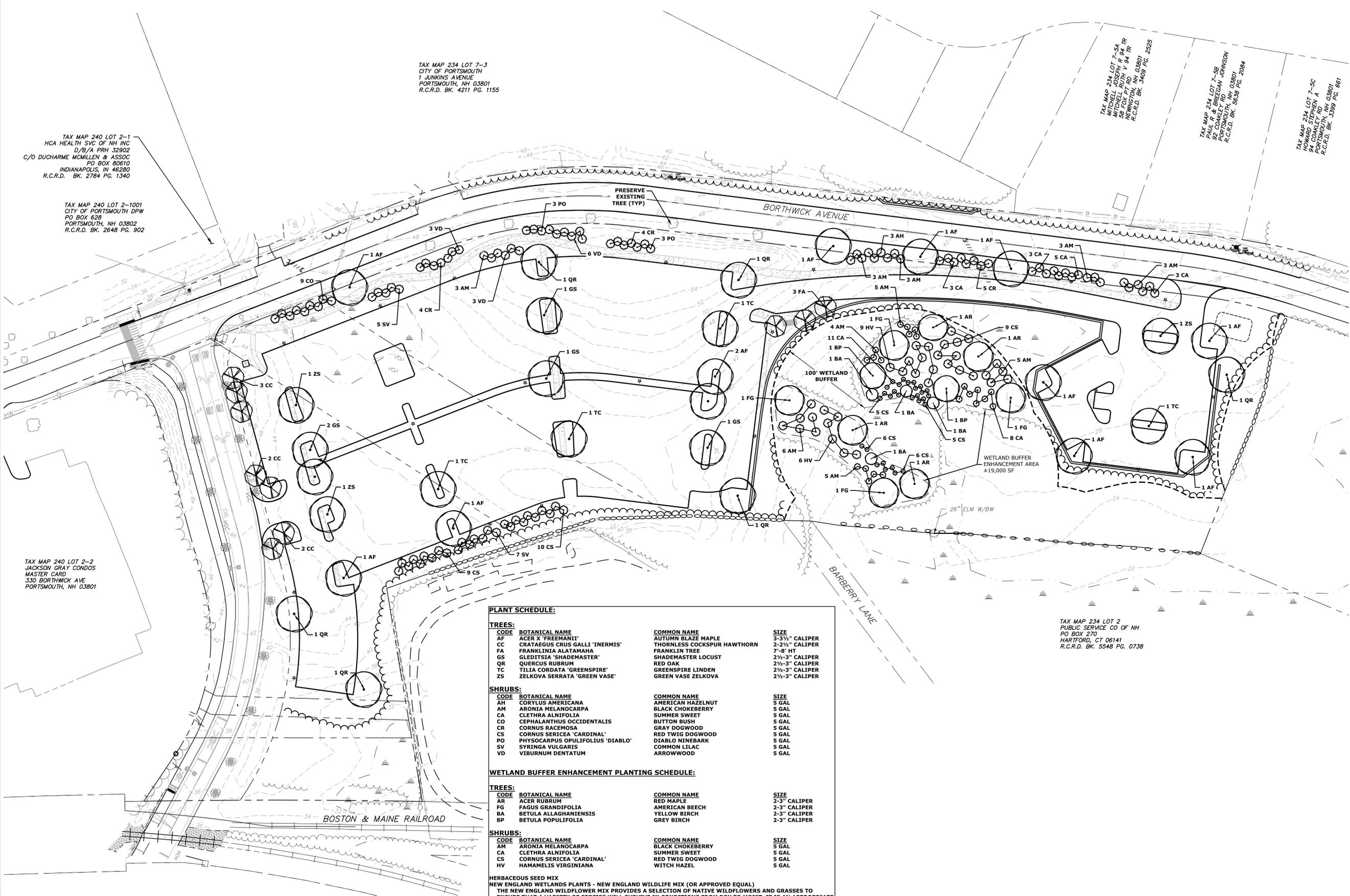
TAX MAP 234 LOT 7-3B
PAUL R & BREGAN JOHNSON
FRANKLIN RD
PORTSMOUTH, NH 03801
R.C.R.D. BK. 5638 PG. 2084

TAX MAP 234 LOT 7-5C
HOWARD STEVEN A
PORTSMOUTH RD
PORTSMOUTH, NH 03801
R.C.R.D. BK. 3399 PG. 681

TAX MAP 240 LOT 2-2
JACKSON GRAY CONDOS
MASTER CARD
330 BORTHWICK AVE
PORTSMOUTH, NH 03801

TAX MAP 234 LOT 2
PUBLIC SERVICE CO OF NH
PO BOX 270
HARTFORD, CT 06141
R.C.R.D. BK. 5548 PG. 0738

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PLANT SCHEDULE:

TREES:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
AF	ACER X 'FREEMANTII'	AUTUMN BLAZE MAPLE	3-3 1/2" CALIPER
CC	CRATAEGUS GALLI 'INERMIS'	THORNLESS COCKSPUR HAWTHORN	2-2 1/2" CALIPER
FA	FRANKLINIA ALATAMAHA	FRANKLIN TREE	7'-8' HT
GS	GLEDITSIA 'SHADEMASTER'	SHADEMASTER LOCUST	2 1/2-3" CALIPER
QR	QUERCUS RUBRUM	RED OAK	2 1/2-3" CALIPER
TC	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2 1/2-3" CALIPER
ZS	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	2 1/2-3" CALIPER
SHRUBS:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
AH	CORYLUS AMERICANA	AMERICAN HAZELNUT	5 GAL
AM	ARONIA MELANOCARPA	BLACK CHOKEBERRY	5 GAL
CA	CLETHRA ALNIFOLIA	SUMMER SWEET	5 GAL
CO	CEPHALANTHUS OCCIDENTALIS	BUTTON BUSH	5 GAL
CR	CORNUS RACEMOSA	GRAY DOGWOOD	5 GAL
CS	CORNUS SERICEA 'CARDINAL'	RED TWIG DOGWOOD	5 GAL
PO	PHYSOCARPUS OPULIFOLIUS 'DIABLO'	DIABLO NINEBARK	5 GAL
SV	SYRINGA VULGARIS	COMMON LILAC	5 GAL
VD	VIBURNUM DENTATUM	ARROWWOOD	5 GAL
WETLAND BUFFER ENHANCEMENT PLANTING SCHEDULE:			
TREES:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
AR	ACER RUBRUM	RED MAPLE	2-3" CALIPER
FG	FAGUS GRANDIFOLIA	AMERICAN BEECH	2-3" CALIPER
BA	BETULA ALLAGANIENSIS	YELLOW BIRCH	2-3" CALIPER
BP	BETULA POPULIFOLIA	GREY BIRCH	2-3" CALIPER
SHRUBS:			
CODE	BOTANICAL NAME	COMMON NAME	SIZE
AM	ARONIA MELANOCARPA	BLACK CHOKEBERRY	5 GAL
CA	CLETHRA ALNIFOLIA	SUMMER SWEET	5 GAL
CS	CORNUS SERICEA 'CARDINAL'	RED TWIG DOGWOOD	5 GAL
HV	HAMAMELIS VIRGINIANA	WITCH HAZEL	5 GAL
HERBACEOUS SEED MIX			
NEW ENGLAND WETLANDS PLANTS - NEW ENGLAND WILDLIFE MIX (OR APPROVED EQUAL)			
THE NEW ENGLAND WILDFLOWER MIX PROVIDES A SELECTION OF NATIVE WILDFLOWERS AND GRASSES TO ENSURE THAT A VARIETY OF SPECIES WILL SURVIVE IN CONDITIONS FROM DRY TO MOIST. IT IS AN APPROPRIATE SEED MIX FOR ROADSIDES, COMMERCIAL LANDSCAPING, PARKS, GOLF COURSES, INDUSTRIAL SITES AND AREAS UNDERGOING ECOLOGICAL RESTORATION. THE MIX CAN BE APPLIED BY HYDRO-SEEDING (NO TACKIFIERS), BY MECHANICAL SPREADER, OR BY HAND. LIGHTLY RAKE OR ROLL AFTER SOWING TO INCREASE SEED TO SOIL CONTACT. APPLY ON A CLEAN, WEED FREE SEED BED. BEST RESULTS ARE OBTAINED WITH A SPRING OR LATE FALL DORMANT SEEDING.			
APPLICATION RATE: 23 LBS/ACRE 1900 SQ FT/LB			

Proposed Satellite Parking Lot

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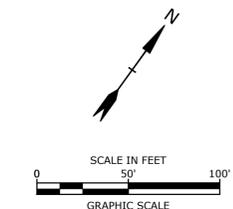
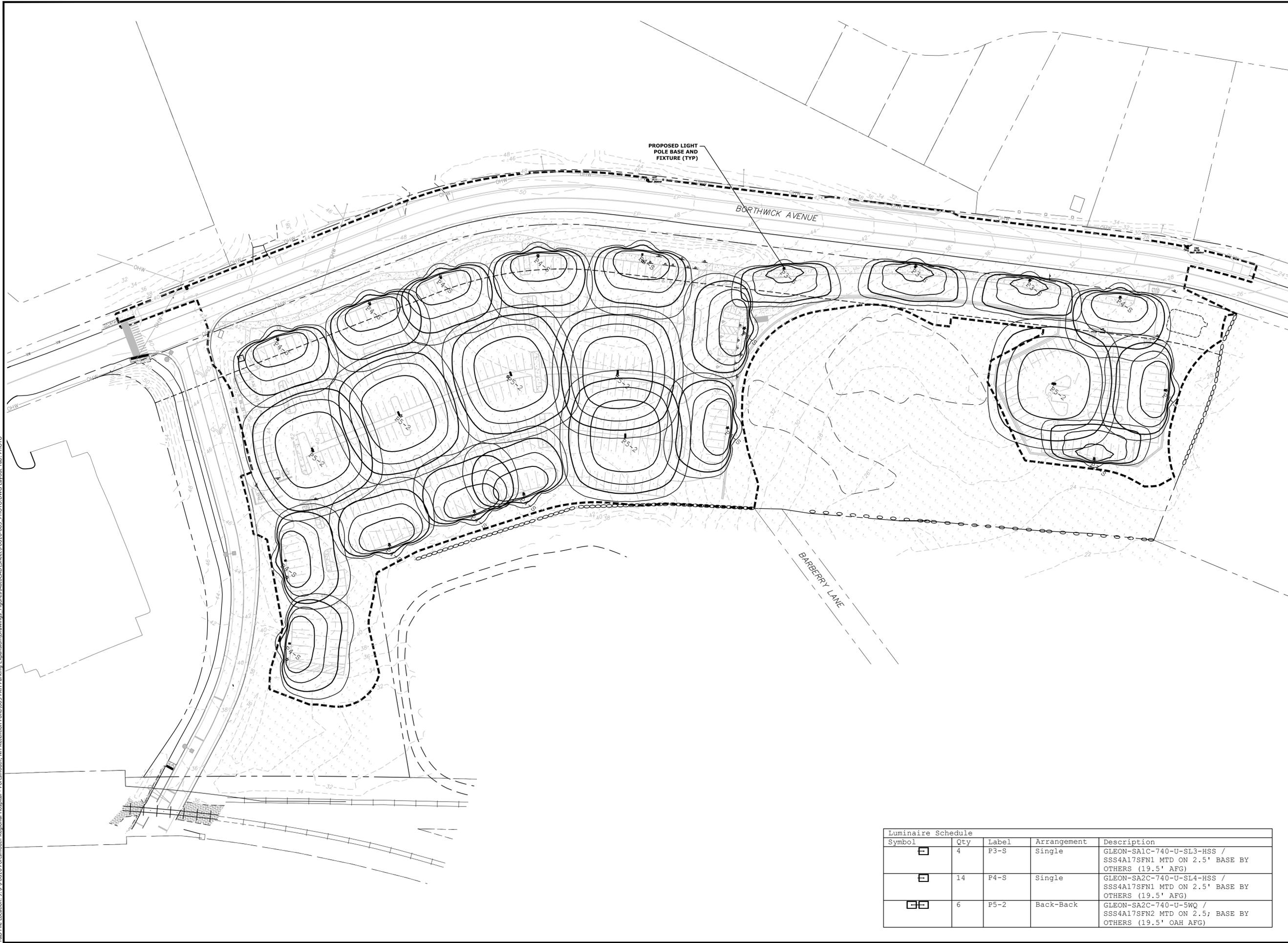
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LANDSCAPE PLAN

SCALE: AS SHOWN

C-105



**Proposed
Satellite
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PROJECT NO: P0616-001
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FILE: P0616-005_PHOTO.DWG
DRAWN BY: MKF
CHECKED: PMC
APPROVED: BLM

PHOTOMETRICS PLAN

SCALE: AS SHOWN

C-106

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
	4	P3-S	Single	GLEON-SA1C-740-U-SL3-HSS / SSS4A17SFN1 MTD ON 2.5' BASE BY OTHERS (19.5' AFG)
	14	P4-S	Single	GLEON-SA2C-740-U-SL4-HSS / SSS4A17SFN1 MTD ON 2.5' BASE BY OTHERS (19.5' AFG)
	6	P5-2	Back-Back	GLEON-SA2C-740-U-5WQ / SSS4A17SFN2 MTD ON 2.5; BASE BY OTHERS (19.5' OAH AFG)

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 Plot: 3/22/22

GENERAL PROJECT INFORMATION

PROJECT OWNER: PORTSMOUTH REGIONAL HOSPITAL
333 BORTHWICK AVENUE
PORTSMOUTH, NH
PROJECT NAME: PROPOSED SATELLITE PARKING LOT
PROJECT ADDRESS: BORTHWICK AVENUE
PORTSMOUTH, NH
PROJECT MAP / LOT: MAP 234 / LOT 7-4A
PROJECT LATITUDE: 43°-03'-56.5"N
PROJECT LONGITUDE: 70°-47'-07.21"W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF A 520 SPOT SATELLITE PARKING LOT TO SERVICE THE EXISTING PORTSMOUTH REGIONAL HOSPITAL. THE WORK IS ANTICIPATED TO START IN FALL 2022, AND BE COMPLETED BY FALL 2023.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 6.24 ACRES.

SOIL CHARACTERISTICS

USCS SITE SPECIFIC SOIL SURVEY CONDUCTED BY TIGHE & BOND INC., ON NOVEMBER 18 & 19, 2021 THE SOILS ON SITE CONSIST OF WOODBRIDGE, BOXFROD, SCITCO, PAXTON, HOLLIS, CHATFIELD AND SCIO SOILS WHICH RANGE FROM WELL DRAINED TO POORLY DRAINED SOILS WITH HYDROLOGIC SOIL GROUP RATING(S) OF B & C.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO AN UNNAMED WETLAND AND ULTIMATELY FLOWS TO THE PISCATAQUA RIVER.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

- 1. CUT AND CLEAR TREES.
- 2. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
 - NEW CONSTRUCTION
 - DEVELOPMENT OF BORROW PIT AREAS
 - DISPOSAL OF SEDIMENT, STUMP AND OTHER SOLID WASTE
 - FLOOD PLAIN EXCAVATION WORK
 - STREAM CHANNEL MODIFICATIONS
 - CONTROL OF DUST
 - CONSTRUCTION OF ACCESS AND HAUL ROAD
 - NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS
 - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
- 3. ALL PERMANENT DITCHES, SWALES, DEFENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPs PRIOR TO DIRECTING RUNOFF TO THEM.
- 4. CLEAR AND DISPOSE OF DEBRIS.
- 5. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
- 6. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 8. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
- 9. SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
- 10. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- 11. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- 12. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 13. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

- 1. THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.
- 2. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

EROSION CONTROL NOTES:

- 1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
- 2. PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
- 3. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES, SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
- 4. SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- 5. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- 6. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- 7. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
- 8. INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- 9. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

STABILIZATION:

- 1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.;
 - E. IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
- 2. WINTER STABILIZATION PRACTICES:
 - A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
 - B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
 - C. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
- 3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
 - A. TEMPORARY SEEDING;
 - B. MULCHING;
 - C. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- 4. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- 5. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- 6. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STAFFED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. A STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

DUST CONTROL:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
- 2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED

- AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
- 3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS INCLUDING BUT NOT LIMITED TO BORTHWICK AVENUE AND ELLEN DONDERO FOLEY AVENUE.

STOCKPILES:

- 1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
- 2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
- 3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
- 4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF SITE VEHICLE TRACKING:

- 1. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

VEGETATION:

- 1. TEMPORARY GRASS COVER:
 - A. SEEDBED PREPARATION:
 - a. APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE;
 - B. SEEDING:
 - a. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
 - b. WHERE THE SOIL HAS BEEN COVERED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;
 - c. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING;
 - C. MAINTENANCE:
 - a. TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
- 2. PERMANENT MEASURES AND PLANTINGS:
 - A. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5;
 - B. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER;
 - C. SOIL CONDITIONS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
 - D. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
 - E. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
 - F. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED;
 - G. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED;
 - H. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

SEED MIX	APPLICATION RATE
CREeping RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
REDTOP	2 LBS/ACRE

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
- 3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL).
 - A. FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA:

- 1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
 - A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
 - B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
 - C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
 - D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

- 1. FIRE-FIGHTING ACTIVITIES;
- 2. FIRE HYDRANT FLUSHING;
- 3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
- 4. WATER USED TO CONTROL DUST;
- 5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
- 6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
- 7. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
- 8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
- 9. UNCONTAMINATED GROUND WATER OR SPRING WATER;
- 10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
- 11. UNCONTAMINATED EXCAVATION DEWATERING;
- 12. LANDSCAPE IRRIGATION.

WASTE DISPOSAL:

- 1. WASTE MATERIAL:
 - A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
 - B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
 - C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
- 2. HAZARDOUS WASTE:
 - A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
 - B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
- 3. SANITARY WASTE:
 - A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

- 1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
- 2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
 - A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
 - a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
 - b. ALL REGULATED MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE, ON AN IMPERVIOUS SURFACE;
 - c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
 - d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
 - e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
 - f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
 - g. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.

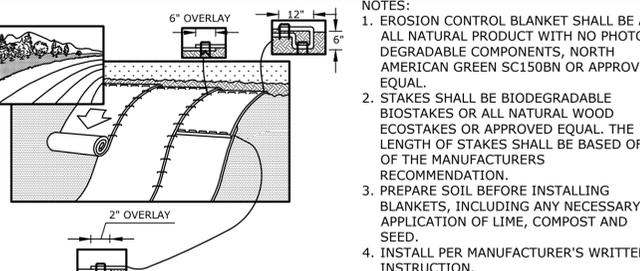
- B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
 - a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
 - b. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
 - c. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
- C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
 - a. PETROLEUM PRODUCTS:
 - i. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
 - ii. FUEL TANKS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
 - iii. SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
 - iv. INSPECT FUEL STORAGE AREAS WEEKLY;
 - v. WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS;
 - vi. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
 - vii. SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
 - viii. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
 - (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
 - (2) HAVE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
 - (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
 - (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
 - (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
 - ix. FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DW8-22. THE FOLLOWING MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT. <https://www.des.nh.gov/organization/commissioner/pdp/factsheets/dw8/documents/dw8-22-6.pdf>
- b. FERTILIZERS:
 - i. FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
 - ii. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
 - iii. STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- c. PAINTS:
 - i. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
 - ii. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
 - iii. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
- D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
 - a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES;
 - b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE;
 - c. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
 - d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
 - e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCY;
 - f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
- E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
 - a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
 - b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
 - c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
 - d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
 - e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
 - f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FUEL.

- EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES
- 1. THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE ENGINEER. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ON SITE AT ALL TIMES.
- 2. THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:
 - A. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE ENGINEER AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
 - B. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
 - C. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;
 - D. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

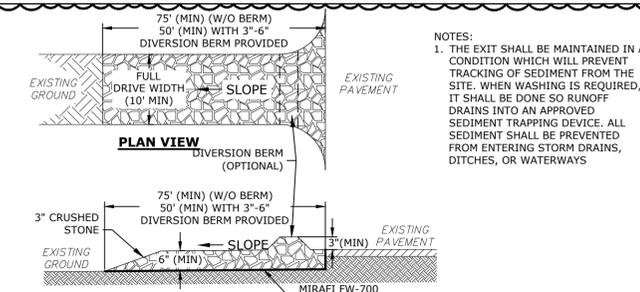
BLASTING NOTES:

- 1. CONTRACTOR SHALL CONTACT THE NHDES PRIOR TO COMMENCING ANY BLASTING ACTIVITIES
- 2. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT SHALL SUBMIT:
 - A. A BLASTING PLAN THAT IDENTIFIES:
 - a. WHERE THE BLASTING ACTIVITIES ARE ANTICIPATED TO OCCUR;
 - b. THE ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND
 - c. SITE-SPECIFIC BLASTING BEST MANAGEMENT PRACTICES.
- 3. IF MORE THAN 5000 CUBIC YARDS OF BLAST ROCK WILL BE GENERATED AND THERE ARE ONE OR MORE PUBLIC DRINKING WATER WELLS WITHIN 2000 FEET OF THE BLASTING ACTIVITIES, A PLAN TO MONITOR GROUNDWATER TO DETECT ANY CONTAMINATION IN SUFFICIENT TIME TO PROTECT THE WATER SUPPLY WELLS SHALL BE PROVIDED TO THE NHDES. THE GROUNDWATER MONITORING PLAN SHALL INCLUDE:
 - A. MONITORING FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA:
 - a. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY THE NHDES.
 - B. THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
 - a. LOADING PRACTICES - THE FOLLOWING BASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
 - i. DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE MASTER. THE LOGS SHALL INCLUDE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS;
 - ii. EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL;
 - iii. SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL;
 - iv. LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BASTHOLE OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED;
 - v. LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT;
 - vi. EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE THE DETONATION. THE FOLLOWING LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.
 - b. EXPLOSIVE SELECTION - THE FOLLOWING BMPs SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:
 - i. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION;
 - ii. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER

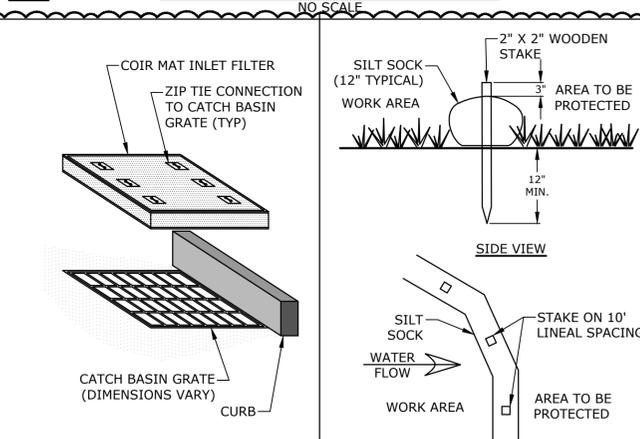
- c. PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.
- d. MUCK PILES MANAGEMENT - MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
 - i. REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE;
 - ii. MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.
- C. SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT DURING BLASTING OPERATIONS. THE MEASURES TO PREVENT SUCH RELEASES SHALL BE DETAILED IN THE GROUNDWATER MONITORING REPORT AND COMPLY WITH THE MEASURES AND BEST MANAGEMENT PRACTICES LISTED ON THIS SHEET.



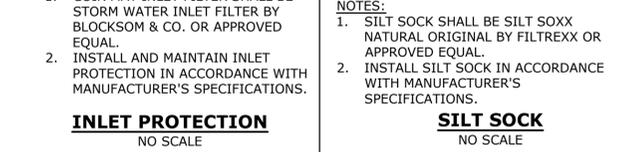
EROSION CONTROL BLANKET
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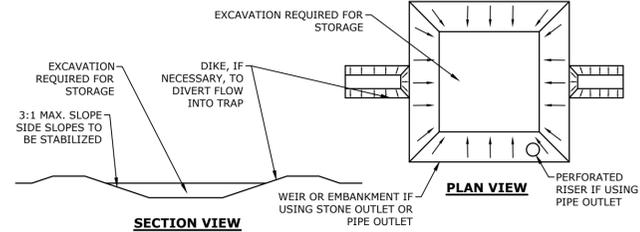
STABILIZED CONSTRUCTION EXIT
NO SCALE



INLET PROTECTION
NO SCALE



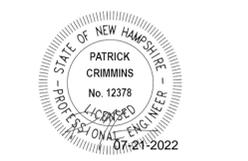
SILT SOCK
NO SCALE



SECTION VIEW
NO SCALE

- NOTES:
 - 1. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE.
 - 2. THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS THAN 5 ACRES.
 - 3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
 - 4. TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.
 - 5. TRAP SHALL DISCHARGE TO A STABILIZED AREA.
 - 6. TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.
 - 7. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
 - 8. SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.

SEDIMENT TRAP
NO SCALE



Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

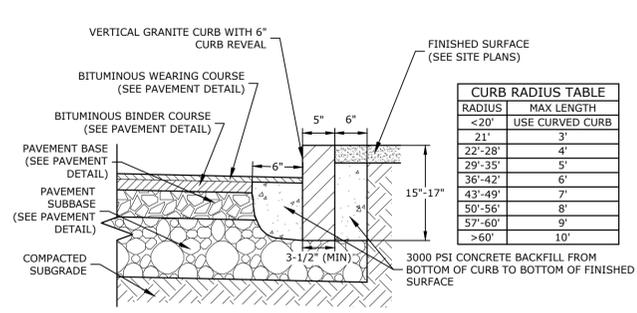
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E	06/29/2022	PB SUBMISSION
D	05/23/2022	AOT SUBMISSION
C	05/12/2022	TAC RESUBMISSION 2
B	04/21/2022	TAC RESUBMISSION
A	03/22/2022	TAC SUBMISSION
MARK	DATE	DESCRIPTION
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DATE:	3/22/22	
FILE:	P0616-005_C-DETAILS.DWG	
DRAWN BY:	AFS	
CHECKED:	PMC	
APPROVED:	BLM	

EROSION CONTROL NOTES & DETAILS SHEET

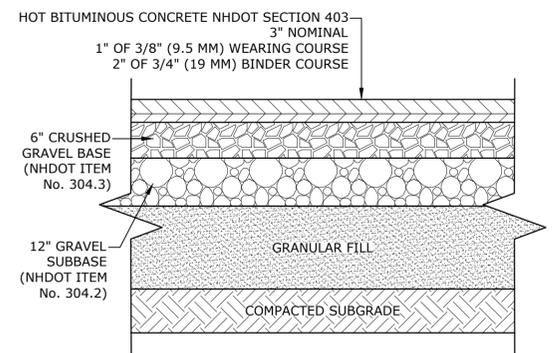
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C-501

Last Save Date: July 20, 2022, 1:06 PM By: ASELLAR
Plot Date: Thursday, July 21, 2022, Plotted By: Alexander Sellar
File Location: E:\Projects\Portsmouth Regional Hospital - Portsmouth, NH\Retention_Pond\0505_PRR_Parking_Expansion\Drawings - Figures\AutoCAD\Sheet\0616-005_C-Details.DWG Layout Tab: C-501

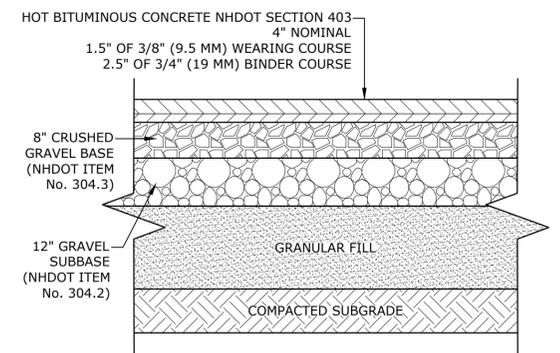


VERTICAL GRANITE CURB
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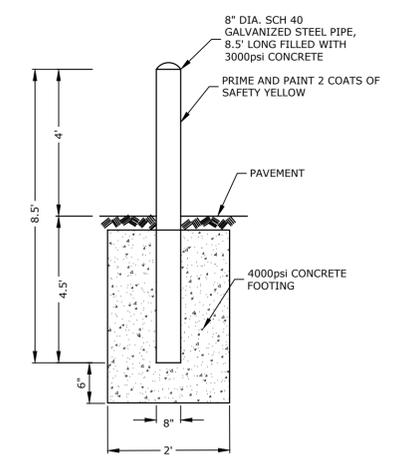
STANDARD DUTY PARKING LOT PAVEMENT SECTION
NO SCALE

NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
4. REFER TO CITY SPECIFICATIONS FOR ASPHALT MIX DESIGN.
5. CONTRACTOR SHALL CONFIRM THIS PAVEMENT SECTION WITH THE PROJECT'S GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.

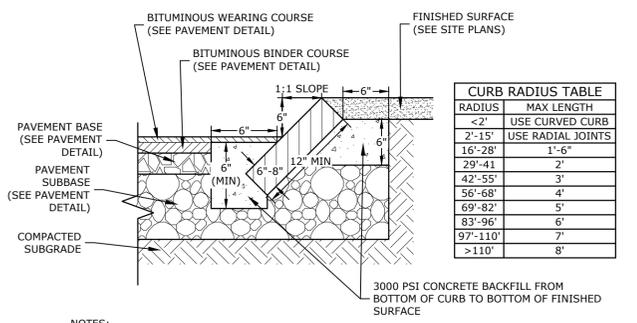


HEAVY DUTY PARKING LOT PAVEMENT SECTION
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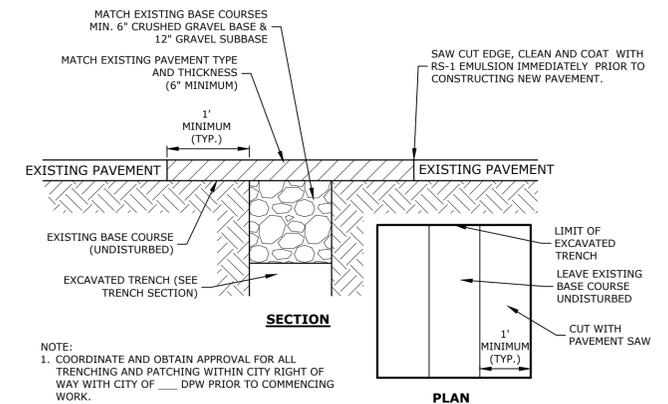
NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
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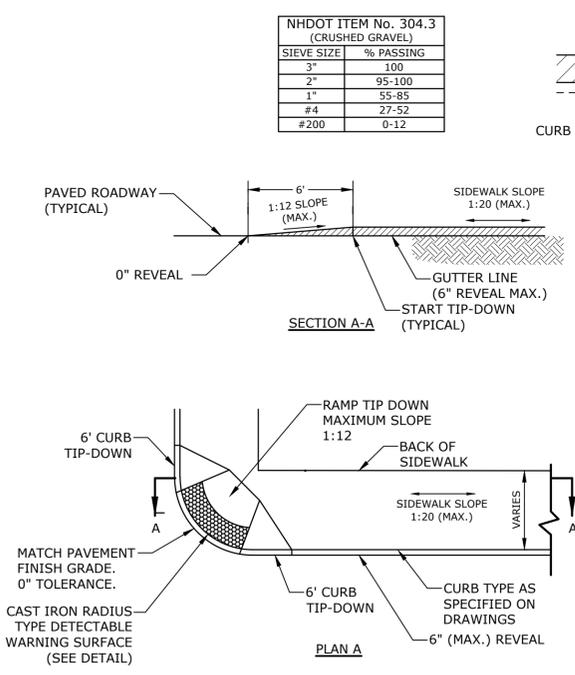
TYPICAL BOLLARD
NO SCALE



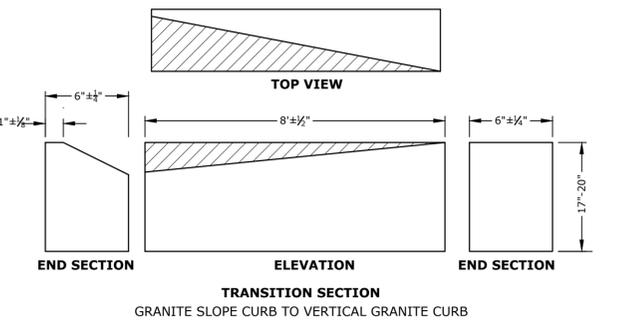
SLOPED GRANITE CURB
NO SCALE



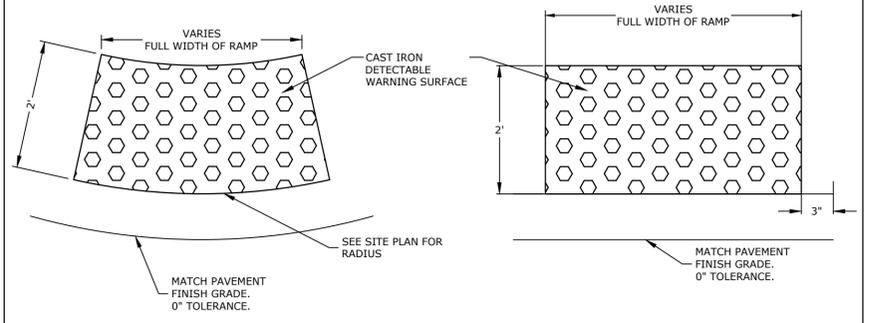
ROADWAY TRENCH PATCH
NO SCALE



TIP DOWN RAMP
NO SCALE



CURB TRANSITION
NO SCALE



CAST IRON DETECTABLE WARNING SURFACE
NO SCALE

NOTES:
1. RAMP SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
2. A 6" COMPACTED CRUSHED GRAVEL BASE (NHDOT ITEM No. 304.3) SHALL BE PROVIDED BENEATH RAMP.
3. DETECTABLE WARNING PANEL SHALL BE CAST IRON SET IN CONCRETE (SEE DETAIL.)
4. PROVIDE DETECTABLE WARNING SURFACES ANYTIME THAT A CURB RAMP, BLENDED TRANSITION, OR LANDING CONNECTS TO A STREET.
5. LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB ALONG THE EDGE OF THE LANDING.
6. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1, THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
7. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMP SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 2 FT. FROM THE ROADWAY CURBLINE.
8. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING, EXCLUSIVE OF THE FLARED SIDES, SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK MARKINGS.
9. DETECTABLE WARNING PANELS SHALL BE A MINIMUM OF 2 FEET IN DEPTH. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP, BLENDED TRANSITION, OR LANDING AND THE STREET.
10. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST VISUALLY WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT).

Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
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MARK	DATE	DESCRIPTION
F	07/21/2022	REV PER AOT & PEER REVIEW
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PROJECT NO: P0616-001
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DRAWN BY: AFS
CHECKED: PMC
APPROVED: BLM

DETAILS SHEET

SCALE: AS SHOWN

C-502

Last Save Date: July 20, 2022, 1:06 PM BY: ASEILAR
Plot Date: Thursday, July 21, 2022, Plotted By: Alexander Sellar
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**Proposed
Satellite
Parking Lot**

Portsmouth Regional
Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

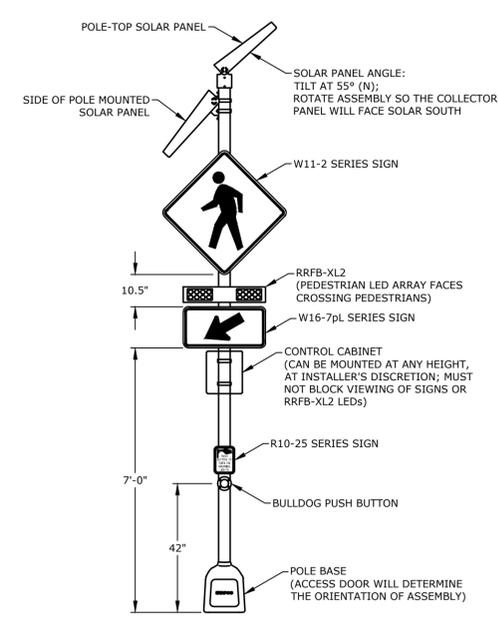
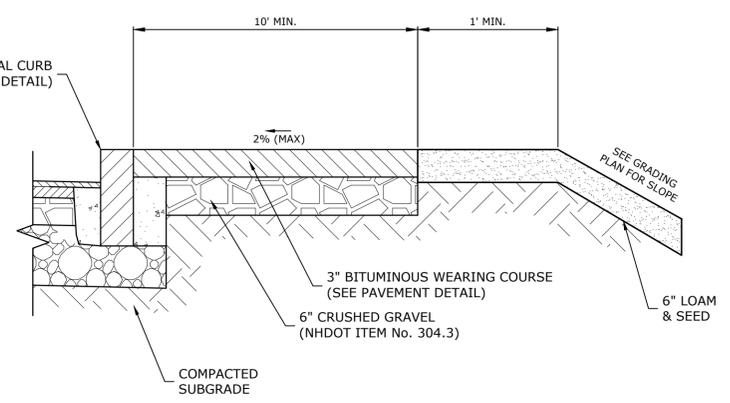
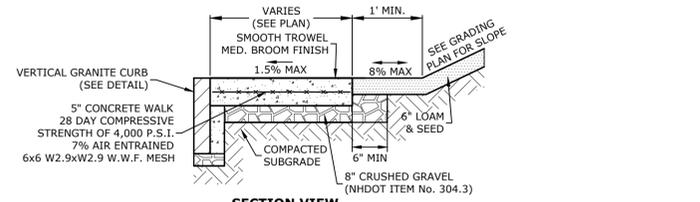
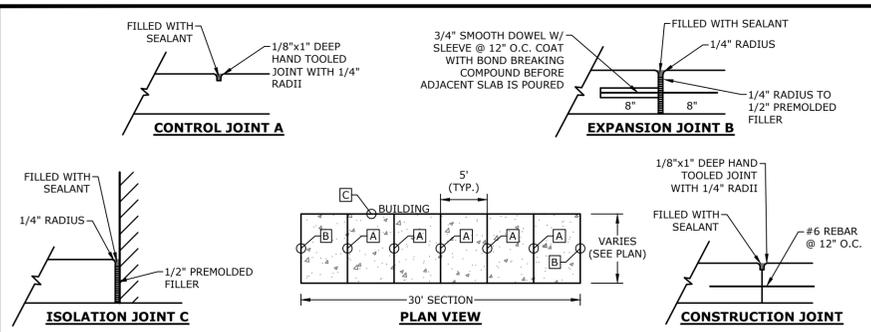
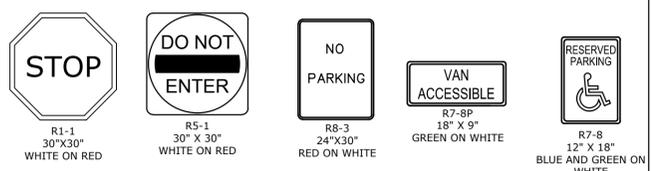
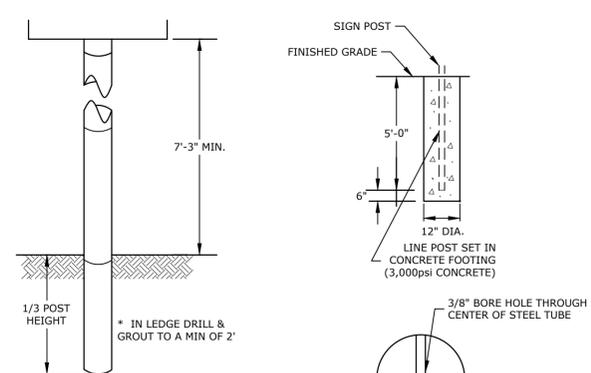
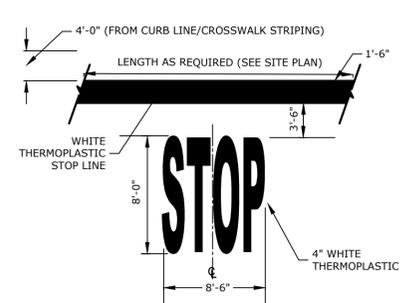
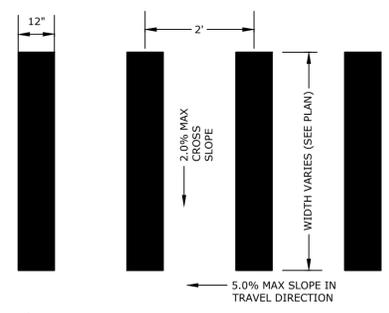
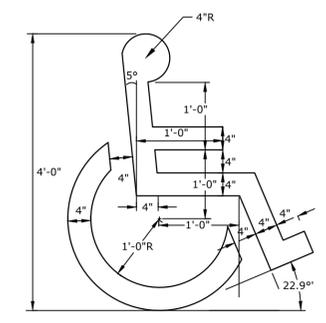
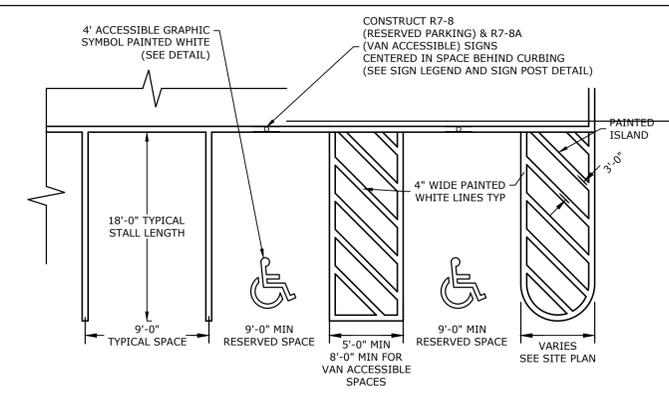
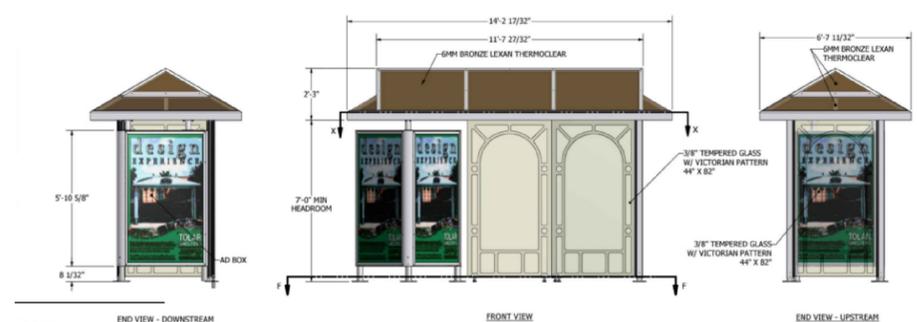
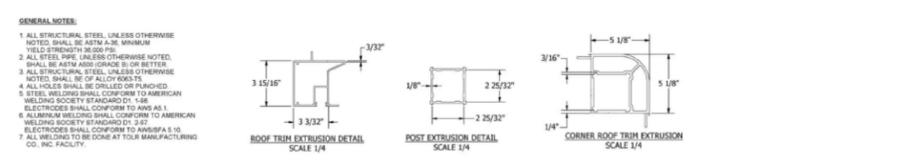
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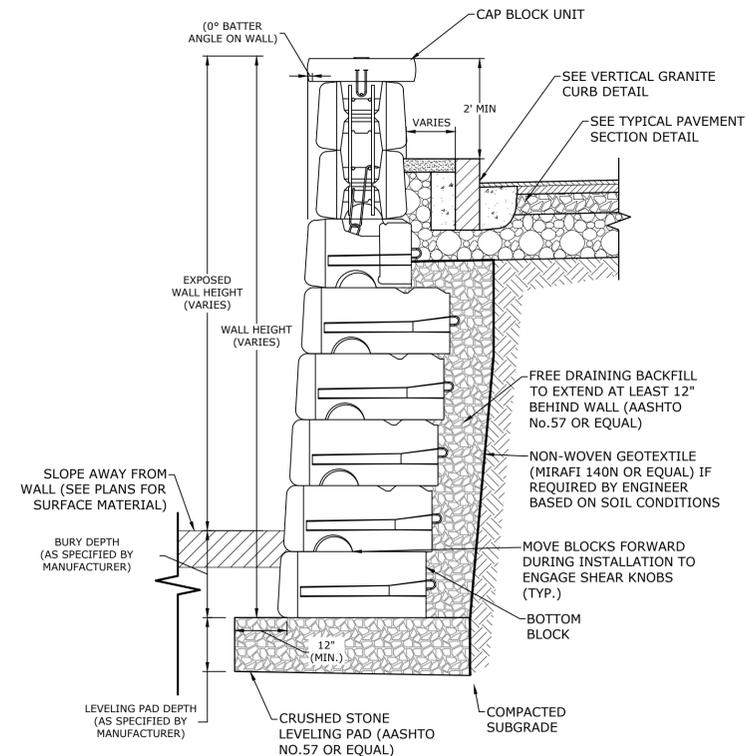
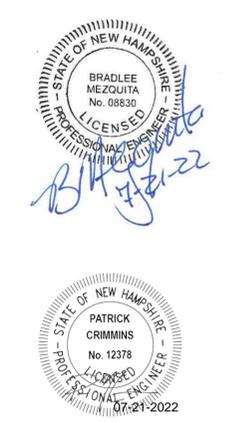
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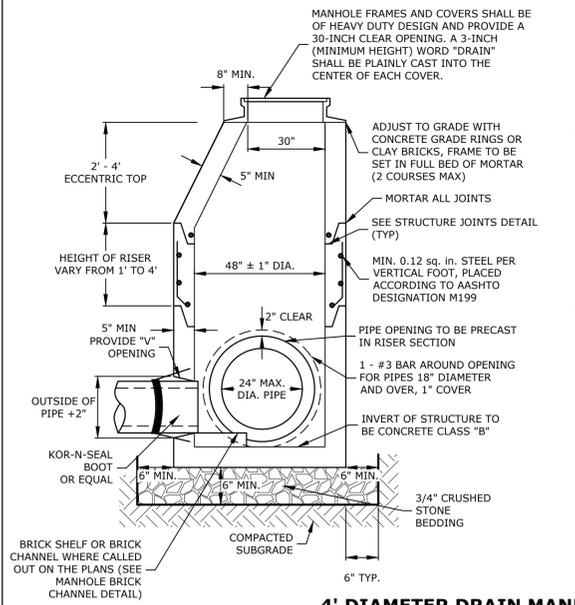


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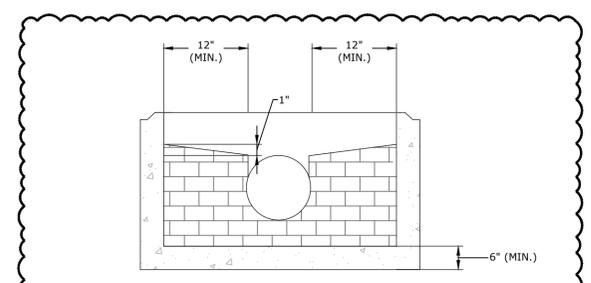
- NOTES:**
- RETAINING WALL SHALL BE BY REDI ROCK LEDGESTONE OR APPROVED EQUAL.
 - THE CONTRACTOR SHALL SUBMIT DESIGN AND CALCULATIONS FOR THE RETAINING WALL THAT SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE. CALCULATIONS SHALL INCLUDE A GLOBAL STABILITY ANALYSIS.
 - MINIMUM DESIGN PARAMETERS:
 - GLOBAL STABILITY FACTOR OF SAFETY = 1.3
 - OVERTURNING FACTOR OF SAFETY = 2.0
 - SLIDING FACTOR OF SAFETY = 1.5
 - GEOGRID PULLOUT FACTOR OF SAFETY = 1.5
 - SEISMIC FACTOR OF SAFETY = 1.1
 - WALL DESIGNS SHALL CONSIDER EFFECTS OF SLOPE, TRAFFIC LOADS, BUILDING LOADS, GUARDRAIL AND/OR FENCING AS REQUIRED.
 - WALL DESIGN ENGINEER SHALL CONSIDER HEIGHT AND SPECIFY GUARDRAIL WHERE REQUIRED
 - ALL INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION MANUAL AND THE WALL DESIGN ENGINEER'S DESIGN PLANS AND SPECIFICATIONS.
 - THE WALL DESIGN ENGINEER SHALL COMPLETE SUFFICIENT INSPECTIONS DURING CONSTRUCTION TO CERTIFY WORK IS COMPLETED IN ACCORDANCE WITH DESIGN.
 - CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS OF WALL WITH WALL DESIGNER'S CERTIFICATION TO OWNER.
 - CONTRACTOR SHALL DIRECT SURFACE RUNOFF AWAY FROM THE WALL DURING CONSTRUCTION.
 - ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT OR OTHER SURFACE TREATMENT SHALL BE INSTALLED IN THE AREA OF THE WALL IMMEDIATELY AFTER THE WALL IS COMPLETE OR OTHER MEASURES SHALL BE TAKEN TO PROTECT THE WALL FROM RUNOFF.
 - CONTRACTOR SHALL SUPPLY SAMPLE TO THE OWNER FOR APPROVAL PRIOR TO WALL CONSTRUCTION.

TYPICAL EXTENDED BLOCK RETAINING WALL SECTION
NO SCALE



- NOTES:**
- ALL SECTIONS SHALL BE 4,000 PSI CONCRETE. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
 - THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
 - THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
 - CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS).
 - THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
 - PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
 - ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.

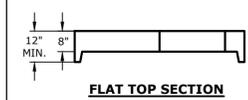
4' DIAMETER DRAIN MANHOLE
NO SCALE



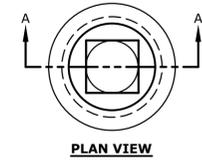
MANHOLE BRICK CHANNEL
NO SCALE

- NOTES:**
- BRICK CHANNEL SHALL BE ASTM C32 SEWER BRICK.
 - CARE SHALL BE TAKEN TO ENSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE DRAIN INVERT.
 - INVERT BRICKS SHALL BE LAID ON EDGE.
 - MANHOLE TEST TO BE CONDUCTED AFTER CHANNEL INSTALLATION IS COMPLETE.
 - WHERE THE ALIGNMENT CHANGES OR SIDE FLOW ENTERS THE MANHOLE, CONSTRUCT CHANNEL WITH A SMOOTH RADIAL CHANNEL.

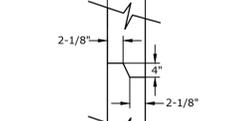
MANHOLE BRICK CHANNEL
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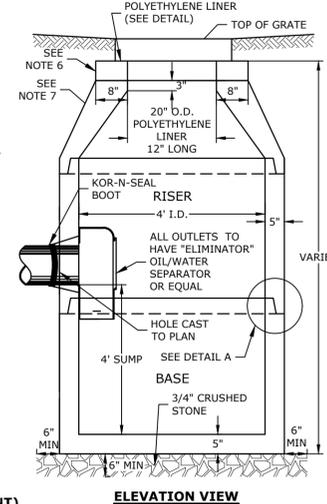
FLAT TOP SECTION



PLAN VIEW

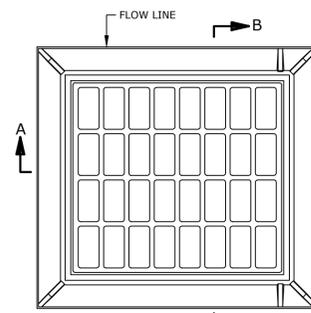


DETAIL A (TONGUE AND GROOVE JOINT)

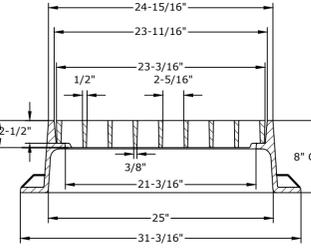


4' DIAMETER CATCH BASIN
NO SCALE

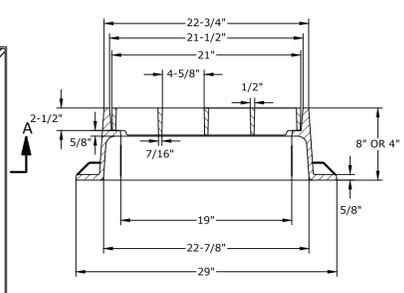
- NOTES:**
- ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 PSI).
 - CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
 - THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
 - RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
 - THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
 - FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2 COURSES MAX.).
 - CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC. OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED.
 - PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
 - OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
 - PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
 - THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
 - "ELIMINATOR" OIL/WATER SEPARATOR SHALL BE INSTALLED TIGHT TO INSIDE OF CATCHBASIN.



PLAN



SECTION A-A



SECTION B-B

- NOTES:**
- ALL DIMENSIONS ARE NOMINAL
 - FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
 - THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
 - THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
 - ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
 - FRAME AVAILABLE IN 4" OR 8" HEIGHTS
 - FREE OPEN AREA = 2.55 SQ. FT.
 - USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.

CATCH BASIN FRAME & GRATE
NO SCALE

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 DATE: 3/22/22
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Proposed Satellite Parking Lot

 Portsmouth Regional Hospital

 444 Borthwick Avenue
 Portsmouth,
 New Hampshire

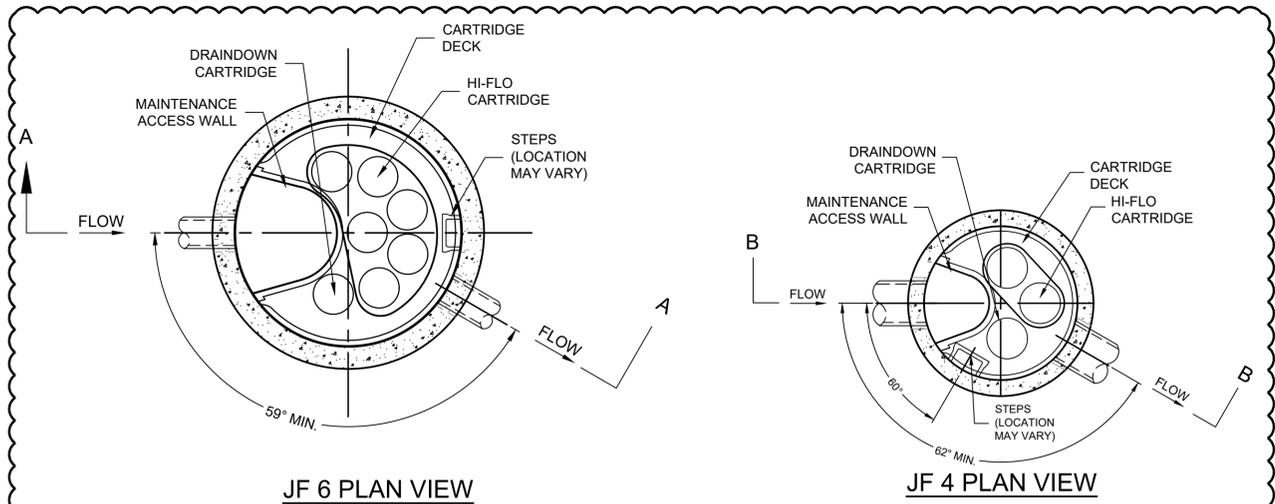
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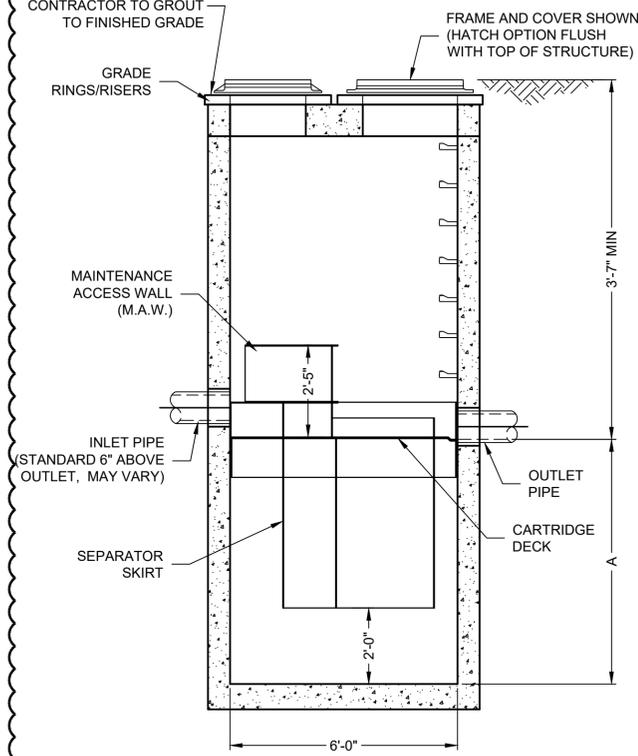
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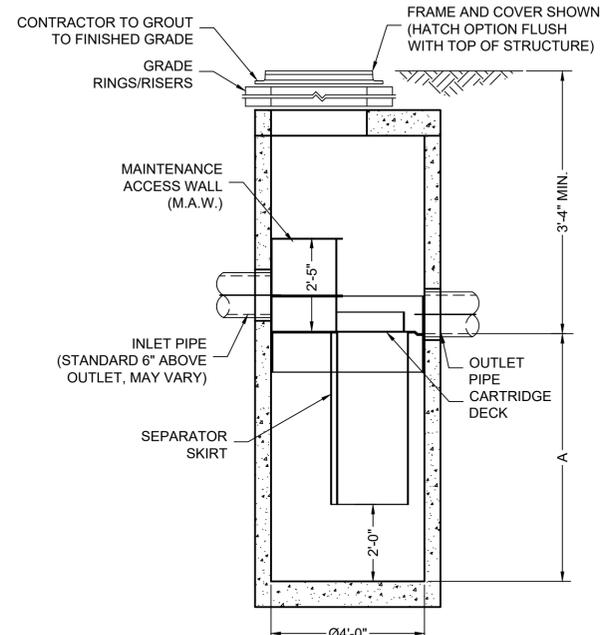


JF 6 PLAN VIEW

JF 4 PLAN VIEW



SECTION A-A



SECTION B-B

Contech Jellyfish Filter System Inspection/Maintenance Requirements

Inspection/Maintenance	Frequency	Action
Inspect vault for sediment build up, static water, plugged media and bypass condition	One (1) time annually and after any rainfall event exceeding 2.5" in a 24-hr period	Maintenance required for any of the following: - >4" of sediment on the vault floor - >1/4" of sediment on top of the cartridge - .4" of static water above the cartridge bottom more than 24 hours after a rain event - If pore space between media is absent. - If vault is in bypass condition during an average rainfall event.
Replace Cartridges	As required by inspection, 1-5 years.	- Remove filter cartridges per manufacturer methods. - Vacuum sediment from vault. - Install new cartridges per manufacturer methods



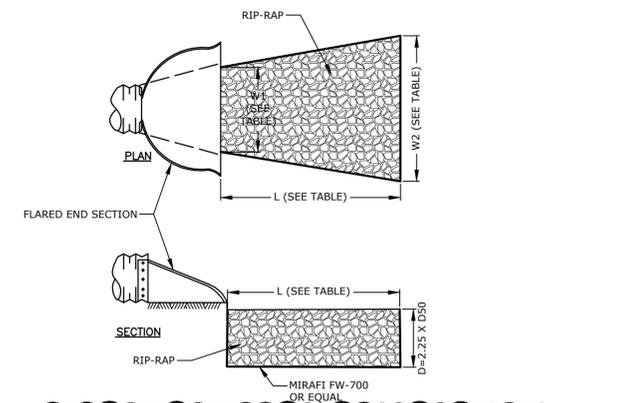
FRAME AND COVER (DIAMETER VARIES) NO SCALE

UNIT MODEL SCHEDULE	
PJFF1	4-2-1
PJFF2	4-1-1
PJFF3	6-5-1
PJFF4	4-1-1

GENERAL NOTES:
 1. TREATMENT UNIT SHALL BE CONTECH JELLYFISH FILTER UNIT OR APPROVED EQUAL.
 2. CONTECH TO PROVIDE FINAL DIMENSIONS BASED ON APPROVED FLOWS AND ALL MATERIALS UNLESS NOTED OTHERWISE.
 3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 4. STRUCTURE SHALL MEET AASHTO HS-20 LOADING REQUIREMENTS. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
 5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES:
 A. CONTRACTOR SHALL PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 B. CONTRACTOR SHALL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
 C. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
 D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.

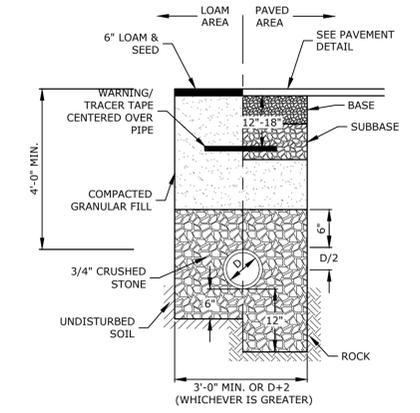
PROPOSED CIRCULAR JELLYFISH FILTER (JFF) UNIT NO SCALE



FIELD ELEVATIONS				
	WIDTH OF APRON (W ₁ , FT)	WIDTH OF APRON (W ₂ , FT)	LENGTH OF APRON (L, FT)	MINIMUM DEPTH (FT)
RRA 1	4	13	9	1.13
RRA 2	6	23	17	0.50
RRA 3	6	23	17	0.50
RRA 4	6	23	17	0.50

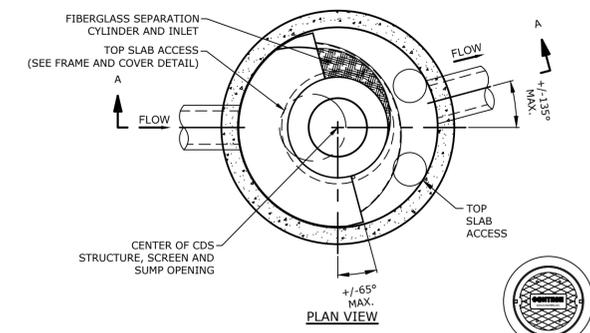
NOTES:
 1. STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.
 2. STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5.
 3. THE STONE SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE SPECIFIED. A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZE BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.

RIP-RAP APRON DETAIL NO SCALE

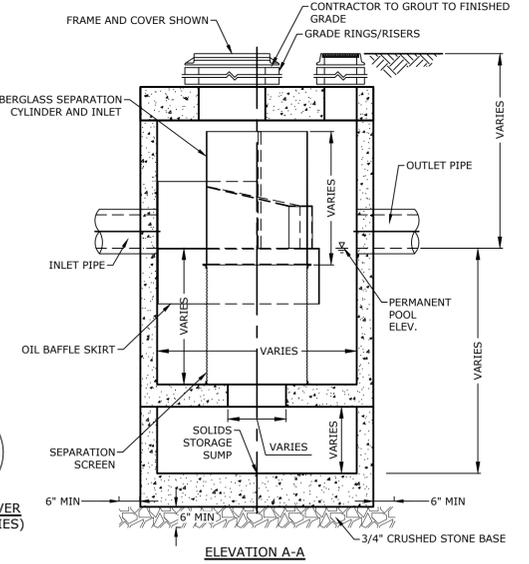


NOTE:
 1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 6" ABOVE TOP OF PIPE.
 2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE CITY OF PORTSMOUTH.

STORM DRAIN TRENCH NO SCALE



FRAME AND COVER (DIAMETER VARIES) NO SCALE



ELEVATION A-A

GENERAL NOTES:
 1. PRE-TREATMENT UNIT SHALL BE CONTECH CONTINUOUS DEFLECTIVE SEPARATION (CDS) UNIT OR APPROVED EQUAL.
 2. CONTECH TO PROVIDE FINAL DIMENSIONS BASED ON APPROVED FLOWS AND ALL MATERIALS UNLESS NOTED OTHERWISE.
 3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 4. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING.
 5. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES:
 A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE CONSIDERED BY THE CONTRACTOR PRIOR TO INSTALLATION.
 B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
 D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN ON GRADING PLAN.
 E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

UNIT MODEL SCHEDULE	
PCDS1	1515-3
PCDS2	1515-3

PROPOSED CONTINUOUS DEFLECTIVE SEPARATION (CDS) UNIT NO SCALE

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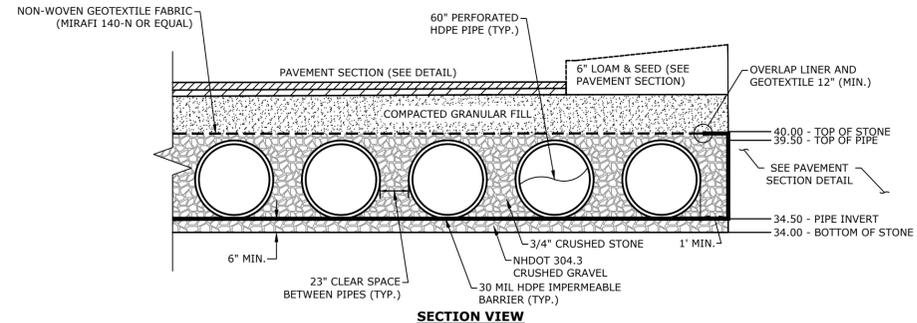
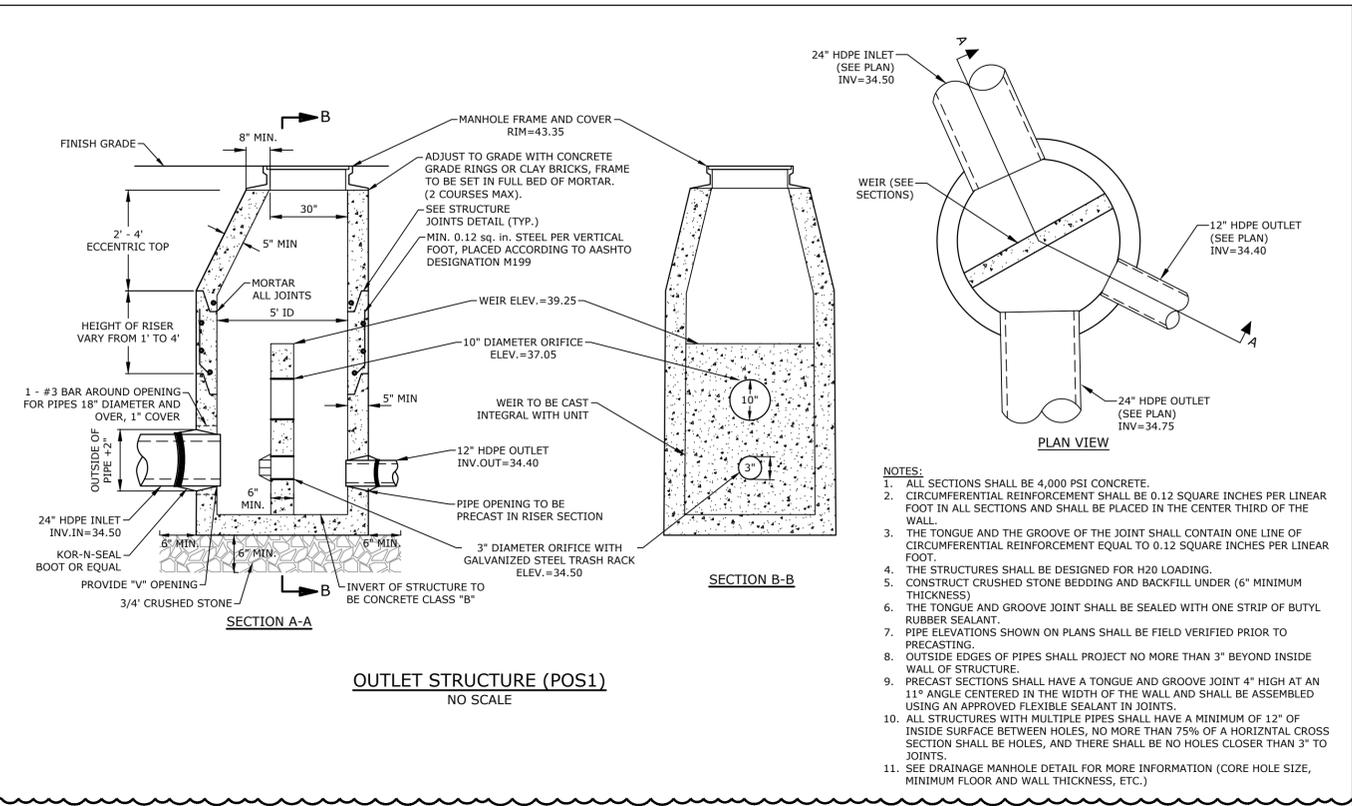
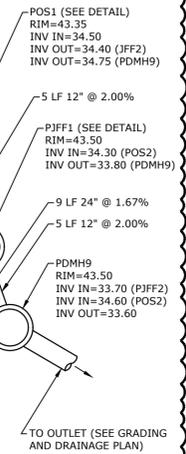
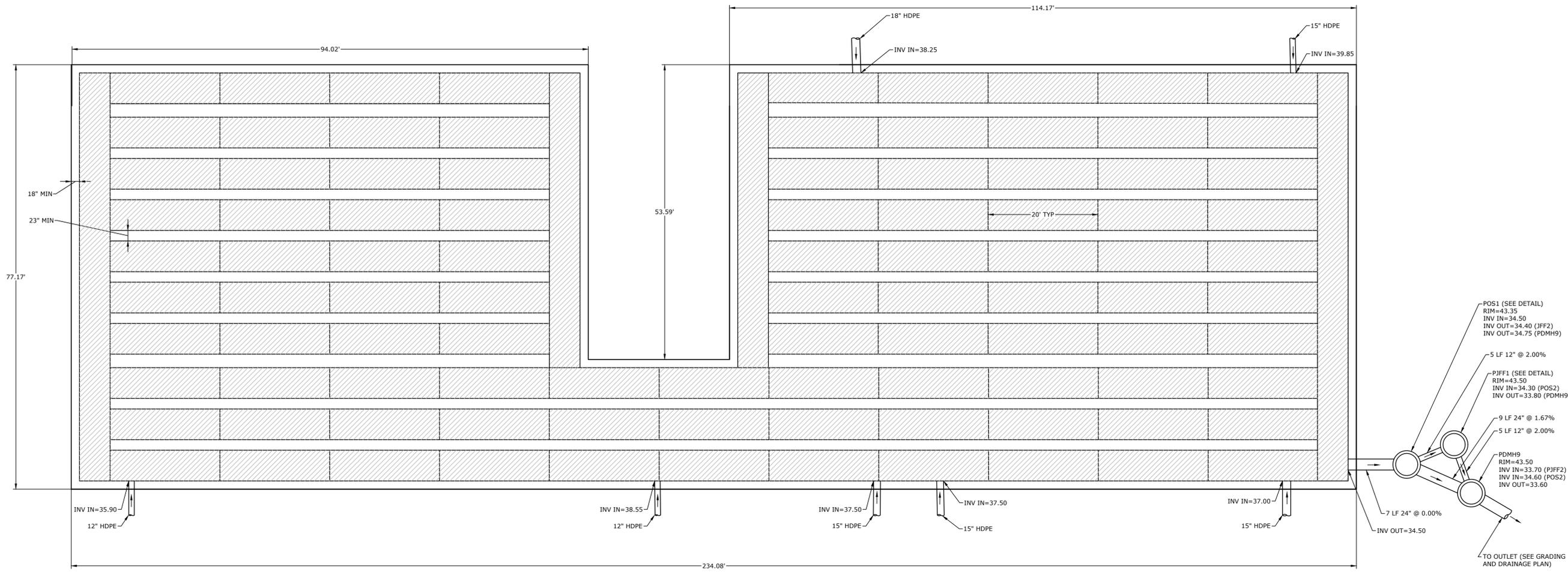
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Inspection & Maintenance Requirements		
Inspection/ Maintenance	Frequency	Action
Monitor inlet and outlet structures for sediment accumulation	Two (2) times annually	- Trash, debris and sediment to be removed - Any required maintenance shall be addressed
Deep Sump Catchbasins	Two (2) times annually	- Removal of sediment as warranted by inspection - No less than once annually
Monitor detention system for sediment accumulation	Two (2) times annually	- Trash, debris and sediment to be removed - Any required maintenance shall be addressed

- NOTE:**
- THE UNDERGROUND INFILTRATION BASIN (UIB) SYSTEM SHALL BE HIGH DENSITY POLYETHYLENE PIPE DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT PIPE SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR REVIEW AND APPROVAL.
 - THE CONTRACTOR SHALL SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
 - THE SURFACE COVER MATERIALS, INCLUDING TOPSOIL/SUBSOIL SHALL BE REMOVED TO THE TOP OF THE EXISTING NATURALLY DEPOSITED SAND. CARE SHALL BE TAKEN TO AVOID MIXING OF THESE MATERIALS WITH OTHER EXCAVATED SOILS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO REVIEW THE SUBSURFACE MATERIAL PRIOR TO INSTALLATION.
 - THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE PROPOSED DESIGN PLAN.
 - THE DESIGN SHALL REQUIRE INSPECTION PORTS/COVERS SUCH THAT SYSTEM CAN BE CLEANED BY VACUUM TRUCK WITH A MINIMUM OF ONE IN EACH CORNER. (FINAL LOCATIONS TO BE COORDINATED PRIOR TO CONSTRUCTION)

60" HDPE UNDERGROUND DETENTION BASIN (UDB-1) DETAIL
NO SCALE

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C	05/12/2022	TAC RESUBMISSION 2
B	04/21/2022	TAC RESUBMISSION
A	03/22/2022	TAC SUBMISSION

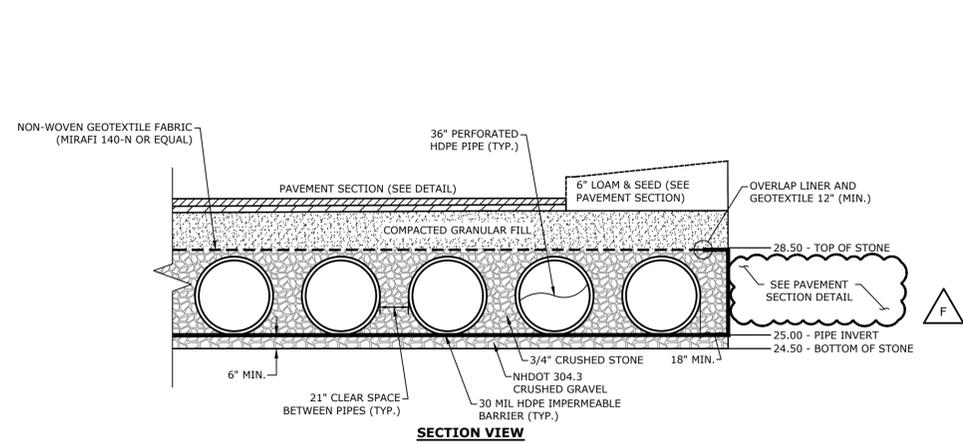
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DATE: 3/22/22
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DETAILS SHEET

SCALE: AS SHOWN

C-506

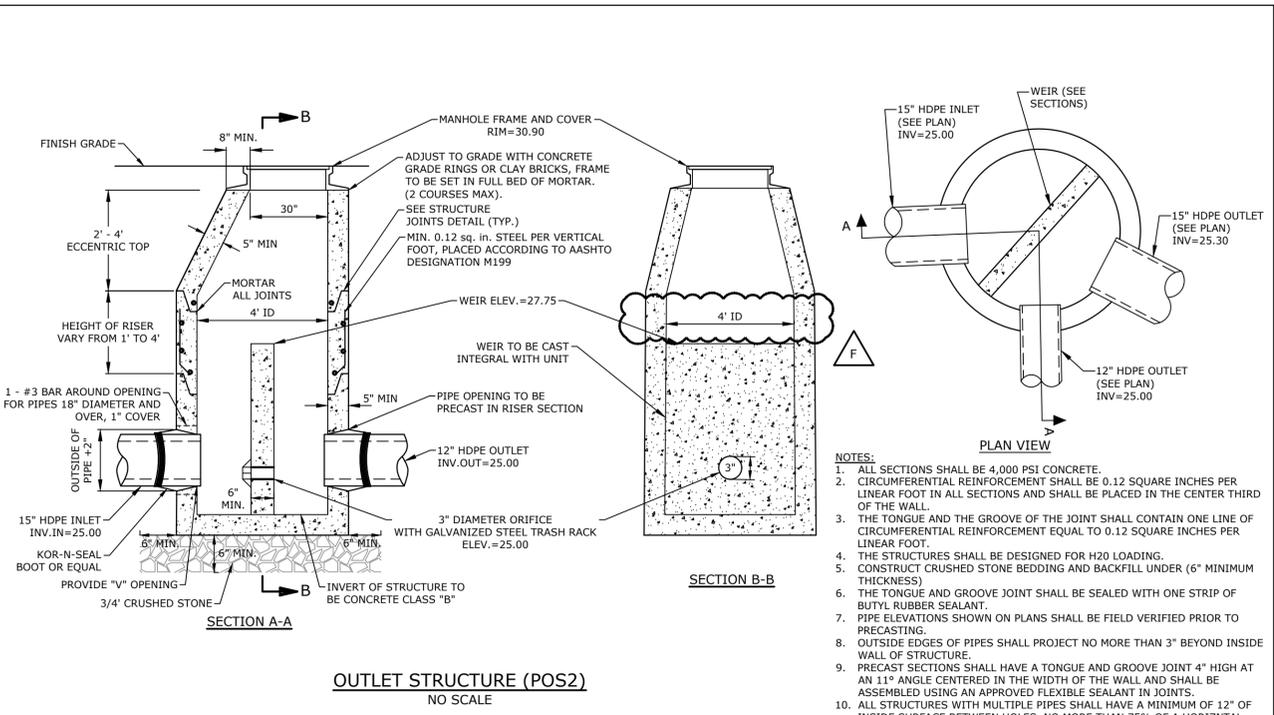
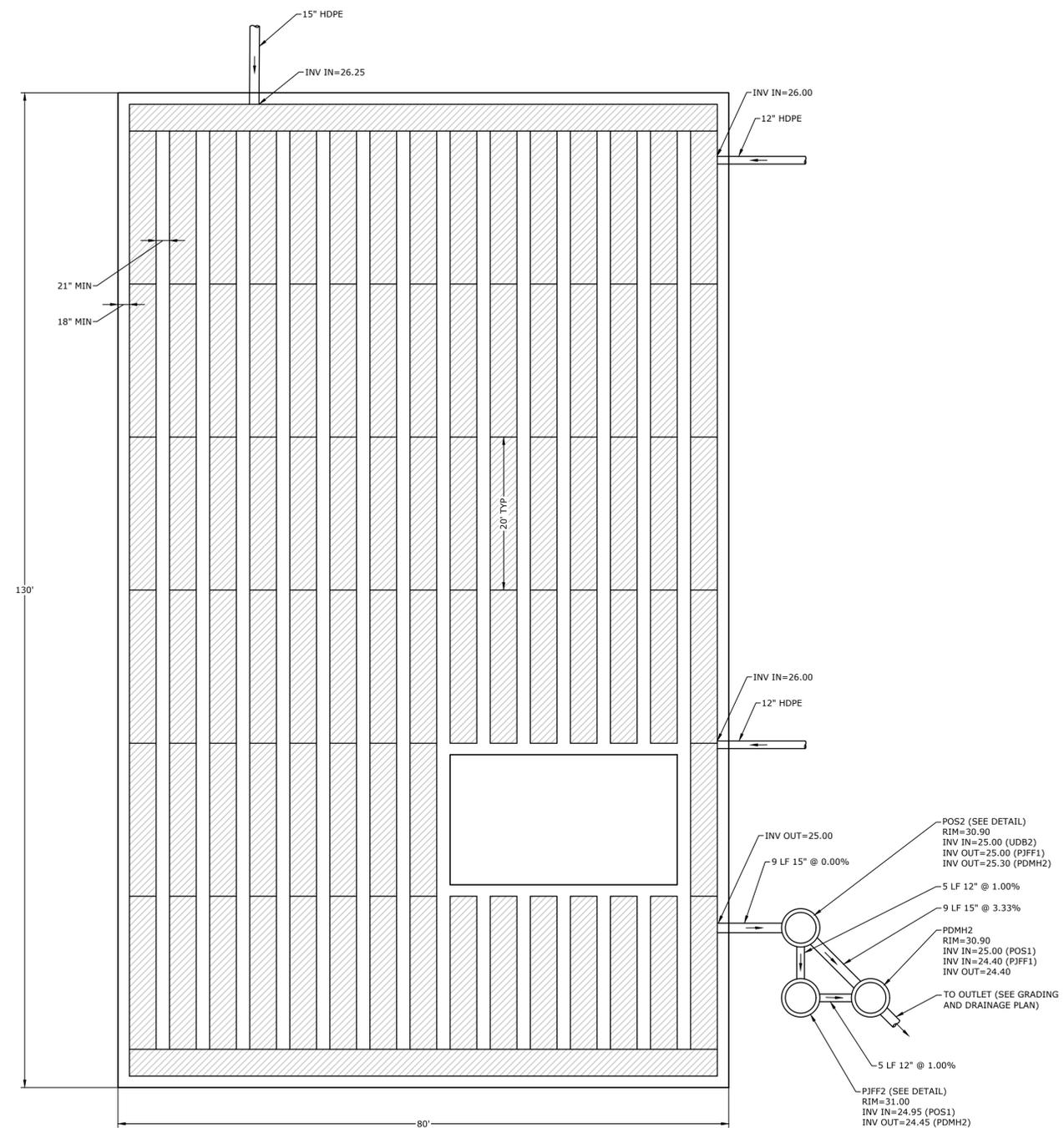
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Inspection & Maintenance Requirements		
Inspection/Maintenance	Frequency	Action
Monitor inlet and outlet structures for sediment accumulation	Two (2) times annually	- Trash, debris and sediment to be removed - Any required maintenance shall be addressed
Deep Sump Catchbasins	Two (2) times annually	- Removal of sediment as warranted by inspection - No less than once annually
Monitor detention system for sediment accumulation	Two (2) times annually	- Trash, debris and sediment to be removed - Any required maintenance shall be addressed

NOTE:

- THE UNDERGROUND INFILTRATION BASIN (UIB) SYSTEM SHALL BE HIGH DENSITY POLYETHYLENE PIPE DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT PIPE SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR REVIEW AND APPROVAL.
- THE CONTRACTOR SHALL SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL.
- THE CONTRACTOR SHALL SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL.
- THE SURFACE COVER MATERIALS, INCLUDING TOPSOIL/SUBSOIL SHALL BE REMOVED TO THE TOP OF THE EXISTING NATURALLY DEPOSITED SAND. CARE SHALL BE TAKEN TO AVOID MIXING OF THESE MATERIALS WITH OTHER EXCAVATED SOILS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO REVIEW THE SUBSURFACE MATERIAL PRIOR TO INSTALLATION.
- THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE PROPOSED DESIGN PLAN.
- THE DESIGN SHALL REQUIRE INSPECTION PORTS/COVERS SUCH THAT SYSTEM CAN BE CLEANED BY VACUUM TRUCK WITH A MINIMUM OF ONE IN EACH CORNER. (FINAL LOCATIONS TO BE COORDINATED PRIOR TO CONSTRUCTION)



NOTES:

- ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
- CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
- THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
- THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
- CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)
- THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
- PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
- OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
- PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
- ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.
- SEE DRAINAGE MANHOLE DETAIL FOR MORE INFORMATION (CORE HOLE SIZE, MINIMUM FLOOR AND WALL THICKNESS, ETC.)

36" HDPE UNDERGROUND DETENTION BASIN 2 (UDB-2) DETAIL
NO SCALE

Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

MARK	DATE	DESCRIPTION
F	07/21/2022	REV PER AOT & PEER REVIEW
E	06/29/2022	PB SUBMISSION
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DETAILS SHEET

SCALE: AS SHOWN

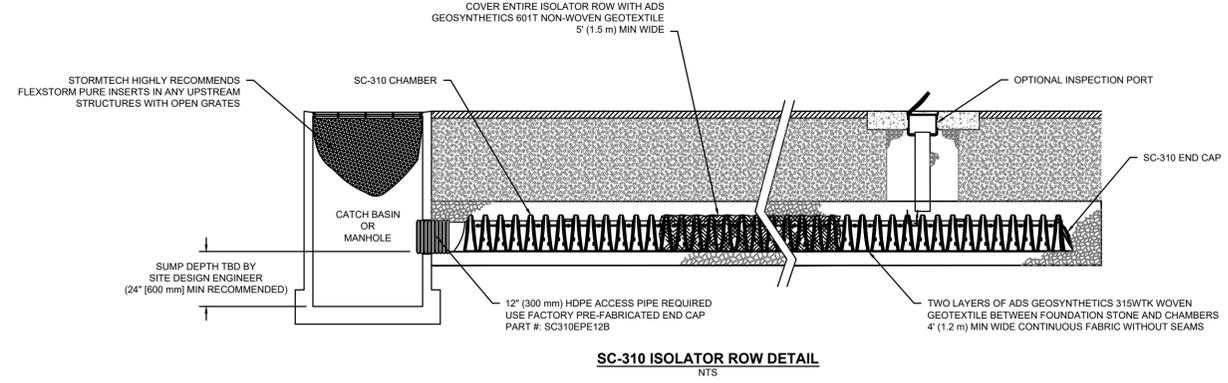
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ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN), DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	A FLAT SURFACE SHALL BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT.

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".



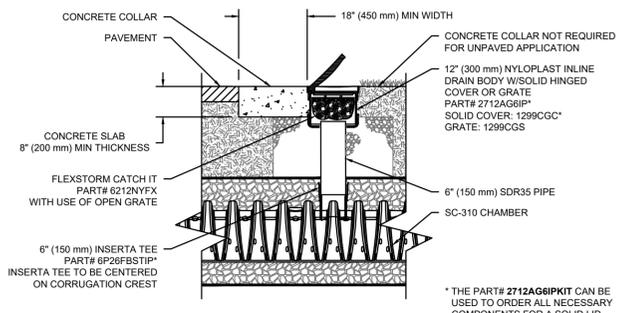
SC-310 ISOLATOR ROW DETAIL
NTS

INSPECTION & MAINTENANCE

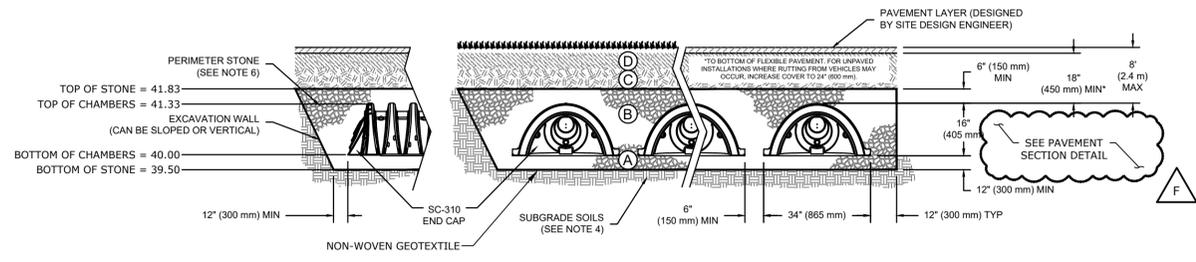
- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
 A. INSPECTION PORTS (IF PRESENT)
 A.1. REMOVE OPEN LID ON NYLOPLAST INLINE DRAIN
 A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3
 B. ALL ISOLATOR ROWS
 B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
 B.2. i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
 A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



SC-310 6" INSPECTION PORT DETAIL
NTS



NOTES:

- SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SURFACE COVER MATERIALS, INCLUDING TOPSOIL/SUBSOIL SHALL BE REMOVED TO THE TOP OF THE EXISTING NATURALLY DEPOSITED SAND. CARE SHALL BE TAKEN TO AVOID MIXING OF THESE MATERIALS WITH OTHER EXCAVATED SOILS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO APPROVE THE SUBSURFACE MATERIAL PRIOR TO INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING AND PROTECTION OF SUBGRADE THROUGHOUT CONSTRUCTION PER MANUFACTURER'S RECOMMENDATIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

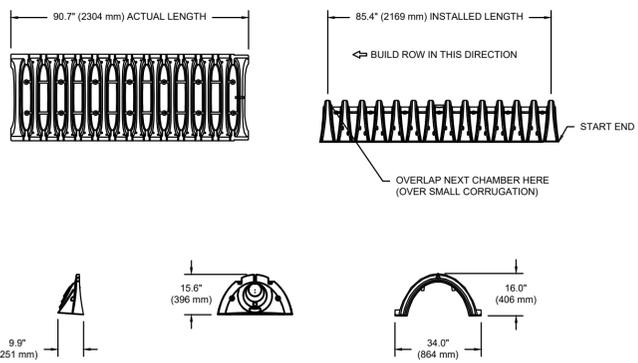
STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740, SC-310, OR APPROVED EQUAL.
- CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN POLYPROPYLENE OR POLYETHYLENE RESINS. ^)
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET ASTM F2922 (POLYETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". ^)
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
 7.1. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
 7.2. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET, THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 OR ASTM F2922 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
 7.3. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310/SC-740 SYSTEM

- STORMTECH SC-310 & SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS. ^)
- STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-780 CONSTRUCTION GUIDE". ^)
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. ^) STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 • STONESHOOTER LOCATED OFF THE CHAMBER BED.
 • BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 • BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR. ^)
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS. ^)
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE. ^)
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS. ^)
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4"-2" (20-50 mm). ^)
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER. ^)
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

SC-310 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS	SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4" (864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET (0.42 m³)	
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET (0.88 m³)	
WEIGHT	35.0 lbs (16.8 kg)	

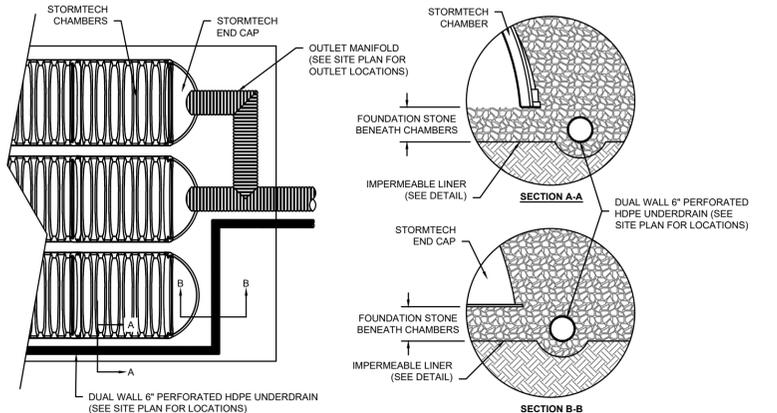
*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

NOTES FOR CONSTRUCTION EQUIPMENT ^)

- STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". ^)
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 • NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 • NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 • WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". ^)
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



UNDERDRAIN DETAIL
NTS

PART #	STUB	A	B	C
SC310EPE07 / SC310EPE08TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	0.5" (13 mm)
SC310EPE08B / SC310EPE08BPC	---	---	---	---
SC310EPE08T / SC310EPE08TPC	---	---	---	---
SC310EPE08B / SC310EPE08BPC	6" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC	---	---	---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL



Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
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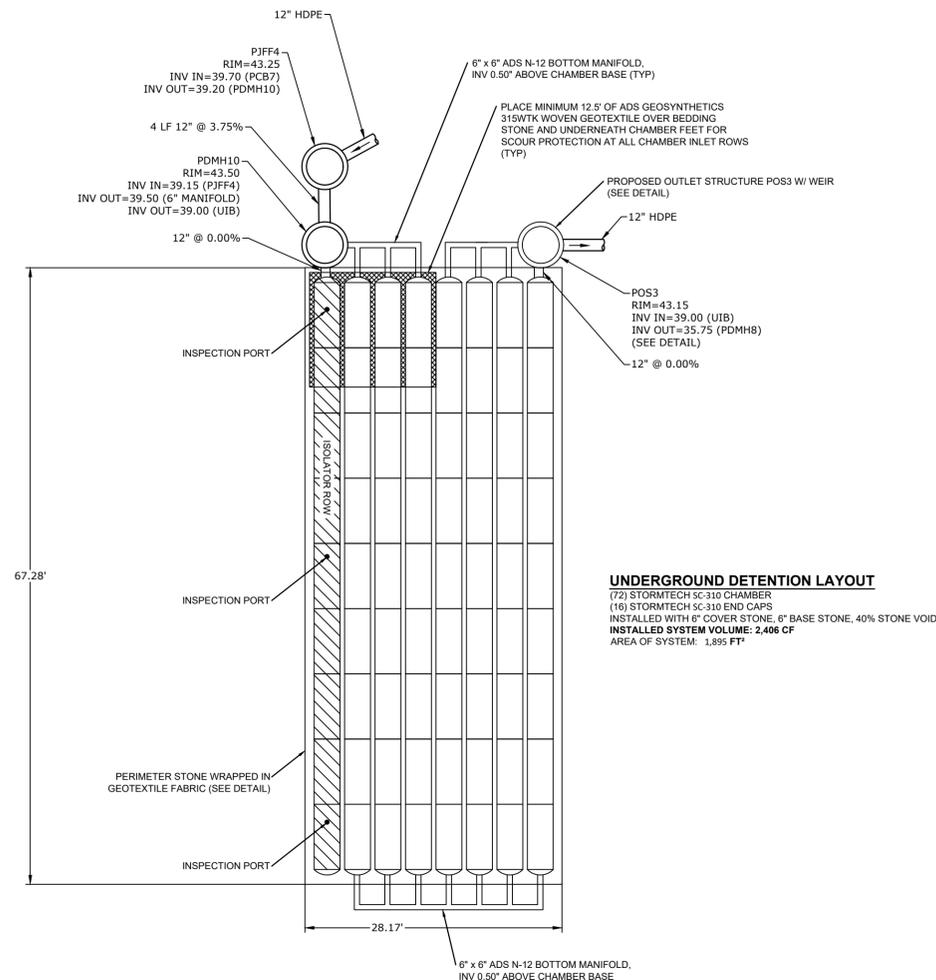
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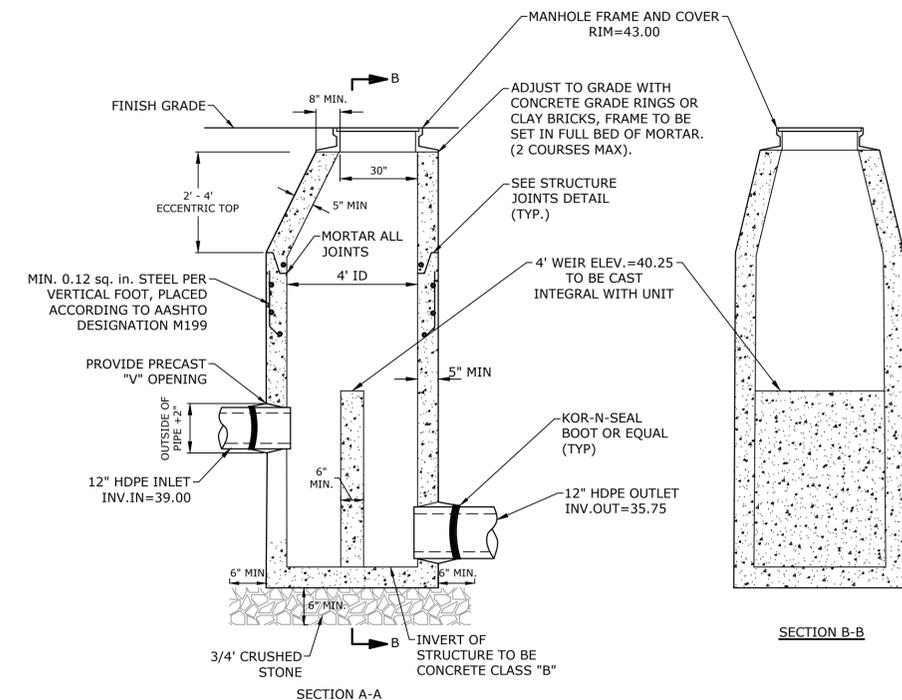
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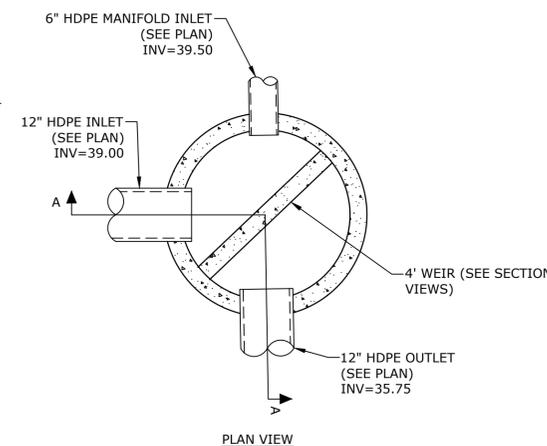
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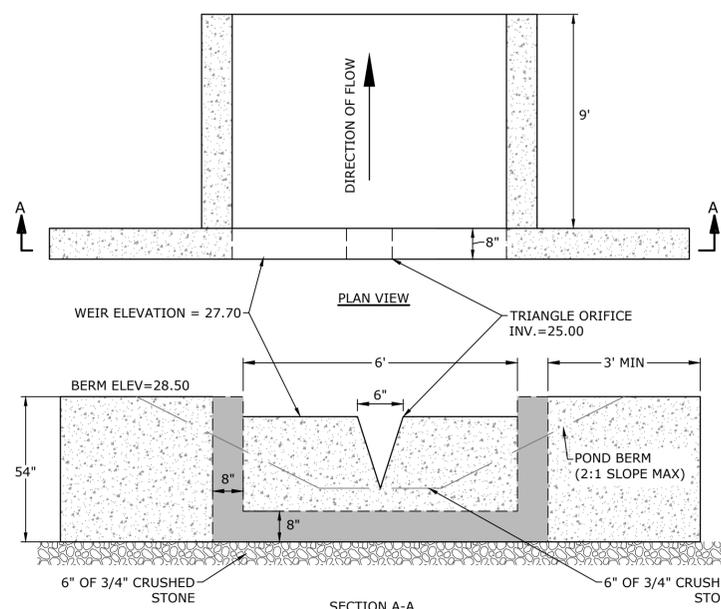
**UNDERGROUND INFILTRATION BASIN
STORMTECH SC-310 CHAMBER LAYOUT**
NO SCALE



- NOTES:**
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
 2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
 3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
 4. THE STRUCTURES SHALL BE DESIGNED FOR H2O LOADING.
 5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6\"/>

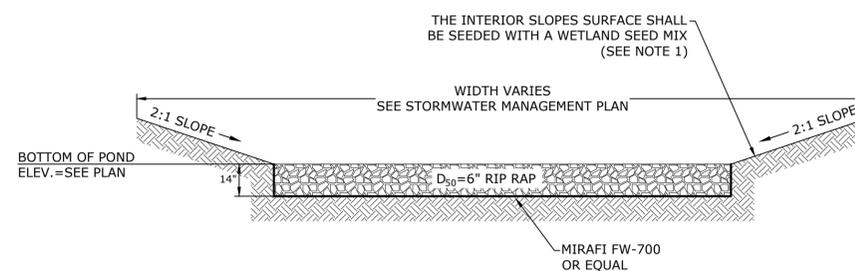


OUTLET STRUCTURE DETAIL (POS3)
NO SCALE



OUTLET CONTROL WEIR
NO SCALE

- NOTES:**
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE (TYPE II CEMENT).
 2. REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS.
 3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.



DETENTION BASIN SECTION
NO SCALE

- NOTES:**
1. WETLAND SEED MIX SHALL BE "NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES", BY NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL AND SHALL BE INSTALLED IN ACCORDANCE TO THE MANUFACTURER'S SPECIFICATIONS.
 2. SEE PLANS FOR LOCATIONS, LAYOUTS, AND ELEVATIONS.
 3. RIP RAP STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5.
 4. THE STONE SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE SPECIFIED. A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZE BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.

**Proposed
Satellite
Parking Lot**

Portsmouth Regional
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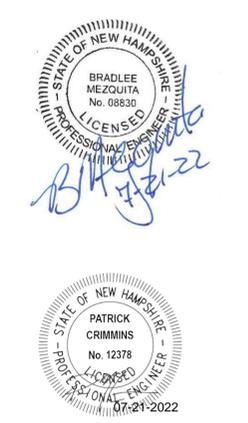
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D	05/23/2022	AOT SUBMISSION
C	05/12/2022	TAC RESUBMISSION 2
B	04/21/2022	TAC RESUBMISSION
A	03/22/2022	TAC SUBMISSION

PROJECT NO:	P0616-001
DATE:	3/22/22
FILE:	P0616-005_C-DETAILS.DWG
DRAWN BY:	AFS
CHECKED:	PMC
APPROVED:	BLM

DETAILS SHEET

SCALE: AS SHOWN

C-509



Proposed Satellite Parking Lot

Portsmouth Regional Hospital

444 Borthwick Avenue
Portsmouth,
New Hampshire

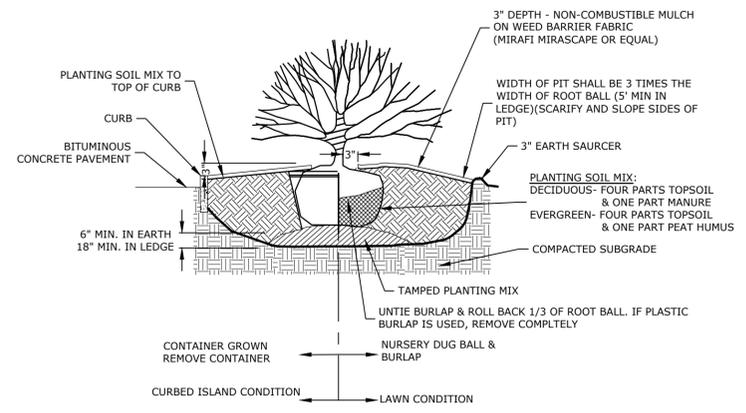
MARK	DATE	DESCRIPTION
F	07/21/2022	REV PER AOT & PEER REVIEW
E	06/29/2022	PB SUBMISSION
D	05/23/2022	AOT SUBMISSION
C	05/12/2022	TAC RESUBMISSION 2
B	04/21/2022	TAC RESUBMISSION
A	03/22/2022	TAC SUBMISSION

PROJECT NO: P0616-001
DATE: 3/22/22
FILE: P0616-005_C-DETAILS.DWG
DRAWN BY: AFS
CHECKED: PMC
APPROVED: BLM

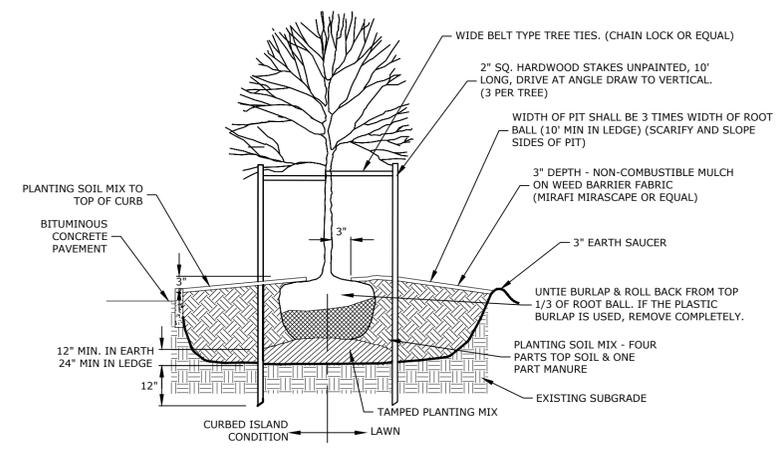
DETAILS SHEET

SCALE: AS SHOWN

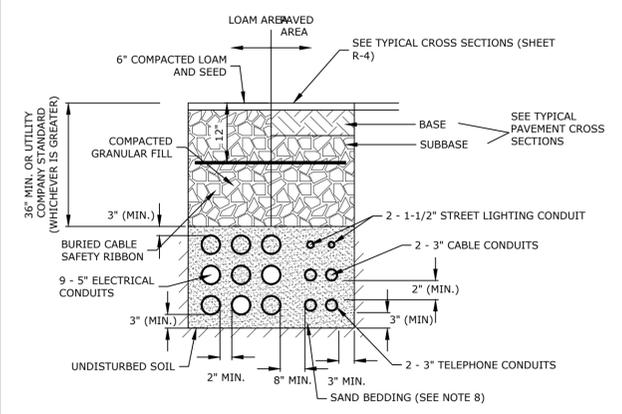
C-510



SHRUB PLANTING
NO SCALE



DECIDUOUS TREE PLANTING
NO SCALE

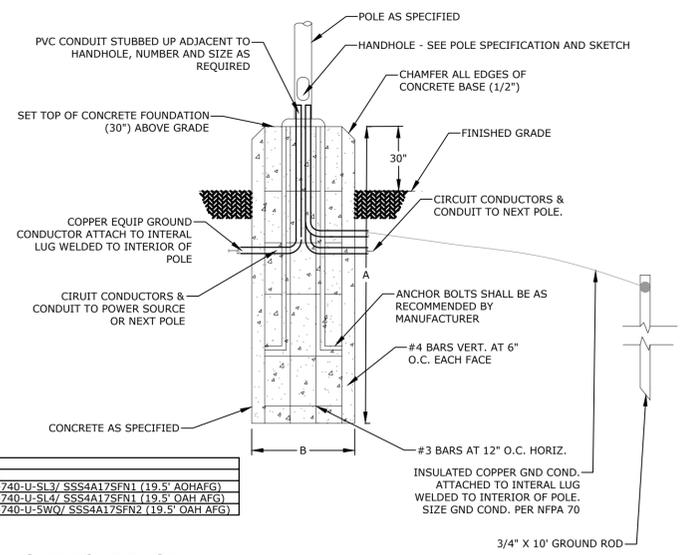


TYPICAL ELECTRICAL AND COMMUNICATION CONDUIT
NO SCALE

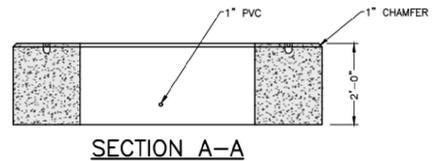
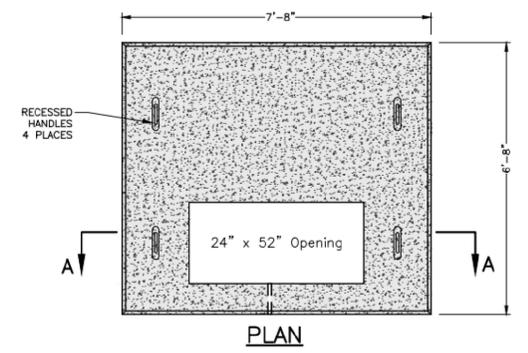
- NOTES:**
- NUMBER, MATERIAL, AND SIZE OF UTILITY CONDUITS TO BE DETERMINED BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING.
 - DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN.
 - NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
 - A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
 - UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
 - ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND, WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
 - ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.
 - SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASUREMENT WHERE COVER IS LESS THAN 3 FEET, WHEN LOCATED BELOW PAVEMENT, OR WHERE SHOWN ON THE UTILITIES PLAN.

- NOTES:**
- ALL LIGHT POLES, LUMINAIRES, AND WIRE TO BE FURNISHED AND INSTALLED BY THE POWER COMPANY. UNLESS OTHERWISE DIRECTED.
 - ANCHOR BOLTS, GROUND ROD & GROUND WIRE TO BE FURNISHED BY THE POWER COMPANY AND INSTALLED BY THE CONTRACTOR, UNLESS OTHERWISE DIRECTED.
 - BOLT CIRCLE DIAMETER SHALL BE VERIFIED WITH THE POWER COMPANY.
 - ALL BASES SHALL BE LOCATED 10'-0" (TO CENTER) FROM FACE OF CURB OR EDGE OF PAVED SHOULDER, UNLESS OTHERWISE NOTED.
 - REINFORCEMENT SHALL CONFORM TO SECTION 544 OF THE STANDARD SPECIFICATIONS.
 - ANY ANCHOR BOLTS DAMAGED DURING INSTALLATION SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER.
 - UPON INSTALLATION, ANCHOR BOLT THREADS SHALL BE CLEANED WITH A WIRE BRUSH.
 - TERRAIN SURROUNDING BASE MUST BE GRADED AS SHOWN IN DETAIL "A" TO PREVENT IMPACTING VEHICLES FORM SNAGGING ON BASE.

LUMINAIRE SCHEDULE	SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION
		3	P3	SINGLE	GLEON-SA1C-740-U-SL3/ SSS4A17SFN1 (19.5' OAHAFG)
		15	P4	SINGLE	GLEON-SA2C-740-U-SL4/ SSS4A17SFN1 (19.5' OAH AFG)
		5	P5-2	BACK-BACK	GLEON-SA2C-740-U-SW0/ SSS4A17SFN2 (19.5' OAH AFG)



LIGHT POLE BASE
NO SCALE



- NOTES:**
- DIMENSIONS SHOWN REPRESENT TYPICAL REQUIREMENTS. MANHOLE LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED WITH EVERSOURCE PRIOR TO CONSTRUCTION
 - CONCRETE MINIMUM STRENGTH - 4,000 PSI @ 28 DAYS
 - STEEL REINFORCEMENT - ASTM A615, GRADE 60
 - PAD MEETS OR EXCEEDS EVERSOURCE SPECIFICATIONS

3-PHASE TRANSFORMER PAD
NO SCALE

Last Save Date: July 20, 2022 1:06 PM By: ASELLAR
 Plot Date: Thursday, July 21, 2022 Plotted By: Alexander Sellar
 P&E File Location: J:\P0616 Portsmouth Regional Hospital - Portsmouth, NH Retention Period\005 PH Parking Expansion\Drawings - Figures\AutoCAD\Sheet\0616-005_C-Details.DWG Layout Tab: C-510