REGULAR MEETING
CONSERVATION COMMISSION

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
SCHOOL DEPARTMENT CONFERENCE ROOM

4:00 P.M. **June 11, 2025**

AGENDA

I. APPROVAL OF MINUTES

1. April 9, 2025

2. April 23, 2025

3. May 14, 2025

II. WORK SESSIONS

1. 470 Banfield Road

III. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)

1. 15 Marjorie Street (LU-24-118)
   Reichl Family Revocable Trust
   Assessor Map 232 Lot 41

2. City of Portsmouth (LU-25-82)
3. (on behalf of)
   15 Marjorie Street
   Reichl Family Revocable Trust
   Assessor Map 232 Lot 41
   AND
   49 Marjorie Street
   Alison Decotis & Travis Munsey
   Assessor 232 Lot 37

4. 505 US Route 1 Bypass (LU-25-66)
   Giri Portsmouth 505 Inc.
   Assessor Map 234 Lot 5

IV. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

1. **REQUEST TO POSTPONE**
   Dredge and Fill – Major Impact
   Peverly Hill Road and Greenleaf Avenue, City ROW
   City of Portsmouth

V. OTHER BUSINESS

1. Withdrawal of 80 FW Hartford
2. Work Session Dates

VI. ADJOURNMENT

**Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:*

https://us06web.zoom.us/webinar/register/WN_Xa4dhVDZTQmUmRUu21Ec7g

REGULAR MEETING
CONSERVATION COMMISSION

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
EILEEN DONDERO FOLEY COUNCIL CHAMBERS

4:00 P.M. **April 9, 2025**

MINUTES

MEMBERS PRESENT: Chair Samantha Collins; Vice Chair Barbara McMillan; Members: Brian Gibb, Jessica Blasko, Lynn Vaccaro, Stewart Sheppard, Alice Carey

MEMBERS ABSENT: Alternate: Talia Sperduto

ALSO PRESENT: Kate Homet; Environmental Planner

I. APPROVAL OF MINUTES

1. March 12, 2025

J. Blasko made a motion to approve the March minutes as presented. S. Shepphard seconded the motion. The motion passed unanimously.

II. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (OLD BUSINESS)

1. **REQUEST TO POSTPONE**
   224 Cate Street
   Jesse Anderson, Owner
   Assessor Map 173 Lot 3

J. Blasko made a motion to postpone the application until the May meeting. B. Gibb seconded the motion. The motion passed unanimously.

III. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)

1. 80 FW Hartford Drive
   Julian Frey, Owner
   Assessor Map 269 Lot 46

S. Sheppard made a motion to move this application out of order on the agenda and hear it at the end of the meeting prior to Other Business. B. Gibb seconded the motion. The motion passed unanimously.

[1:11:50] S. Sheppard announced that he would be recusing himself from this application.

Julian Frey, the property owner, came to present this application alongside a subject matter expert in sustainability, Steve Barndollar. Mr. Frey described how they had been working with the Commission in the past to deal with trees removed from the wetland buffer and now they were back for a new application to deal with drainage issues on their property. The applicant proposed removing the existing tree stumps on the property and placing in a rain garden to deal with the flooding impacts.

Commissioners asked questions about the topography of the property, the current stormwater flow, the construction and layers of the proposed rain garden, the proximity of the wetland to this work, and they noted that they would like to see evidence from an expert that the rain garden will perform as functioned and fix their flooding issues. In addition, it was discussed that if the exact location of the proposed rain garden is found to be outside of the 100' wetland buffer, a permit would not be needed.

J. Blasko made a motion to postpone this application to the May meeting so that the exact location of the rain garden is known and the 100' buffer line is delineated clearly on the plan set. B. Gibb seconded the motion. The motion passed unanimously (6-0) with S. Sheppard recusing himself.

IV. STATE WETLAND BUREAU APPLICATIONS (OLD BUSINESS)

1. Dredge and Fill
   50 Andrew Jarvis Drive (581 Lafayette Road)
   City of Portsmouth (Atlas Commons LLC)
   Assessor Map 229 Lot 3

Vice Chair McMillan made a motion to move this application out of order on the agenda and hear it after 80 FW Hartford Drive. B. Gibb seconded the motion. The motion passed unanimously.

[1:39:49] John Chagnon from Haley Ward came to present this application. He noted that Sam Hayden had come the previous month to present the minimum expedited permit, which was not signed, and the application was now a standard dredge and fill. Mr. Chagnon proceeded to respond to some of the outstanding concerns that had been brought up during the previous meeting.

Commissioners then asked questions about the proposed tree removals and additions, the landscape plan, the jurisdictional area for the Commission to deliberate on, a winter maintenance plan, the School Department's responsibilities, and the existing wetland functions.

J. Blasko made a motion to recommend approval to NHDES with the condition that there is some sort of plan considered for snow storage, snow removal and winter maintenance for the

school to have on hand. B. Gibb seconded the motion. A discussion continued about the impacts of this application. The motion failed 3-3 with

V. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

1. **REQUEST TO POSTPONE**
   Dredge and Fill – Major Impact
   Peverly Hill Road and Greenleaf Avenue, City ROW
   City of Portsmouth

J. Blasko made a motion to postpone this application to the May meeting. A. Carey seconded the motion. The motion passed unanimously.

2. Dredge and Fill – Major Impact
   255 Gosport Road
   Gosport Realty Trust, Owner
   Assessor Map 224 Lot 10-9

Matt Cardin, the environmental consultant for this property, came to present this application. He described the application for a tidal dock to be installed in Sagamore Creek. The dock would be a 6 x 200' permanent pier connected to a seasonal 30 x 4' gangway which would be connected to a 10 x 10' float with a 15 x 6' ramp for access to the pier. The proposal would impact freshwater and tidal wetlands on the property. The applicant was also seeking a waiver for not abiding by the length requirements for the structure put in place by the State. Mr. Cardin went on to describe the square footage of impacts and then discussed the details of the project and the qualities of the wetlands on site.

The Commissioners asked a variety of questions about the dock use, access to the dock, impacts to salt marsh, the water depth, the dock length, neighboring docks, etc.

L. Vaccaro made a motion to recommend approval of the application to NHDES. B. Gibb seconded the motion. The Commission discussed the project and its impacts, raised concerns over the impacts and sensitivity of the resources in the area, the water depth issues and the prime wetland impacts, and mentioned how other neighbors may follow suit if a precedent is set with placing a dock in this section of Sagamore Creek. The comments of concern were specified as conditions of the recommendation to approve, these included concern for the salt marsh, the prime wetland, application seems more like a boardwalk due to spacing, mudflat concerns, lacking sufficient water for floating, applicant should consider publicly accessible accessways to the water rather than building their own.

Chair Collins called a vote. The motion failed 1-6 with A. Carey voting in favor of the motion. The application was recommended denial to NHDES.

S. Sheppard made a motion to send the list of the concerns discussed to NHDES with reference to this application. B. Gibb seconded the motion. The motion passed unanimously.

VI. OTHER BUSINESS

1. Sustainability Fair Tabling – April 11th

The Commission discussed the upcoming fair and the materials needed for hosting a table. In addition, they also discussed a possible volunteer opportunity for a trail clean up on Jones Avenue, potential work session with the Planning Board in the future, a potential non-public for a Commission discussion, and a reminder to attend the upcoming special meeting on April 23rd from 4:00 – 6:00 p.m.

VII. ADJOURNMENT

The meeting was adjourned at 6:25 p.m.

SPECIAL MEETING OF THE
CONSERVATION COMMISSION

EILEEN DONDERO FOLEY COUNCIL CHAMBERS
1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE

4:00 P.M. **APRIL 23, 2025**

MINUTES

MEMBERS PRESENT: Chair Samantha Collins; Vice Chair Barbara McMillan; Members: Brian Gibb, Jessica Blasko, Lynn Vaccaro, Stewart Sheppard, Alice Carey; Alternate: Talia Sperduto

MEMBERS ABSENT:

ALSO PRESENT: Kate Homet; Environmental Planner, Peter Britz; Director of Planning & Sustainability, Mark West; Consultant

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I. Presentation and discussion from Mark West of West Environmental on the citywide wetland mapping update

Kate Homet introduced the guest speaker of the evening, Mark West of West Environmental, and explained that Mr. West had been hired as part of the 2022 Moose Plate Grant that the City had received. Mr. West was hired to update the citywide wetland maps, track any changes that had occurred since the previous mapping, and create a final report summarizing his work.

Mr. West spent time presenting his mapping update, including his initial research, methodology, new mapping resources, and the final product. He also included information on some areas of change across the City and areas with particularly sensitive habitats that he noticed during his field verifications.

Once Mr. West concluded his presentation, there was time for questions and a broader discussion on the implications of the updated map. Commissioners and staff asked questions and deliberated on how the updated map impacts City wetlands.

II. Adjournment

The meeting adjourned at 5:30 p.m.

REGULAR MEETING
CONSERVATION COMMISSION

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
EILEEN DONDERO FOLEY COUNCIL CHAMBERS

4:00 P.M. **May 14, 2025**

MINUTES

MEMBERS PRESENT: Vice Chair Barbara McMillan; Members: Brian Gibb, Jessica Blasko, Lynn Vaccaro, Alternate: Talia Sperduto

MEMBERS ABSENT: Chair Samantha Collins; Members: Stewart Sheppard, Alice Carey

ALSO PRESENT: Kate Homet; Environmental Planner

Vice Chair McMillan announced that Chair Collins would not be in attendance and that she would be Acting Chair in her absence. She also announced that the meeting would have to wrap by 5:30 p.m. as the City Council needed the chambers for a work session.

Acting Chair McMillan then noted that no minutes had been received so no vote would take place on them, and also, the Commission had received a letter in their meeting packet from Drew Stevens from the NH Turtle Rescue with information on what to do if injured turtles are spotted or need help with traffic crossings. A public service announcement was given on how to get in touch with this group if a turtle is spotted in distress.

I. APPROVAL OF MINUTES

1. April 9, 2025

2. April 23, 2025

No action was taken.

II. WORK SESSIONS

1. 126 Lang Road

Nicole Duquette from McClure Engineering came to speak to this work session along with Alex Finnegan from the Preservation of Affordable Housing and Mike Mulhern from Service Credit

Union. Ms. Duquette talked briefly about the site walk that had occurred and then described the proposed two-phase plan to build housing in the lot behind the Service Credit Union building. This application is currently undergoing review for the first phase at the Technical Advisory Committee and at the Planning Board for preliminary conceptual design review. Ms. Duquette noted that the second phase of the project is where wetland buffer impacts would occur and they would need to seek a Wetland Conditional Use Permit once they reach that phase. She also described the current conditions of the lot and the existing wetlands, the status of ledge and need for soil and ledge removal, the recent discovery of vernal pools and the historic use of the property as a scrapyard.

The Commission then asked questions about the project's proximity to the different wetlands on site, the location of the vernal pools, the possibility of underground parking, the reason for different phases, the fossil fuel uses proposed for the site and the type of housing that would be installed. The Commission made suggestions for the proposed undeveloped area, a possibility for landscaped barriers between the housing and the wetlands, the final layout of the walking path design, the possibility of a bus stop in the area, the plans for stormwater onsite, a final landscape plan that includes everything that will be cut, and finally the Commissioners stressed the importance of the wetland buffers and necessary setbacks.

III. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (OLD BUSINESS)

1. 224 Cate Street
   Jesse Anderson, Owner
   Assessor Map 173 Lot 3

Sarah Sullivan Large from FB Environmental came to present this application on behalf of the property owner, Jesse Anderson, who was also in attendance. Ms. Sullivan Large presented on the history of the project, the existing conditions of the parcel and what changes had been made to the application since the previous Conservation Commission meeting,

The Commission then asked questions about and had discussions on the proposal to grind the remaining stumps, the sizing of the proposed trees and shrubs, a maintenance plan for the newly planted buffer, plans for mowing and installing wetland boundary markers.

J. Blasko made a motion to recommend approval of the application to the Planning Board with the following conditions:

1. In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall permanently install wetland boundary markers, which may be purchased through the City of Portsmouth Planning & Sustainability Department. Markers are to be placed along the 40' vegetative buffer (due to the steep slope) at 50-foot intervals and must be installed prior to the start of any site work.

2. A monitoring report for the first two years after planting will be submitted annually to the Planning and Sustainability Department. The first report shall be submitted after the restoration work has been completed. This report will include an update on all plant health, growth, and establishment. Additionally, it should include methods for irrigation

and information on routine maintenance practices. The second report must demonstrate at least an 80% survival rate of new plantings after the first two years of monitoring, if not, then replanting will be required.

3. Prior to the submission to the Planning Board, applicant shall provide a maintenance plan for current and future property owners to the Planning & Sustainability Department for review. This plan should provide instructions on maintaining the conservation mix seeded areas and provide education on the correct way to care for non-traditional grass lawns. Once approved by City staff, the applicant shall submit this plan as part of their Wetland Conditional Use Permit application to the Planning Board.

4. Red Maple trees must be 4-6' in height at time of install.

5. A note shall be added to the plan set stating that no mowing or cutting of vegetation shall occur between the newly planted area and the top of the stream bank.

B. Gibb seconded the motion. The motion passed unanimously.

2. **REQUEST TO POSTPONE**
80 FW Hartford Drive
Julian Frey, Owner
Assessor Map 269 Lot 46

J. Blasko made a motion to postpone this application until the June meeting. L. Vaccaro seconded the motion. The motion passed unanimously.

IV. WETLAND CONDITIONAL USE PERMIT APPLICATIONS (NEW BUSINESS)

1. 400 Spaulding Turnpike
SLF Realty Group LLC, Owner
Assessor Map 238 Lot 2

Stefanie Tetreault from Tighe & Bond came to present this application with Jeff Jackson from Eversource for an after the fact wetland conditional use permit. Ms. Tetreault explained that Eversource had previously received permitting for this pole replacement project but access to the poles had changed prior to construction so the impacts created to the wetland and wetland buffer on this site had changed, resulting in the need for an updated permit. Ms. Tetreault went on to describe the change of impacts and what had been done to make the access road a temporary impact.

The Commissioners then asked questions about and discussed the path for the access road, the need for the gate to restrict access, the existing erosion controls and wetland boundary markers.

J. Blasko made a motion to recommend approval of this project to the Planning Board with the following conditions:

1. In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall permanently install wetland boundary markers, which may be purchased through the City of Portsmouth Planning & Sustainability Department. The Commission recommends placing two markers on either side of the proposed gate at the bottom of the access road. These markers must be installed prior to the start of any site work.

2. Applicant shall include a note on this plan set to indicate that parking and/or vehicle storage is prohibited in this accessway unless required for utility maintenance by Eversource.

B. Gibb seconded the motion. The motion passed unanimously.

V. STATE WETLAND BUREAU APPLICATIONS (NEW BUSINESS)

REQUEST TO POSTPONE
Dredge and Fill – Major Impact
Peverly Hill Road and Greenleaf Avenue, City ROW
City of Portsmouth

J. Blasko made a motion to postpone this application until the June meeting. B. Gibb seconded the motion. The motion passed unanimously.

VI. OTHER BUSINESS

a. Follow-up on 2025 Wetland Mapping Update

Ms. Homet followed up on the recent wetland map update presentation by Mark West and asked if anyone had any follow-up questions.

b. Planning an upcoming work session

The possibility of an upcoming work session to discuss the Commission's role, process, jurisdiction, goals, etc. was discussed. A Doodle Poll will be sent out to find everyone's availability.

VII. ADJOURNMENT

The meeting adjourned at 5:30 p.m.

Memo

TO: Conservation Commission Members
FROM: Kate Homet, Environmental Planner; Peter Britz, Director of Planning & Sustainability
DATE: June 5, 2025
SUBJ: June 11, 2025 Conservation Commission Meeting

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15 Marjorie Street
Reichl Family Revocable Trust
Assessor Map 232 Lot 41

This application is for home improvements including the construction of an 18 x 34' sunroom/covered porch, the construction of a 20 x 32' addition, the construction of a new driveway, garden areas and the installation of an approx. 120'retaining wall to support native landscaping and improve site grading with the addition of fill to level out the existing elevation in the rear yard.

1. *The land is reasonably suited to the use activity or alteration.*

This application requests expanding impervious surface areas within the wetland buffer in an area directly upslope of the wetland resource as well as fill to regrade a slope within the wetland buffer.

2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*

This property is almost entirely within the wetland buffer. There is no feasible location outside the buffer, but the proposal could move the driveway, retaining wall and additions further from the wetland resource and/or reduce the impact size.

3. *There will be no adverse impact on the wetland functional values of the site or surrounding properties.*

The encroachment of the home, driveway and retaining wall closer to the wetland may have an adverse impact on the health of the wetland. Applicant should highlight areas of existing stormwater flow onsite and proposed flow. In addition, applicant needs to highlight the exact area, amount and material proposed for fill within the buffer area. This should also be accompanied by a profile drawing to better understand how the fill will be installed and at what heights.

4. *Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*

This project proposes removing some vegetation within the buffer in order to build the new addition, porch, driveway, garden/patio area and retaining wall. Applicant should consider removing or rerouting the proposed driveway turn around to push those impacts and that of the retaining wall further from the wetland edge. In addition, alteration will occur with the installation of fill and regrading of the buffer areas which is

currently a mix of lawn and dense vegetation. The regrading of the area closest to the wetland resource could have significant impacts on wetland health, drainage and stormwater filtration.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

This proposal is not the alternative with the least adverse impact. This proposal appears to show a net increase of impervious surfaces within the wetland buffer and new impervious surfaces, fill and structures up against the wetland edge. This proposal appears to be very intrusive to the wetland buffer and alternatives could include pulling additions, the driveway and the retaining wall further from the wetland, limiting or eliminating the need for fill, shrinking the addition sizes and/or moving the new addition areas into the setbacks and further outside of the wetland.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

It is hard to distinguish the exact amount of impacts to the vegetated buffer strip but it appears that the retaining wall and driveway may cut through this area which will be permanent impacts along with the addition of fill for regrading purposes. The applicant should consider revegetating and not disturbing the 25' wetland buffer. Any proposed plantings and seed mixes should be native and either wetland buffer or conservation-friendly.

Recommendation: Staff recommends postponement of this wetland conditional use permit in order to give the applicant more time to address the following:

1. Details on the proposed fill – such as volume, area, material, depth, etc. Please also provide a detail sheet and/or side profile of the proposed fill.

2. Applicant should explore alternative layout plans to reduce impact numbers within the 100' wetland buffer.

City of Portsmouth – On Behalf of:

15 Marjorie Street
Reichl Family Revocable Trust
Assessor Map 232 Lot 41
AND
49 Marjorie Street
Alison Decotis & Travis Munsey
Assessor 232 Lot 37

This application is for the installation of a new 6" sewer service on the property of 15 Marjorie Street to redirect flow to a new pump station's collection area. The existing service must be abandoned prior to the removal of the existing sewer main which crosses 150 Greenleaf Ave. The property's existing driveway, which crosses the property at 49 Marjorie Street, will be demolished and re-vegetated. A new driveway will be constructed at 49 Marjorie Street above the proposed sewer service. Additionally, a 12" culvert will be installed under the proposed driveway. The project proposes a permanent wetland buffer disturbance of 2,248 s.f. with a combined permanent and temporary wetland buffer disturbance of 5,437 s.f. This is an improvement project being performed by the City of Portsmouth on private property.

1. *The land is reasonably suited to the use activity or alteration.*

Due to aging infrastructure, these sewer lines need to be upgraded and/or replaced in order to ensure the safety of the neighborhood, soils, groundwater, and local ecosystems. The land already has an existing driveway which will be removed and replaced in a new location with a pervious material.

2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*

The existing sewer infrastructure already travels through the wetland buffer which means that any repair or replacement work has to occur within the buffer. This is a critical line for servicing the home at 15 Marjorie Street.

3. *There will be no adverse impact on the wetland functional values of the site or surrounding properties.*

The sewer replacement will serve as temporary disturbance while the permanent disturbance will be in the removal and rebuilding of the driveway. If the pervious driveway can be properly maintained, minimal adverse impact should occur to the wetland.

4. *Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*

This project proposes the revegetation of areas that are temporarily disturbed and permeability for those that are permanent disturbances.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

This proposal appears to be necessary infrastructure upgrades which have minimized the amount of permanent disturbance to the wetland buffer. If not upgraded, the potential for sewer failure on this property could create a detrimental impact to the wetland resource.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

This project proposes minimal impact to the vegetated buffer strip, all temporary disturbance areas are to be revegetated and all permanent disturbance areas are to be porous.

Recommendation: Staff recommends approval of this wetland conditional use permit as presented to the Planning Board.

505 US Route 1 Bypass
Giri Portsmouth 505 Inc.
Assessor Map 234 Lot 5

This project is for the installation of four new electric vehicle charging stations within the parking lot of the property. This would include creating and/or re-striping eight parking spaces and installing the necessary equipment and utility connections needed. This work will occur within the wetland buffer of Hodgson Brook and includes the removal of 958 s.f. of existing asphalt and converting to a grassed area. It also includes 173 s.f. of permanent impacts to an existing landscape section within the buffer to install the transformer and concrete pads. In total, this project will reduce the net impervious on site by 785 s.f.

1. *The land is reasonably suited to the use activity or alteration.*

The existing site is asphalt and is reasonably suited for the installation of such infrastructure.

2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*

The EV chargers could be placed further away from the wetland buffer or outside of the buffer altogether but the applicant is already removing impervious and shifting the new infrastructure further from the brook.

3. *There will be no adverse impact on the wetland functional values of the site or surrounding properties.*

The brook is already a heavily impacted resource and bolstering its buffer is critical to its protection. The removal of pavement between the proposed chargers and the brook will help to reclaim a bit of the wetland buffer. It is recommended that this area receive dense native wetland buffer vegetation/plantings to further protect the brook.

4. *Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*

This project proposes alterations with the construction of new transformers and concrete pads but plans to remove existing pavement and replant may help offset those impacts.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

This proposal has minimal impact to the wetland resource due to the overall gain of pervious surfaces within the buffer.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

The exact impacts to the 25' vegetated buffer are not calculated but the removal of 785 s.f. of pavement from the buffer and the installment of seed mix and/or plantings will be an improvement.

Recommendation: Staff recommends approval of this wetland conditional use permit to the Planning Board with the following conditions:

1. In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall permanently install wetland boundary markers, which may be purchased through the City of Portsmouth Planning & Sustainability Department. Markers are to be placed along the 25' vegetative buffer at 50-foot intervals and must be permanently installed as a part of this after the fact permit.

2. Applicant shall use only a native conservation or native wetland buffer seed mix within the wetland buffer area. In addition, applicant should consider adding plantings along with the seeded area to bolster the' vegetated buffer strip.

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: Matt and Beth Reichl Date Submitted: 05.28.2025

Application # (in City's online permitting): LU-24-118

Site Address: 15 Marjorie St Map: 232 Lot: 41

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
✔	Complete application form submitted via the City's web-based permitting program	ONLINE
✔	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	Detailed in Plan and Narrative

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	ONLINE
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	setbacks, locations of wetlands, new and existing
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	Detailed in Plan and Narrative
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Narrative and Landscape Plan

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Wetland buffer enhancement plan. **(10.1017.25)**	Landscape Plan
✔	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	N/A
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	Storm Water Management Plan included
✔	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	parallel to buffer strip
✔	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	Plant native species, No pest/herbacides
✔	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	Permiable pavement to match right of way installed by DPW
✔	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	Pavement Maintenace plan included
✔	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	Site Plan and landscape plan
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	In submission Materials
✔	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	N/A

Applicant's Signature: Timothy Hron **Date:** 05.28.2025

Hron Brothers Construction
Timothy Hron
288 Currier Hill Road
Gilmanton, NH 03237
hronbrosconstruction@gmail.com
(603) 630-1525

May 5, 2025

Peter Britz, Chairman
Portsmouth Conservation Commission
Planning and Sustainability Director
City of Portsmouth Municipal Complex
1 Junkins Avenue
Portsmouth, NH 03801

Re: Proposed Residential Project at 15 Marjorie Street, Portsmouth, NH – Addition and Retaining Wall

Dear Mr. Britz,

I am writing on behalf of **Matt and Beth Reichl**, the property owners at **15 Marjorie Street, Portsmouth, NH**, to formally submit a residential improvement project for review by the **Portsmouth Conservation Commission**.

The proposed work includes the construction of a **18x34' sunroom/covered porch, 20x32' addition** and installation of an approx. 120' **retaining wall** to support native landscaping and improve site grading. The property lies within or near the **inland wetland buffer zone**, and we are committed to ensuring that the project meets all local and state environmental regulations.

A **site plan and supporting documents** have been prepared and are enclosed for your review. We are mindful of the property's proximity to sensitive environmental areas and will incorporate appropriate **erosion control measures** and **low-impact stormwater practices** to minimize environmental impact during and after construction.

The project was designed and will be managed by **Hron Brothers Construction**, based in Gilmanton, NH. I will serve as the primary point of contact throughout the review and construction process.

We respectfully request to be placed on an upcoming **Conservation Commission agenda** to present the project and respond to any questions the Commission may have.

Thank you for your time and consideration. Please feel free to contact me at **(603) 630-1525** or **hronbrosconstruction@gmail.com** if you require any additional information prior to the meeting.

Sincerely,

Timothy Hron
Hron Brothers Construction
288 Currier Hill Road
Gilmanton, NH 03237
hronbrosconstruction@gmail.com
(603) 630-1525

06.20.2024

Letter of Authorization

I Matt Reichl give authorization to Tim Hron to file applications and speak n my behalf regarding 15 Marjorie St application

Matt Reichl

Hron Brother's Construction
288 Currier Hill Rd
Gilmanton, NH 03237
Hronbrosconstruction@gmail.com
603.630.1525

04.30.2025

Portsmouth Conservation Commission
1 Junkins Avenue
Portsmouth, NH 03801

Re: Proposed Addition at 15 Sylvester Street – Wetland Buffer Criteria Compliance

Dear Members of the Conservation Commission,

I am writing to respectfully submit information regarding a proposed development at 15 Sylvester Street, Portsmouth, NH, (tax map 232, lot 41 and 232, lot 29) and to address the criteria required under the City's Wetland Protection Ordinance for projects within a wetland buffer. This letter outlines how the proposed work complies with each of the six criteria specified by the ordinance.

1. **Suitability of Land for Proposed Use**
   The parcel at 15 Sylvester Street is reasonably suited to the proposed residential development, which will be located on an existing lot of record in a residential neighborhood. The site is predominantly upland with sufficient elevation, and the proposed use is consistent with surrounding properties and zoning regulations. Site design has been carefully planned to avoid disturbance to critical wetland areas.

2. **Lack of Feasible Alternative Locations Outside the Wetland Buffer**
   Given the size and configuration of the lot, as well as existing constraints such as setbacks and lot coverage limitations, there is no feasible or reasonable alternative location for the proposed structure that would avoid the wetland buffer entirely. The design minimizes encroachment to the greatest extent possible while preserving the integrity and usability of the lot.

3. **No Adverse Impact on Wetland Functional Values**
   The project has been designed to preserve wetland function by maintaining natural drainage patterns, incorporating erosion control measures, and avoiding direct alteration of the wetland itself. Buffer impacts are minor and temporary, and the development will not impair flood storage, water quality, wildlife habitat, or other wetland functions on the site or surrounding properties.

4. **Limited Alteration of Natural Vegetative State**
   Disturbance to the natural vegetative state within the buffer will be limited strictly to what is necessary for construction access and structural footprint. Mature vegetation and existing tree canopy will be preserved wherever feasible, and selective clearing will be done with minimal ground disturbance to avoid long-term ecological disruption.

5. **Least Impactful Alternative Selected**
   Several layout alternatives were evaluated, and the current proposal represents the least impactful configuration. The development has been compactly designed to limit encroachment, with utility placement and access routes chosen to avoid sensitive areas wherever possible.

6. **Restoration of Buffer to Natural State**
   Following construction, disturbed areas within the buffer will be restored to a natural vegetative state to the greatest extent feasible. This will include replanting with native species and implementing measures to prevent invasive plant growth. A buffer restoration and landscaping plan will be submitted as part of the permit application. Additionally, permanent wetland boundary markers will be placed during and after construction.

We believe that the proposed development has been thoughtfully planned to protect wetland values and to meet the intent of the City's conservation regulations. We respectfully request the Conservation Commission's review and support for this project.

Thank you for your time and consideration. Please feel free to contact me if any additional information or clarification is needed.

Sincerely,
Timothy Hron
Hron Brother's Construction

Residential Stormwater Management Plan

Property Owners: Matt & Beth Reichl
Address: 15 Sylvester Street, Portsmouth, NH
Lot Size: Approximately 0.25 acres
New Impervious Area: 964 sq. ft. (addition)
Date: 05.05.2025

---

1. Project Overview

This plan addresses stormwater impacts from the addition of 964 square feet of impervious surface to an existing residential lot. Stormwater practices are proposed to promote infiltration and reduce runoff volume and velocity in accordance with the **New Hampshire Stormwater Manual**.

---

2. Site Conditions

- **Soil Type**: Sandy loam (Hydrologic Soil Group B)
- **Topography**: Gently sloping to the rear of the property
- **Vegetation**: Mixed lawn and tree canopy
- **Wetlands**: Approx. 7,380 sq. ft. of inland wetland buffer present on-site

---

3. Stormwater Management Objectives

- Reduce runoff volume from new impervious surfaces
- Promote infiltration on-site to support groundwater recharge
- Prevent erosion and sediment transport to nearby wetlands
- Improve water quality through natural filtration

---

4. Proposed Best Management Practices (BMPs)

A. Permeable Paver Driveway Extension

- **Purpose**: Infiltrate runoff directly at the source

- **Base Layer**: 12-inch washed aggregate storage bed
- **Surface**: Permeable interlocking concrete pavers
- **Underdrain**: Optional based on infiltration test results
- **Overflow**: Sheet flow directed toward lawn area

B. Dry Well for Roof Runoff

- **Purpose**: Capture and infiltrate rooftop runoff from new addition
- **Location**: Adjacent to building foundation, downslope side
- **Design Volume**: Sized for the 1-inch water quality storm (~60–80 gallons)
- **Construction**: Pre-cast concrete or plastic chamber set in gravel trench
- **Inlet**: Connected to downspouts
- **Overflow**: Routed to vegetated lawn or existing swale

C. Vegetated Buffer Strip

- **Purpose**: Treat and slow overland flow before it reaches wetland buffer
- **Location**: At edge of lawn near wetland buffer zone
- **Design**:
    - **Width**: 10 feet minimum
    - **Slope**: Less than 5%
    - **Vegetation**: Dense mix of native grasses and shrubs

---

5. Maintenance Plan

BMP	Task	Frequency
Permeable Pavers	Sweep/vacuum to remove sediment	Quarterly
Dry Well	Inspect inlet/outlet, clean debris	Biannually and after storms
Vegetated Buffer Strip	Mow high grasses, remove invasives	Monthly during growing season

---

6. Regulatory Compliance

This plan follows design guidance provided in the **New Hampshire Stormwater Manual**, especially:

- **Volume 2: Post-Construction Best Management Practices**
- **Volume 3: Stormwater Site Design and Infiltration Guidelines**

All BMPs are designed with adequate separation from seasonal high groundwater (>4 feet where infiltration is proposed), and no structures encroach within required buffers for jurisdictional wetlands.

The Matt and Beth Reichl Residence

15 Marjorie Lane, Portsmouth NH 03801

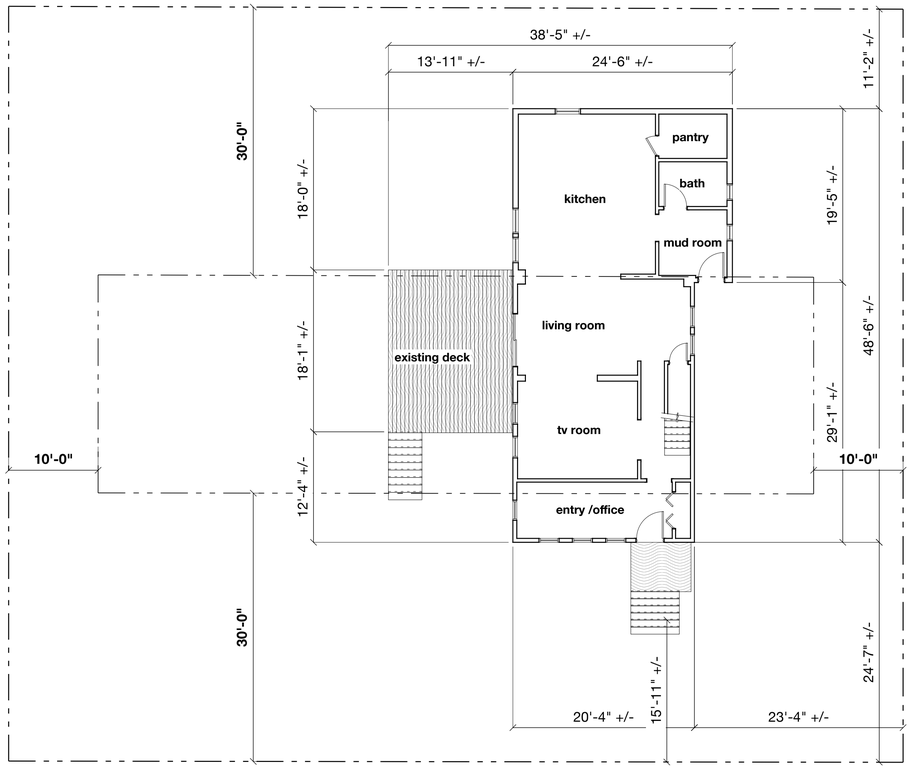
Additions and Renovations

Architectural Design Drawing List

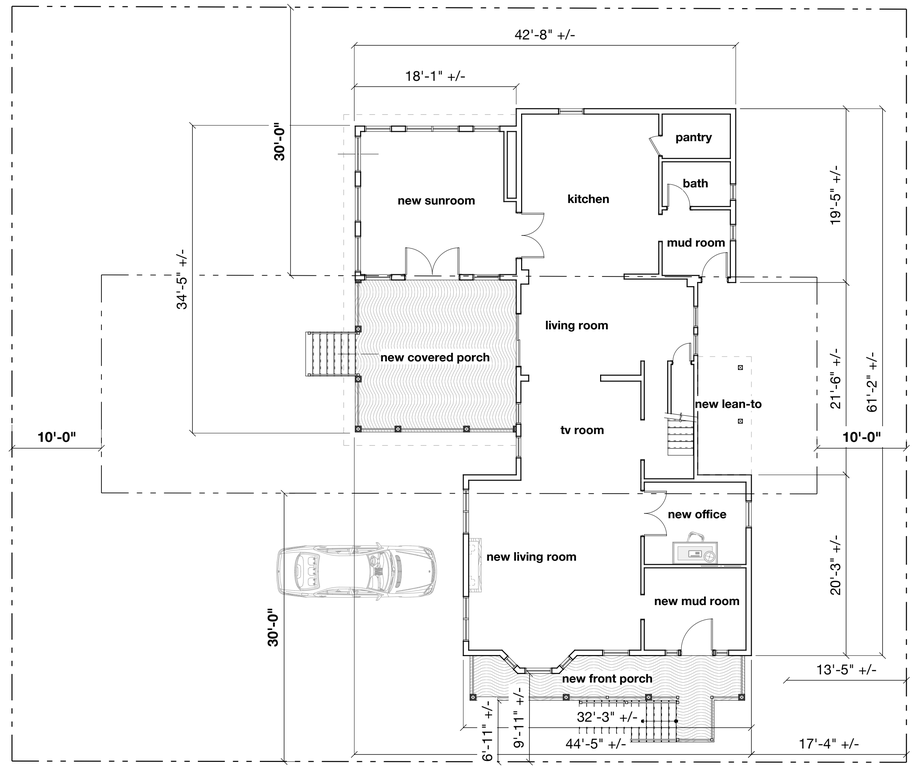
AD-0.01 EXISTING AND NEW PLOT PLANS

AD-1.00 EXISTING & NEW BASEMENT PLAN
AD-1.01 EXISTING & NEW FIRST FLOOR PLAN
AD-1.02 EXISTING & NEW SECOND FLOOR PLAN
AD-1.03 EXISTING & NEW ROOF PLAN

AD-3.01 NEW EXTERIOR ELEVATIONS SOUTH & EAST
AD-3.02 NEW EXTERIOR ELEVATIONS NORTH & WEST



Existing Plot Plan
1/8" = 1'-0"



Proposed New Plot Plan
1/8" = 1'-0"

LOT # 232-41 (existing)

LOT SIZE	8,431 SQFT
EX'G FOOT PRINT	1,396 SQFT
EX'G LOT COVERAGE	16.6%

GROSS BASEMENT AREA	470 SQFT
GROSS FIRST FLOOR AREA	1,067 SQFT
GROSS SECOND FLOOR AREA	917 SQFT
TOTAL	2,454 SQFT
EXISTING DECK	253 SQFT
EXISTING LANDING	37 SQFT
TOTAL WITH DECK & LANDING	2,744 SQFT

LOT # 232-41 (proposed)

LOT SIZE	8,431 SQFT
EX'G FOOT PRINT	1,396 SQFT
EX'G LOT COVERAGE	16.6%2
NEW FOOT PRINT	2,416 SQFT
NEW LOT COVERAGE	28.7%
ALLOWED FOOT PRINT (20%)	1,686 SQFT
ALLOWED FOOT PRINT IF 15,000 SQFT	3,000 SQFT
NEW LOT COVERAGE IF 15,000 SQFT	16.1%

GROSS BASEMENT AREA	1,110 SQFT
GROSS FIRST FLOOR AREA	1,887 SQFT
GROSS SECOND FLOOR AREA	1,561 SQFT
TOTAL	4,558 SQFT
NEW FRONT PORCH	130 SQFT
NEW COVERED PORCH	306 SQFT
TOTAL WITH PORCHES	4,994 SQFT

Hubert Krah DESIGNS LLC

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www.hubertkrah.com

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4. DO NOT SCALE DRAWINGS FROM PRINTS OR REPRODUCTIONS. SCALE INDICATED IS VALID ON ORIGINAL DRAWING WHICH IS 24" X 36" OVERALL

Progress Issues:

06/18/24	BETH & MATT REICHL, HBC
06/27/24	BETH & MATT REICHL, HBC

Permit Issues:

Construction Issues:

PROJECT:

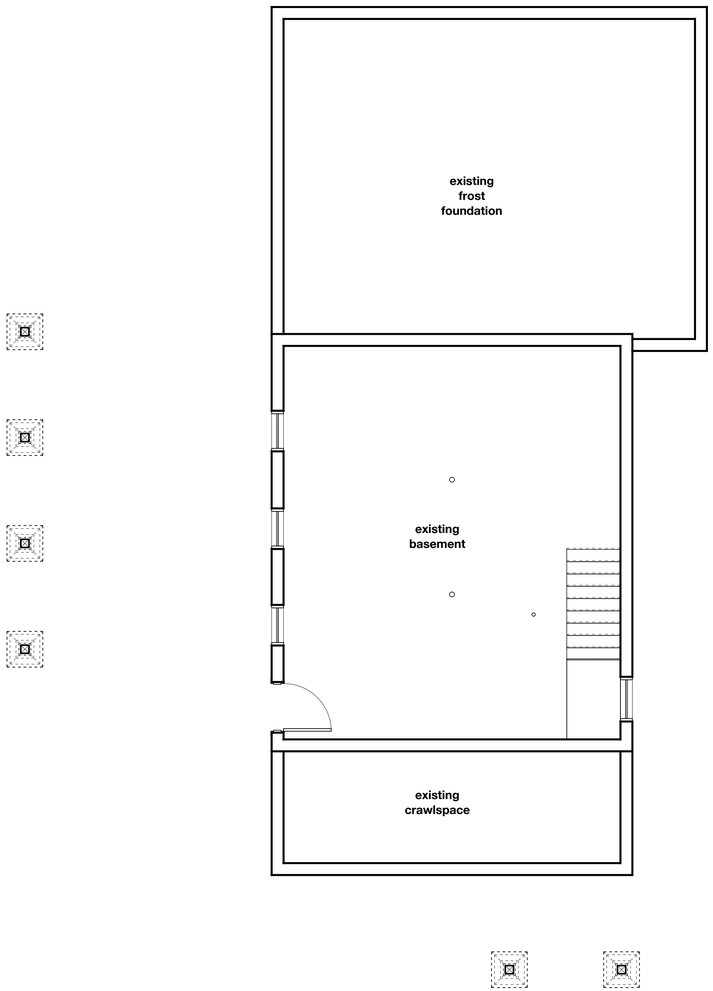
Additions and Renovations
for
The Reichl Residence
15 Marjorie Street
Portsmouth NH 03801

DATE:
06/27/24

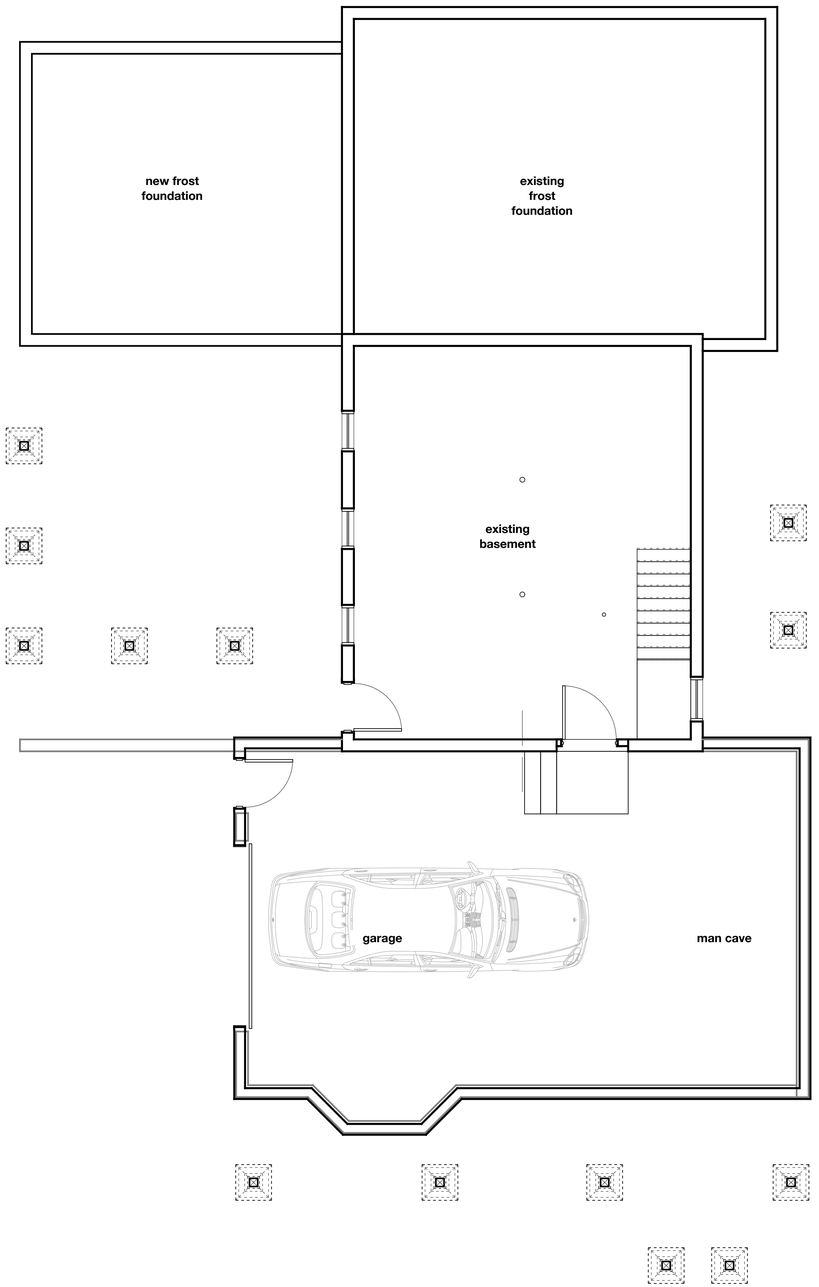
ISSUED AS:
PROGRESS ISSUE

Architectural Plot Plans & Title

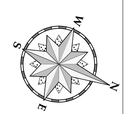
AD-0.01



Existing Floor Plan @ Basement
1/4" = 1'-0"



Proposed New Floor Plan @ Basement
1/4" = 1'-0"



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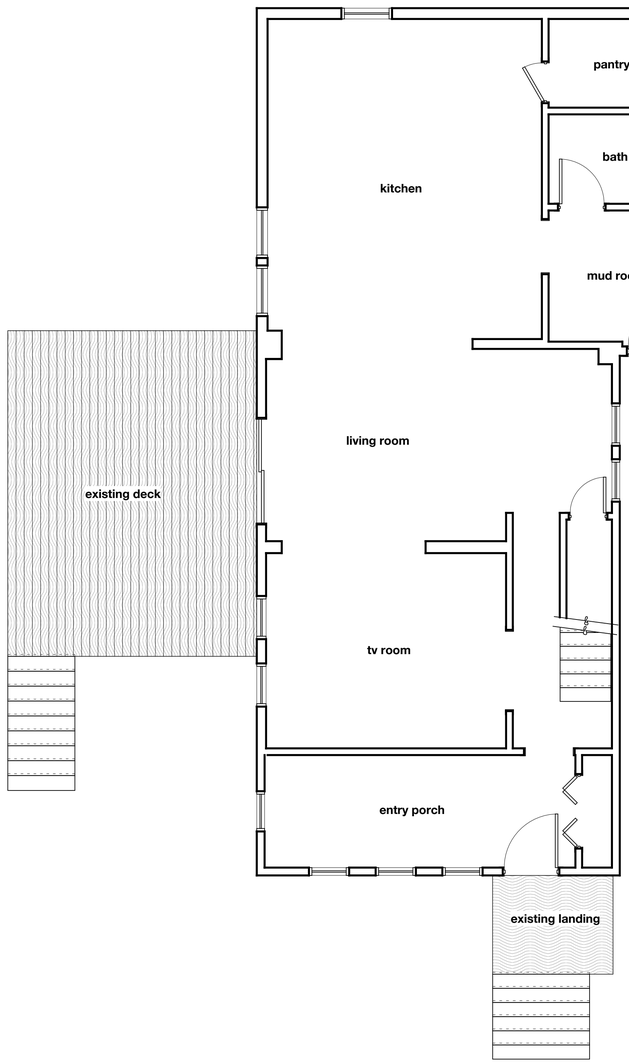
Additions and Renovations
for
The Reichl Residence
15 Marjorie Street
Portsmouth NH 03801

DATE:
06/27/24

ISSUED AS:
PROGRESS ISSUE

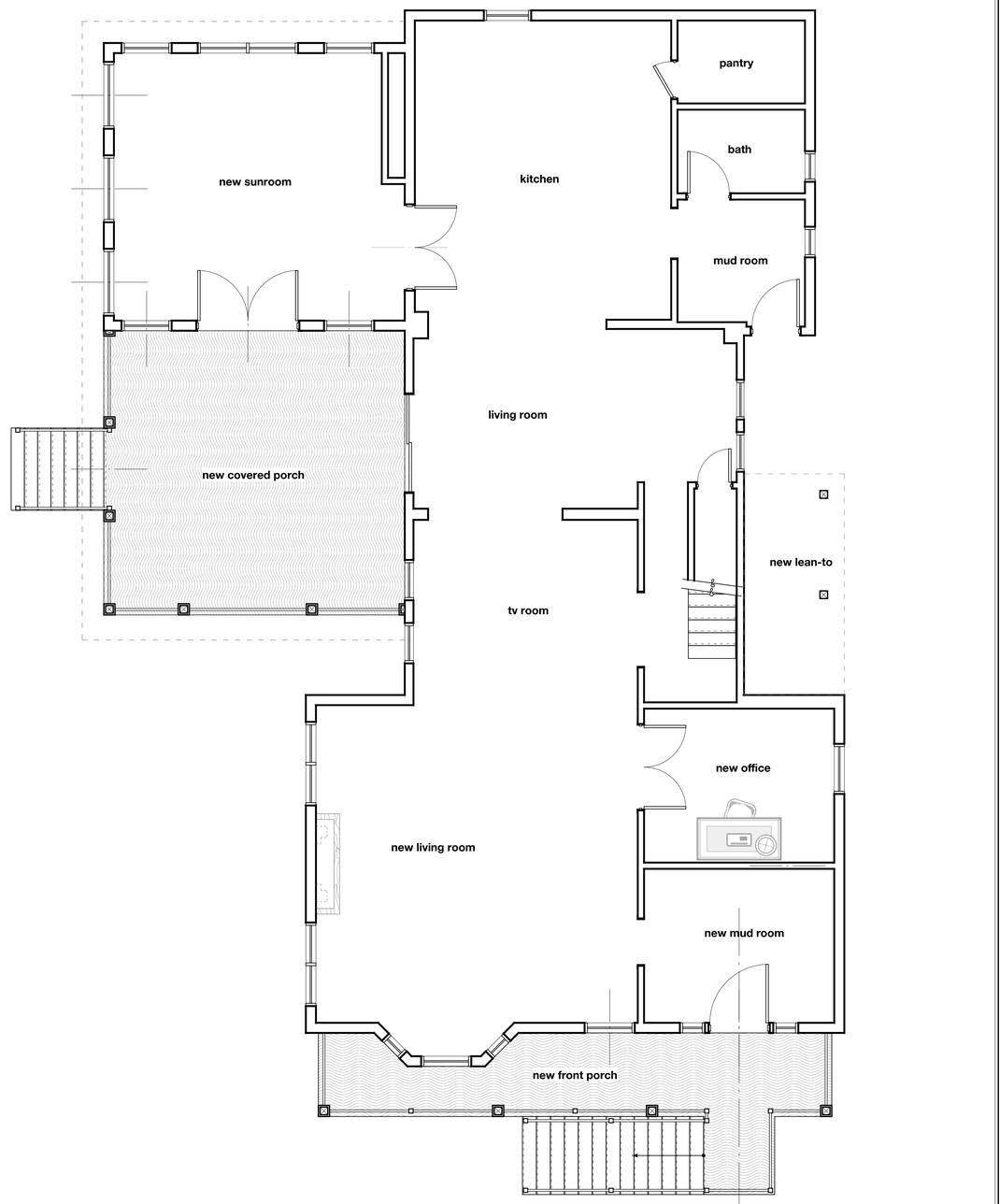
Architectural
Floor Plans
Basement

AD-1.00



Existing New Floor Plan @ First Floor

1/4" = 1'-0"



Proposed New Floor Plan @ First Floor

1/4" = 1'-0"

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Permit Issues:

Construction Issues:

PROJECT:

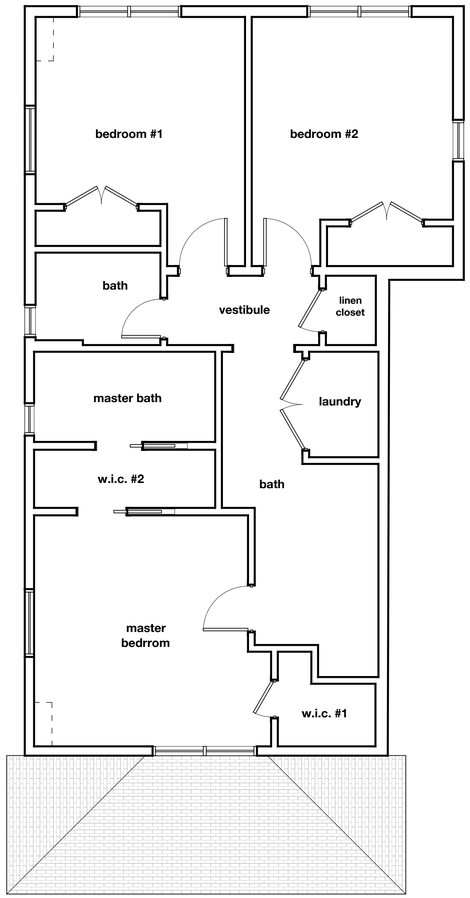
Additions and Renovations
for
The Reichl Residence
15 Marjorie Street
Portsmouth NH 03801

DATE:
06/27/24

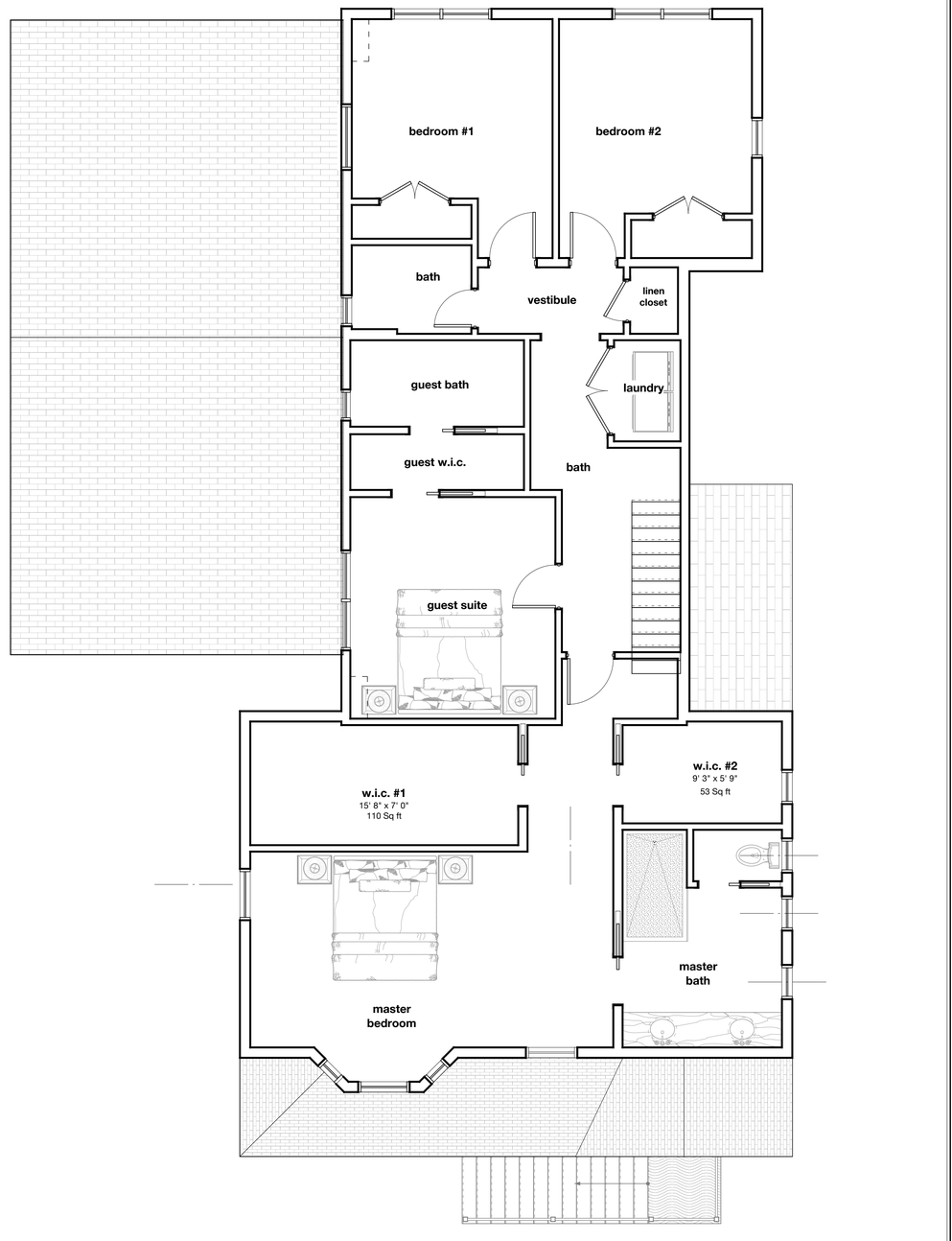
ISSUED AS:
PROGRESS ISSUE

Architectural
Floor Plans
First Floor

AD-1.01



Existing Floor Plan @ Second Floor
1/4" = 1'-0"



Proposed New Floor Plan @ Second Floor
1/4" = 1'-0"

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06/27/24	BETH & MATT REICHL, HBC

Permit Issues:

Construction Issues:

PROJECT:

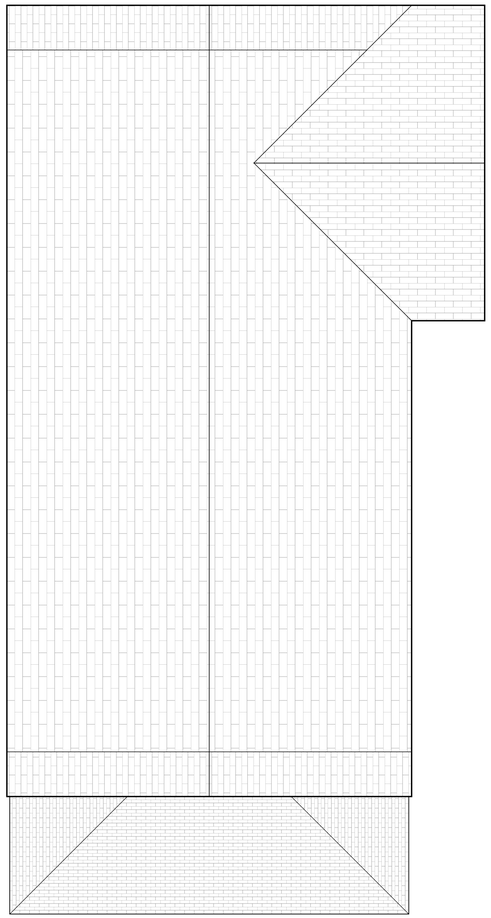
Additions and Renovations
for
The Reichl Residence
15 Marjorie Street
Portsmouth NH 03801

DATE:
06/27/24

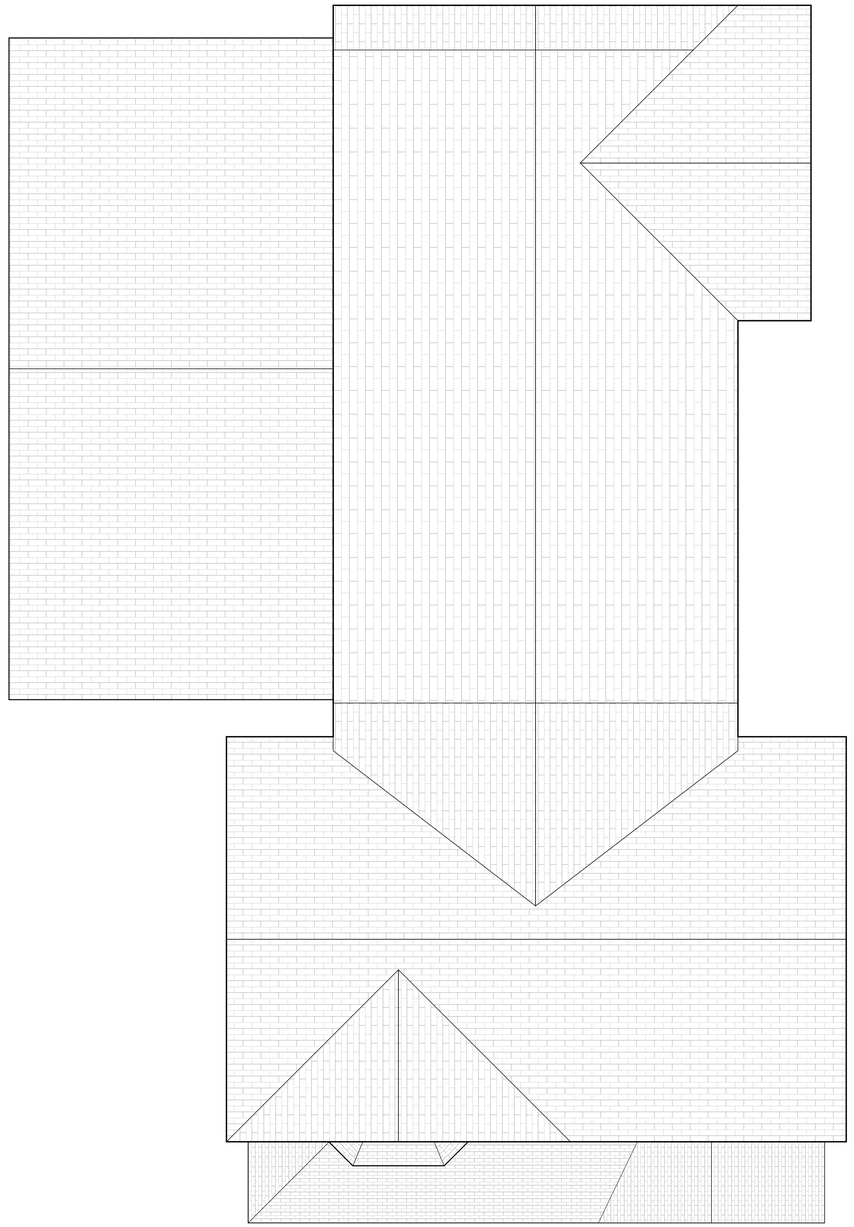
ISSUED AS:
PROGRESS ISSUE

Architectural
Floor Plans
Second Floor

AD-1.02



Existing Roof Plan
1/4" = 1'-0"



Proposed New Roof Plan
1/4" = 1'-0"

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Progress Issues:

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06/27/24	BETH & MATT REICHL, HBC

Permit Issues:

Construction Issues:

PROJECT:

Additions and Renovations
for
The Reichl Residence
15 Marjorie Street
Portsmouth NH 03801

DATE:
06/27/24

ISSUED AS:
PROGRESS ISSUE

Architectural
Floor Plans
Roof

AD-1.03

Proposed New South Elevation

1/4" = 1'-0"

Proposed New East Elevation

1/4" = 1'-0"

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Additions and Renovations
for
The Reichl Residence
15 Marjorie Street
Portsmouth NH 03801

DATE:
06/27/24

ISSUED AS:
PROGRESS ISSUE

New Exterior Elevation South & East

AD-3.01

Proposed New North Elevation

1/4" = 1'-0"

Proposed New West Elevation

1/4" = 1'-0"

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06/27/24	BETH & MATT REICHL, HBC

Permit Issues:

Construction Issues:

PROJECT:

Additions and Renovations

for

The Reichl Residence

15 Marjorie Street
Portsmouth NH 03801

DATE:

06/27/24

ISSUED AS:

PROGRESS ISSUE

New Exterior

Elevation

North & West

AD-3.02

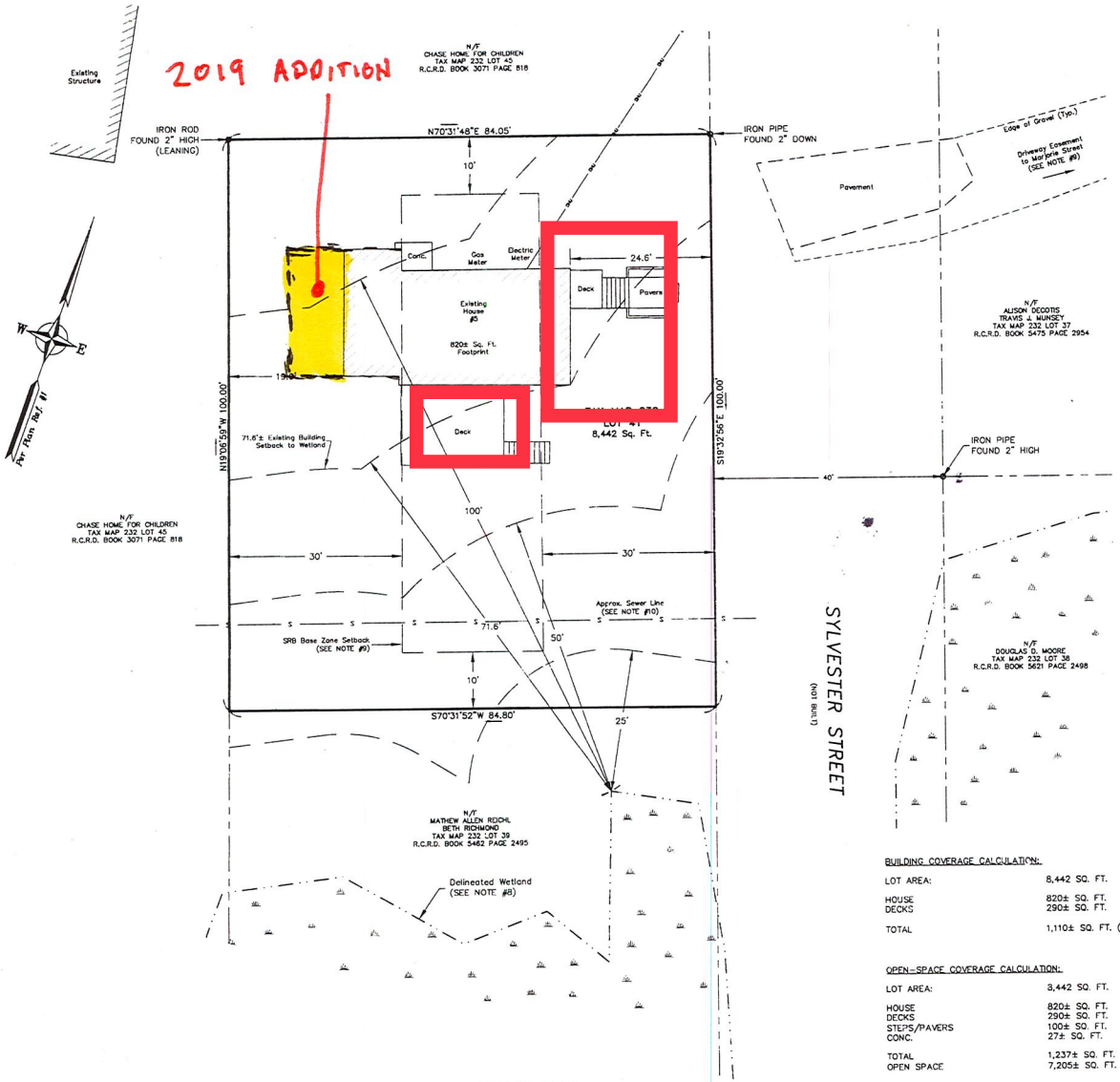
East
Elevation

North Elevation

South
Elevation

West Elevation

Page 2 of 2



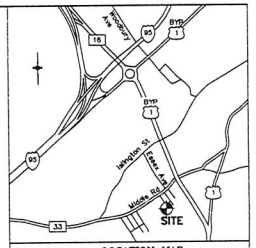
ZONING DATA PER CITY OF PORTSMOUTH ZONING ORDINANCE
(LAST AMENDED: AUGUST 20, 2018 – SEE NOTE #6):

ZONE: SINGLE RESIDENCE B (SRB)

REQUIREMENTS: *

MINIMUM LOT AREA:	15,000 Sq. Ft
PER DWELLING UNIT:	15,000 Sq. Ft
CONTINUOUS STREET FRONTAGE:	100 Ft
MINIMUM LOT DEPTH:	100 Ft
MINIMUM FRONT YARD:	30 Ft
MINIMUM SIDE YARD:	10 Ft
MINIMUM REAR YARD:	30 Ft
MAXIMUM STRUCTURE HEIGHT:	35 Ft
MAXIMUM BUILDING COVERAGE:	20%
MINIMUM OPEN SPACE:	40%

*PER CITY OF PORTSMOUTH ZONING ORDINANCE SECTION 10.521 TABLE OF DIMENSIONAL STANDARDS–RESIDENTIAL AND MIXED RESIDENTIAL DISTRICTS



PLAN REFERENCES:

1. "EASEMENT PLAN, PLAN FOR: ACCESS EASEMENT MARJORIE STREET, PORTSMOUTH, NH" PREPARED BY BEAL ASSOCIATES, PLLC, DATED MARCH 2013 AND RECORDED AT THE R.C.R.D. AS PLAN D-37716
2. "A PLAN OF LAND IN PORTSMOUTH, N.H. FOR THE CHASE HOME FOR CHILDREN", PREPARED BY JOHN W. DURGIN ASSOCIATES, INC., DATED SEPTEMBER 10, 1980. PLAN NO.: 5890.
3. "PROSPECT PARK, PORTSMOUTH, N.H., BELONGING TO LEAVITT, WOODWORTH & SWEATT, 30 COURT STREET, BOSTON, MASS.", PREPARED BY JOHN N. McCLINTOCK, DATED APRIL 30, 1903 AND RECORDED AT THE R.C.R.D. AS PLAN #00225.
4. "PLAN OF LAND PORTSMOUTH, N.H., FOR MAX MILTON", PREPARED BY JOHN W. DURGIN, DATED JULY, 1974.

NOTES:

1. OWNERS OF RECORD:
   TAX MAP 232 LOT 41
   MATHEW ALLEN REICHL
   BETH RICHMOND
   R.C.R.D. BOOK 5462 PAGE 2495
   DATED JULY 19, 2013
   6415/1661
2. TOTAL EXISTING PARCEL AREA:
   TAX MAP 232 LOT 41
   8,442 SQ. FT.
3. BASIS OF BEARING IS PER PLAN REFERENCE #1.
4. APPROXIMATE ABUTTER'S LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE RELIED UPON AS BOUNDARY INFORMATION.
5. EASEMENTS OR OTHER UNWRITTEN RIGHTS MAY EXIST THAT ENCUMBER OR BENEFIT THE PROPERTY NOT SHOWN HEREON.
6. ZONING INFORMATION AND SETBACKS SHOWN HEREON ARE FOR REFERENCE PURPOSES. CONFIRM CURRENT ZONING REQUIREMENTS WITH THE CITY OF PORTSMOUTH PRIOR TO DESIGN OR CONSTRUCTION.
7. THE BOUNDARY SHOWN HEREON IS DETERMINED FROM WRITTEN RECORDS, FIELD EVIDENCE AND PAROL TESTIMONY RECOVERED AT THE TIME OF SURVEY AND MAY BE SUBJECT TO CHANGE IF OTHER EVIDENCE BECOMES AVAILABLE.
8. THE WETLAND BOUNDARY AS DEPICTED ON THIS PLAN WAS DELINEATED/FLAGGED BY JOSEPH W. NOEL, ME CERTIFIED SOIL SCIENTIST #209, IN OCTOBER 2018. THE FLAGS WERE SURVEY LOCATED BY NORTH EASTERLY SURVEYING INC. IN OCTOBER 2018. THE DELINEATION WAS CONDUCTED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS DOCUMENT CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, (1987) ALONG WITH THE REQUIRED REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND MANUAL: NORTHCENTRAL AND NORTHEAST REGION, (VERSION 2, JANUARY 2012).

   HYDRIC SOIL DETERMINATIONS WERE CONDUCTED IN ACCORDANCE WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE DOCUMENT FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0 (2010) ALONG WITH THE MANUAL FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND (VERSION 3, APRIL 2004).

   PLANT SPECIES INDICATOR STATUS WAS BASED ON THE U.S. ARMY CORPS OF ENGINEERS PUBLICATION THE NATIONAL WETLAND PLANT LIST (2013).
9. REFERENCE IS MADE TO "GRANT OF DRIVEWAY EASEMENT" RECORDED AT THE R.C.R.D. AT BOOK 5432 PAGE 704.
10. LOT IS SUBJECT TO A SEWER EASEMENT. LOCATION SHOWN IS APPROXIMATE PER PLAN REFERENCE #4.

BUILDING COVERAGE CALCULATION:

LOT AREA:	8,442 SQ. FT.
HOUSE	820± SQ. FT.
DECKS	290± SQ. FT.
TOTAL	1,110± SQ. FT. (13.1%)

OPEN-SPACE COVERAGE CALCULATION:

LOT AREA:	8,442 SQ. FT.
HOUSE	820± SQ. FT.
DECKS	290± SQ. FT.
STEPS/PAVERS	100± SQ. FT.
CONC.	27± SQ. FT.
TOTAL	1,237± SQ. FT.
OPEN SPACE	7,205± SQ. FT. (85.3%)

REV.	DATE	STATUS	BY	CHKD	APPD.

EXISTING CONDITIONS PLAN

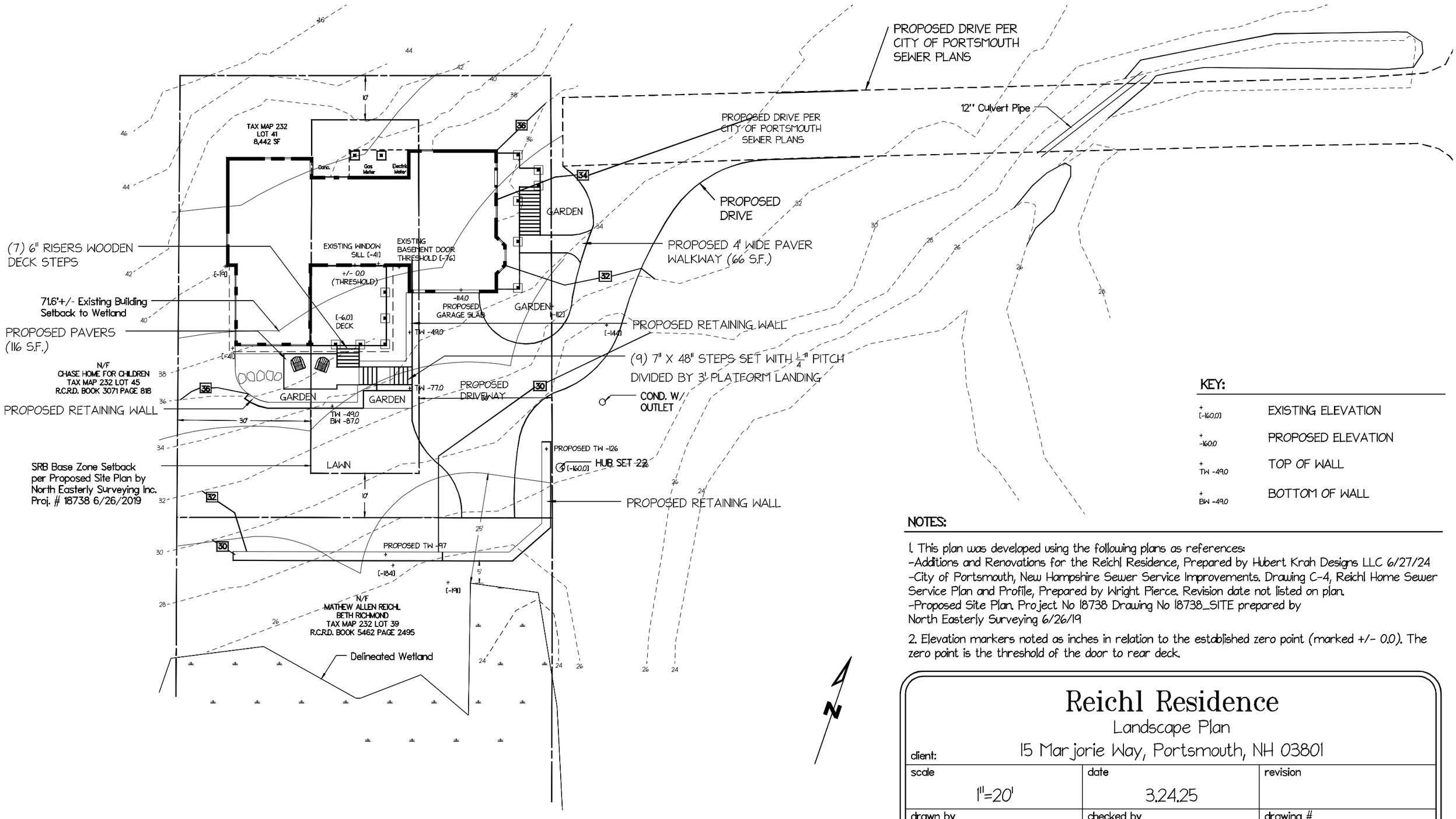
FOR PROPERTY AT
5 Sylvester Street
Portsmouth, Rockingham County, New Hampshire
OWNED BY
Mathew Allen Reichl
Beth Richmond
5 Sylvester Street, Portsmouth, NH 03801

North
EASTERLY SURVEYING, Inc.
SURVEYORS IN N.H. & MAINE
(207) 439-6333
191 STATE ROAD, SUITE #1
KITTERY, MAINE 03904

SCALE:	PROJECT NO.	DATE:	SHEET:	DRAWN BY:	CHECKED BY:
1" = 10'	18738	11/13/18	1 OF 1	P.J.T.	P.L.A.

DRAWING No: 18738_EXISTING_CONDITIONS
FIELD BOOK No: "Portsmouth #17"

Tax Map 232 Lot 41



KEY:

+ [-160.0]	EXISTING ELEVATION
+ -160.0	PROPOSED ELEVATION
+ TW -49.0	TOP OF WALL
+ BW -49.0	BOTTOM OF WALL

NOTES:

1. This plan was developed using the following plans as references:
-Additions and Renovations for the Reichl Residence, Prepared by Hubert Krah Designs LLC 6/27/24
-City of Portsmouth, New Hampshire Sewer Service Improvements. Drawing C-4, Reichl Home Sewer Service Plan and Profile, Prepared by Wright Pierce. Revision date not listed on plan.
-Proposed Site Plan. Project No 18738 Drawing No 18738_SITE prepared by North Easterly Surveying 6/26/19

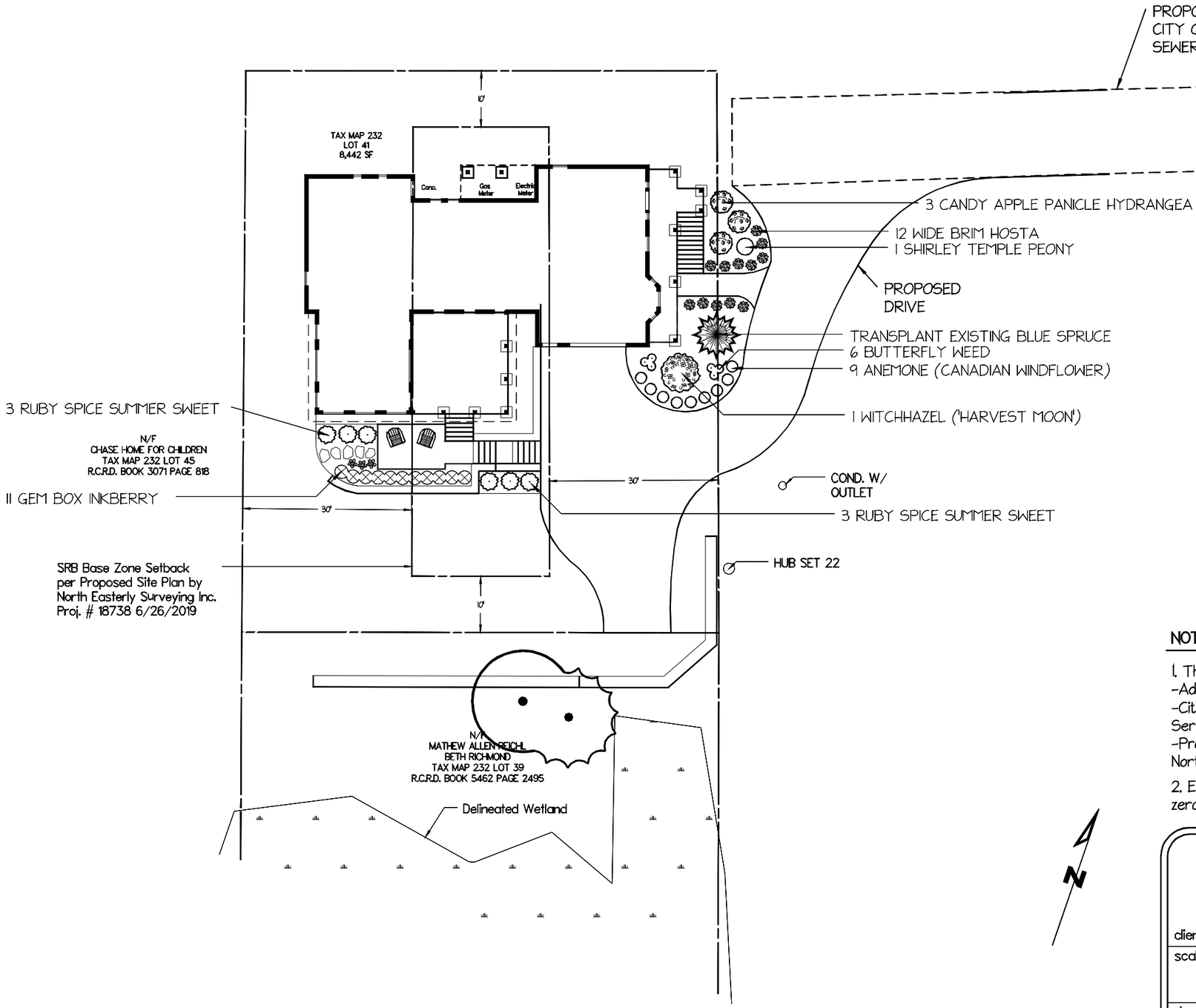
2. Elevation markers noted as inches in relation to the established zero point (marked +/- 0.0). The zero point is the threshold of the door to rear deck.

Reichl Residence

Landscape Plan

client: 15 Marjorie Way, Portsmouth, NH 03801

scale	date	revision
1"=20'	3.24.25	
drawn by	checked by	drawing #
DMC		Prop. Layout



PLANT SCHEDULE:

Qty	Botanical Name	Common Name
Trees		
1	Hamamelis virginiana	WITCHHAZEL
Shrubs		
3	Hydrangea paniculata 'Candy Apple'	CANDY APPLE PANICLE HYDRANGEA
11	Ilex glabra 'Gem Box'	GEM BOX INKBERRY
6	Clethra alnifolia 'Ruby Spice'	RUBY SPICE SUMMER SWEET
Perennials		
9	Anemone canadensis	ANEMONE
6	Asclepias tuberosa	BUTTERFLY WEED
1	Paeonia lactiflora 'Shirley Temple'	SHIRLEY TEMPLE PEONY
12	Hosta 'Wide Brim'	WIDE BRIM HOSTA

NOTES:

1. This plan was developed using the following plans as references:
-Additions and Renovations for the Reichl Residence, Prepared by Hubert Krah Designs LLC 6/27/24
-City of Portsmouth, New Hampshire Sewer Service Improvements. Drawing C-4, Reichl Home Sewer Service Plan and Profile, Prepared by Wright Pierce. Revision date not listed on plan.
-Proposed Site Plan. Project No 18738 Drawing No 18738_SITE prepared by
North Easterly Surveying 6/26/19

2. Elevation markers noted as inches in relation to the established zero point (marked +/- 0.0). The zero point is the threshold of the door to rear deck.

Reichl Residence

Landscape Plan

client: 15 Marjorie Way, Portsmouth, NH 03801

scale	date	revision
1"=20'	3.24.25	
drawn by	checked by	drawing #
DMC		Prop. Plantings

Pavement Maintenance plan

Inspect the Driveway

- Look for leaves, dirt, or water that isn't draining.
- Check for weeds or loose areas.

Clean the Surface

- Use a **leaf blower**, **broom**, or **stiff brush** to remove leaves, dirt, and debris.
- Sweep gently to avoid pushing dirt into the surface.

---

2. Seasonal or As-Needed Tasks

Remove Weeds

- Pull weeds by hand, roots and all.
- Consider adding a layer of gravel or sand between pavers to block new growth (use only clean material).

Fix Uneven Areas

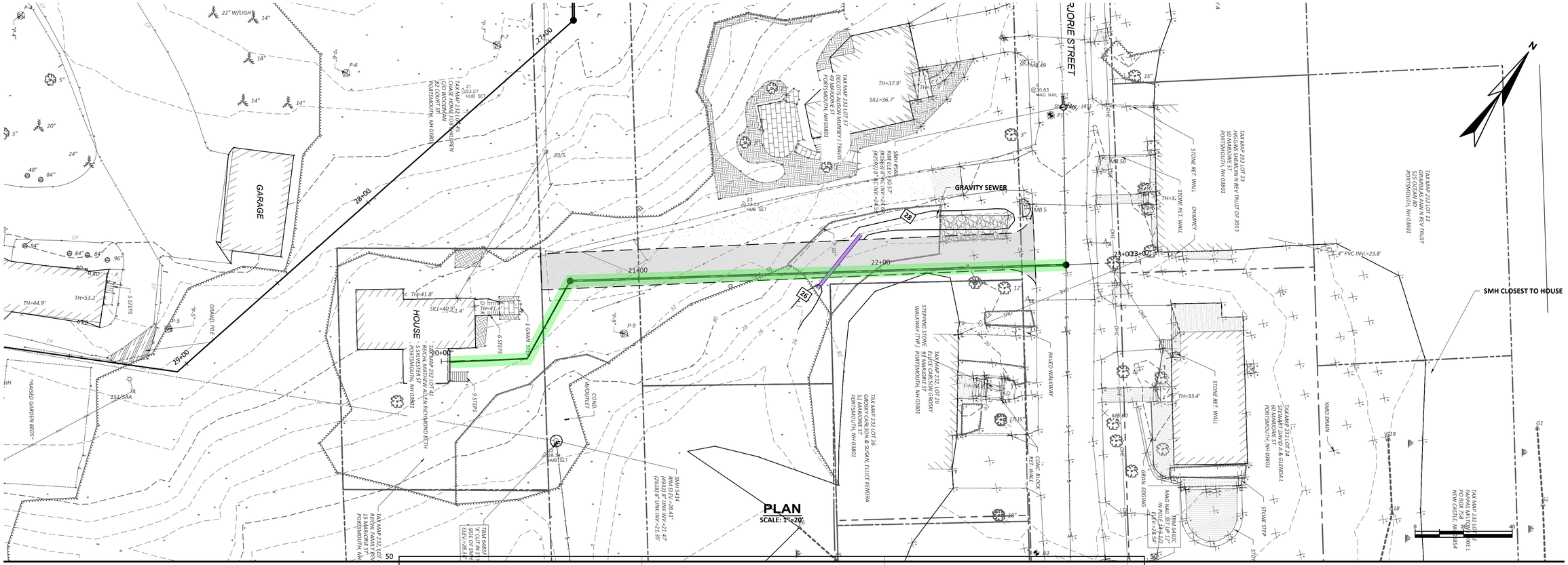
- If pavers or stones settle, lift and re-level them.
- Add more base material (gravel or sand) under the pavers if needed.

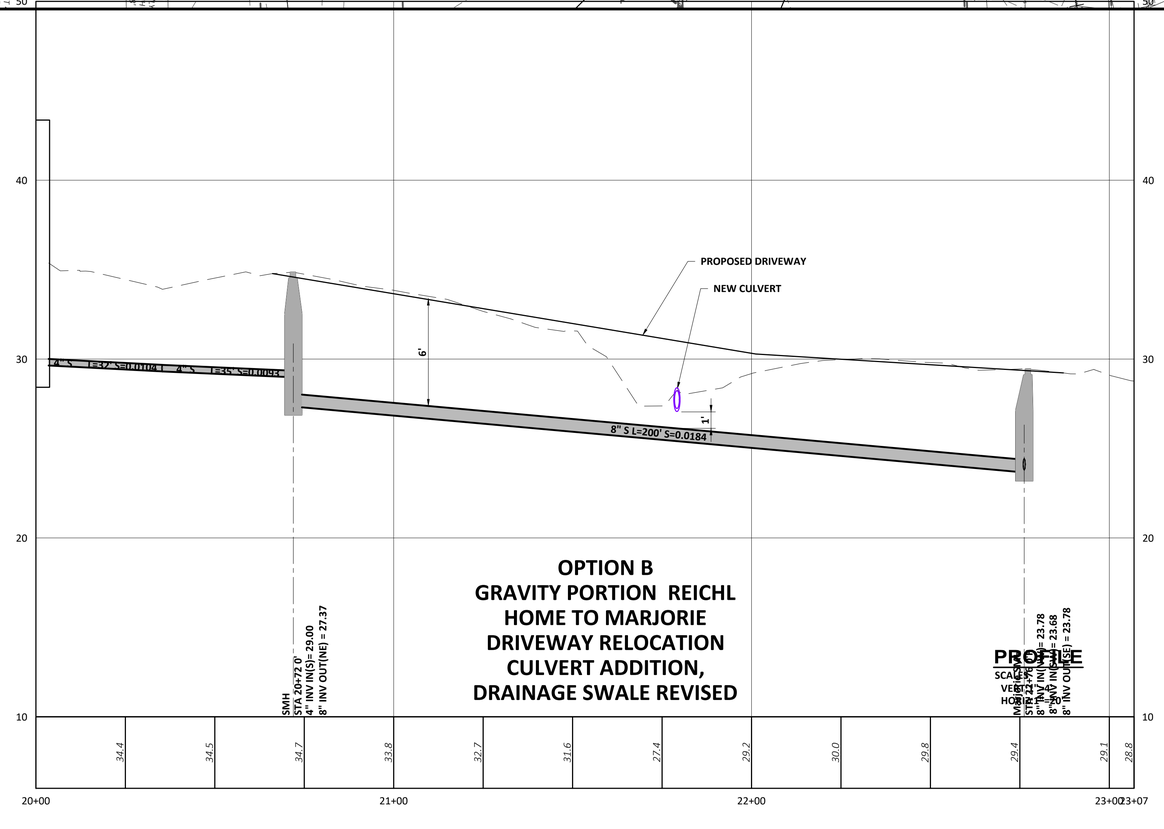
Check Drainage

- After a rain, look for spots where water doesn't soak in.
- If water pools, sweep or lightly rake to loosen dirt, or consider professional vacuum cleaning once a year.

Winter Tips (No Salt or Sand)

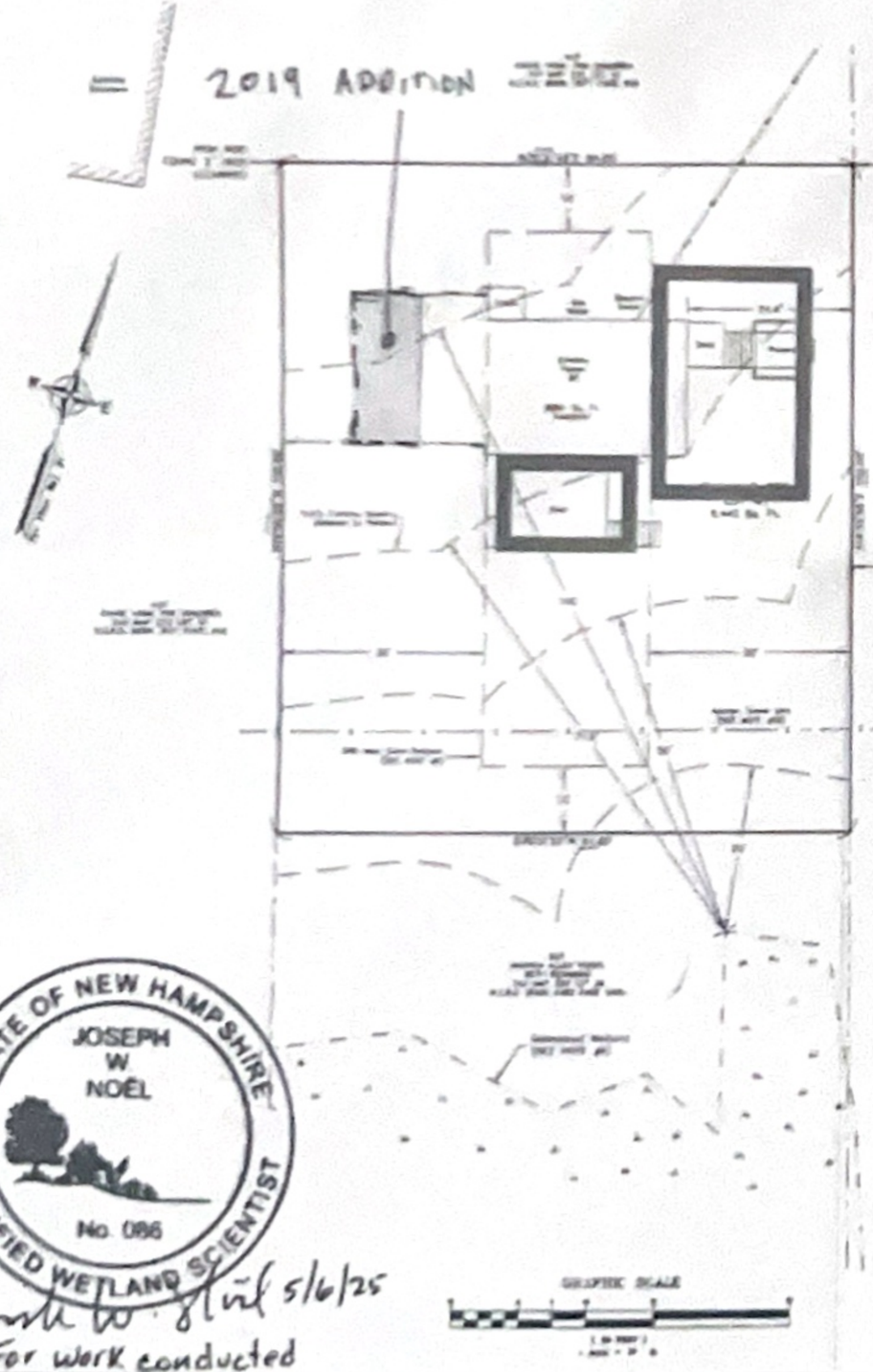
- Use a **plastic shovel** or snow blower to remove snow without damaging the surface.
- Don’t use **salt, sand, or ash**, as they can clog the pores.
- Let small amounts of snow melt naturally if it’s safe to do so.


GARAGE
HOUSE
MARJORIE STREET
GRAVITY SEWER
SMH CLOSEST TO HOUSE
PAVED WALKWAY
STONE RET. WALL
CHIMNEY
GRAN. EDGING
STONE STEP
YARD DRAIN
CONC. BLOCK RET. WALL
STEPPING STONE WALKWAY (TYP.)
TH=37.9'
SILL=36.7'
TH=41.8'
SILL=40.9'
TH=41.4'
TH=53.2'
TH=44.9'
TH=34.0'
TH=33.4'
21400
20+00
21+00
22+00
23+00
23+07
PLAN
SCALE: 1"=20'
TAX MAP 232 LOT 37
TAX MAP 232 LOT 45
TAX MAP 232 LOT 23
TAX MAP 232 LOT 24
TAX MAP 232 LOT 26
TAX MAP 232 LOT 27
SMH 6514
SMH 6515
TBM 6485F
TBM 6486C
TBM 6488C


PROPOSED DRIVEWAY
NEW CULVERT
6'
1'
8" S L=200' S=0.0184
EXCAVATION
EXCAVATION
OPTION B
GRAVITY PORTION REICHL
HOME TO MARJORIE
DRIVEWAY RELOCATION
CULVERT ADDITION,
DRAINAGE SWALE REVISED
PROFILE
SCALE: 1"=20'
VERT. 1"=4'
HOR. 1"=20'
SWH
STA 20+72.0'
4" INV IN(S)= 29.00
8" INV OUT(NE) = 27.37
8" INV IN(S)= 23.78
8" INV IN(E)= 23.68
8" INV OUT(N) = 23.78
34.4
34.5
34.7
33.8
32.7
31.6
27.4
29.2
30.0
29.8
29.4
29.1
28.8
20+00
21+00
22+00
23+00
23+07
10
20
30
40
50

Page 2 of 2

2019 ADDITION



ZONING DATA PER CITY OF PORTSMOUTH ZONING ORDINANCE
LAST AMENDED AUGUST 20, 2018 – SEE NOTE #10

ZONE: SINGLE RESIDENCE B (SRB)

REQUIREMENTS:

MINIMUM LOT AREA:	15,000 Sq. Ft.
PER DWELLING UNIT:	15,000 Sq. Ft.
CONTINUOUS STREET FRONTAGE:	100 Ft.
MINIMUM LOT DEPTH:	100 Ft.
MINIMUM FRONT YARD:	30 Ft.
MINIMUM SIDE YARD:	10 Ft.
MINIMUM REAR YARD:	30 Ft.
MAXIMUM STRUCTURE HEIGHT:	35 Ft.
MAXIMUM BUILDING COVERAGE:	20%
MINIMUM OPEN SPACE:	40%

PER CITY OF PORTSMOUTH ZONING ORDINANCE SECTION 10.521
TABLE OF DIMENSIONAL STANDARDS-RESIDENTIAL AND MIXED RESIDENTIAL DISTRICTS

PLAN REFERENCES:

1. "EASEMENT PLAN, PLAN FOR ACCESS EASEMENT, MARJORIE STREET, PORTSMOUTH, NH" PREPARED BY BCM ASSOCIATES, PLLC, DATED MARCH 2013 AND RECORDED AT THE R.C.R.D. AS PLAN D-37716
2. "A PLAN OF LAND IN PORTSMOUTH, N.H. FOR THE CHASE HOME FOR CHILDREN" PREPARED BY JOHN W. DURGIN ASSOCIATES INC., DATED SEPTEMBER 10, 1990, PLAN NO.: 3890.
3. "PROSPECT PARK, PORTSMOUTH, N.H., BELONGING TO LEAVITT, WENTWORTH & GREATZ, 70 COURT STREET, BOSTON, MASS." PREPARED BY JOHN W. McCLINTOCK, DATED APRIL 30, 1902 AND RECORDED AT THE R.C.R.D. AS PLAN #00225.
4. "PLAN OF LAND PORTSMOUTH, N.H., FOR MAX WILTON" PREPARED BY JOHN W. DURGIN, DATED JULY, 1974.

NOTES:

1. OWNERS OF RECORD:
TAX MAP 232 LOT 41
MATHEW ALLEN REICHL
BETH RICHMOND
R.C.R.D. BOOK 5462 PAGE 2405
DATED JULY 16, 2014 — 6415/1661

2. TOTAL EXISTING PARCEL AREA:
TAX MAP 232 LOT 41
6,442 SQ. FT.

3. BASIS OF BEARING IS PER PLAN REFERENCE #.

4. APPROXIMATE ABUTTER'S LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE RELIED UPON AS BOUNDARY INFORMATION.

5. EASEMENTS OR OTHER UNWRITTEN RIGHTS MAY EXIST SHALL ENCUMBER OR BENEFIT THE PROPERTY NOT SHOWN HEREON.

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7. THE BOUNDARY SHOWN HEREON IS DETERMINED FROM WRITTEN RECORDS, FIELD EVIDENCE AND DEEDS. TESTIMONY RECOVERED AT THE TIME OF SURVEY AND MAY BE SUBJECT TO CHANGE IF OTHER EVIDENCE BECOMES AVAILABLE.

8. THE WETLAND BOUNDARY AS DEPICTED ON THIS PLAN WAS DELINEATED/FLAGGED BY JOSEPH W. NOEL, NE CERTIFIED SOIL SCIENTIST #086, IN OCTOBER 2018. THE FLAGS WERE SURVEY LOCATED BY NORTH EASTERLY SURVEYING INC. IN OCTOBER 2018. THE DELINEATION WAS CONDUCTED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS DOCUMENT CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987) ALONG WITH THE REQUIRED REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VERSION 2, JANUARY 2012).

HYDRIC SOIL DETERMINATIONS WERE CONDUCTED IN ACCORDANCE WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE DOCUMENT FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0 (2010) ALONG WITH THE MANUAL FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND (VERSION 3, APRIL 2004).

PLANT SPECIES WETLAND STATUS WAS BASED ON THE U.S. ARMY CORPS OF ENGINEERS PUBLICATION THE NATIONAL WETLAND PLANT LIST (2013).

9. REFERENCE IS MADE TO "GRANT OF DRIVEWAY EASEMENT" RECORDED AT THE R.C.R.D. AT BOOK 5432 PAGE 1514.

10. LOT IS SUBJECT TO A SEWER EASEMENT. LOCATION SHOWN IS APPROXIMATE PER PLAN REFERENCE #.

BUILDING COVERAGE CALCULATION:

LOT AREA:	6,442 SQ. FT.
HOUSE:	1,594 SQ. FT.
DECKS:	288 SQ. FT.
TOTAL:	1,882 SQ. FT. (29.2%)

OPEN SPACE COVERAGE CALCULATION:

LOT AREA:	6,442 SQ. FT.
HOUSE:	1,594 SQ. FT.
DECKS:	288 SQ. FT.
DRIVEWAY/PARKING:	1,594 SQ. FT.
WALKS:	282 SQ. FT.
TOTAL:	3,758 SQ. FT.
OPEN SPACE:	2,684 SQ. FT. (41.7%)

STATE OF NEW HAMPSHIRE
JOSEPH W. NOEL
No. 086
CERTIFIED WETLAND SCIENTIST

Joseph W. Noel 5/6/25
For work conducted in October 2018

EXISTING CONDITIONS PLAN

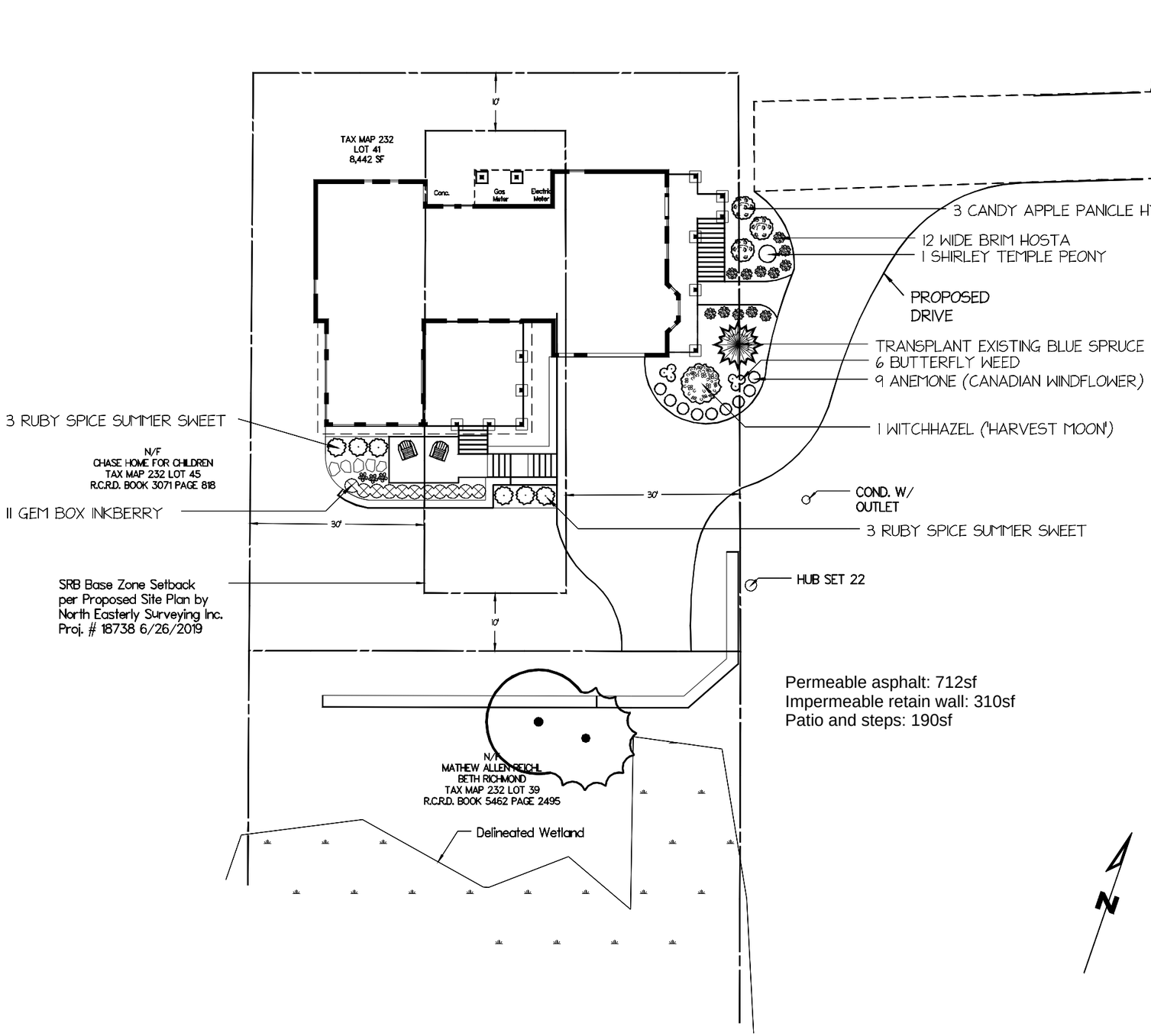
FOR PROPERTY AT
5 Sylvester Street
Portsmouth, Rockingham County, New Hampshire
OWNED BY
Mathew Allen Reichl
Beth Richmond
5 Sylvester Street, Portsmouth, NH 03801

EASTERLY SURVEYING, Inc.
SURVEYORS IN N.H. & MAINE
194 STATE ROAD, SUITE #1
(207) 439-4333
KITTERY, MAINE 03904

NO.	DATE	STATUS	BY	CHKD	APPD

SCALE:	DRAWING NO:	DATE:	SHEET:	DRAWN BY:	CHECKED BY:
1" = 10'	18128	12/21/18	1 OF 1	BJE	JWN

Tax Map 232 Lot 41



PLANT SCHEDULE:

Qty	Botanical Name	Common Name
Trees		
1	Hamamelis virginiana	WITCHHAZEL
Shrubs		
3	Hydrangea paniculata 'Candy Apple'	CANDY APPLE PANICLE HYDRANGEA
11	Ilex glabra 'Gem Box'	GEM BOX INKBERRY
6	Clethra alnifolia 'Ruby Spice'	RUBY SPICE SUMMER SWEET
Perennials		
9	Anemone canadensis	ANEMONE
6	Asclepias tuberosa	BUTTERFLY WEED
1	Paeonia lactiflora 'Shirley Temple'	SHIRLEY TEMPLE PEONY
12	Hosta 'Wide Brim'	WIDE BRIM HOSTA

NOTES:

1. This plan was developed using the following plans as references:
-Additions and Renovations for the Reichl Residence, Prepared by Hubert Krah Designs LLC 6/27/24
-City of Portsmouth, New Hampshire Sewer Service Improvements. Drawing C-4, Reichl Home Sewer Service Plan and Profile, Prepared by Wright Pierce. Revision date not listed on plan.
-Proposed Site Plan. Project No 18738 Drawing No 18738_SITE prepared by
North Easterly Surveying 6/26/19

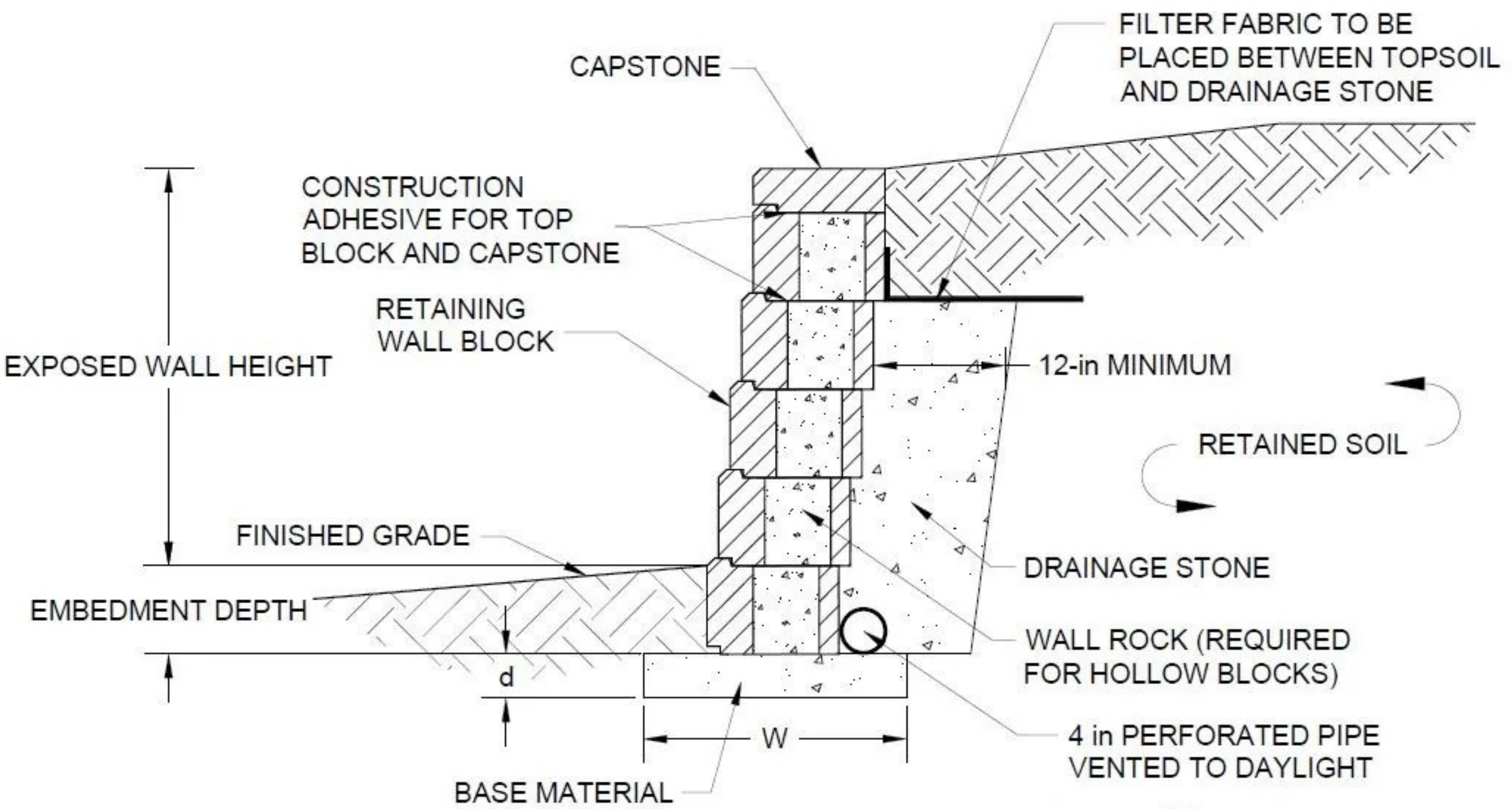
2. Elevation markers noted as inches in relation to the established zero point (marked +/- 0.0). The zero point is the threshold of the door to rear deck.

Reichl Residence

Landscape Plan

client: 15 Marjorie Way, Portsmouth, NH 03801

scale	date	revision
1"=20'	3.24.25	
drawn by	checked by	drawing #
DMC		Prop. Plantings


FILTER FABRIC TO BE PLACED BETWEEN TOPSOIL AND DRAINAGE STONE
CAPSTONE
CONSTRUCTION ADHESIVE FOR TOP BLOCK AND CAPSTONE
RETAINING WALL BLOCK
EXPOSED WALL HEIGHT
12-in MINIMUM
RETAINED SOIL
FINISHED GRADE
DRAINAGE STONE
EMBEDMENT DEPTH
WALL ROCK (REQUIRED FOR HOLLOW BLOCKS)
d
W
4 in PERFORATED PIPE VENTED TO DAYLIGHT
BASE MATERIAL

Marc E. Jacobs, *CSS, CWS, PWS, CPESC*
Professional Wetland / Soil Scientist
jacobs2wetsoil2004@yahoo.com

VIA EMAIL to: andy.morrill@wright-pierce.com

March 11, 2025

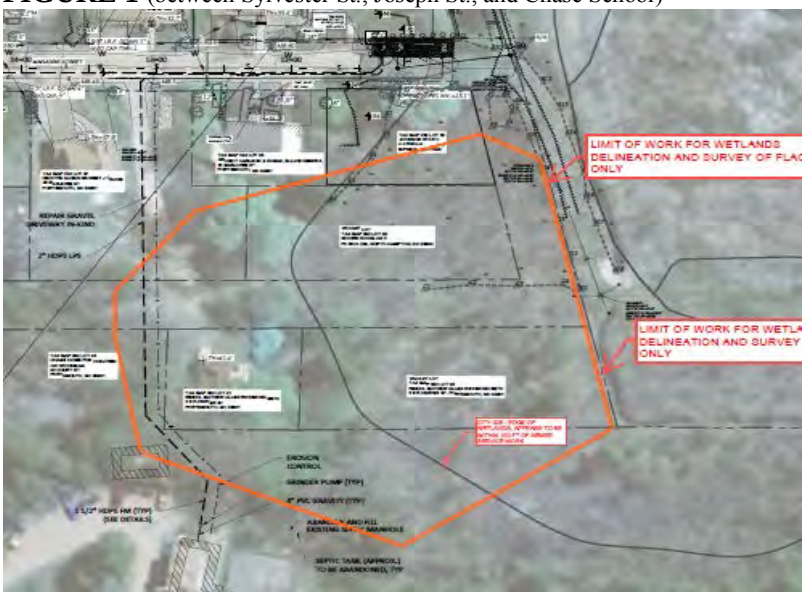
Mr. Andy Morrill, P.E.
Wright-Pierce
230 Commerce Way, Suite 302
Portsmouth, NH 03801

Re: Marjorie, Joseph and Sylvester Streets, Greenleaf Avenue, Portsmouth Toyota, Chase School
Portsmouth, NH

Dear Mr. Morrill,

The following preliminary remarks summarize observations made during site inspections conducted at the above-referenced locations between April 24 and April 27, 2023 as well as on November 13, 2023 and January 23, 2025 to identify and delineate jurisdictional wetlands. The approximate areas-of-interest (AOI) are depicted below in Figures 1-3. Previous delineation adjacent to or including portions of these AOI, primarily at the end of Marjorie Street, took place in July 2020 and is described in a report dated September 21, 2020, which was also prepared by this office and is appended to the back of this report. This report replaces the delineation report dated August 21, 2023.

FIGURE 1 (between Sylvester St., Joseph St., and Chase School)



609 Portsmouth Avenue
PO Box 417
Greenland, NH 03840-0417

Phone (603) 686-5097
Fax (603) 686-5142
Mobile (603) 534-SOIL (7645)

FIGURE 2 (generally adjacent to Toyota of Portsmouth- April 24-27, 2023)

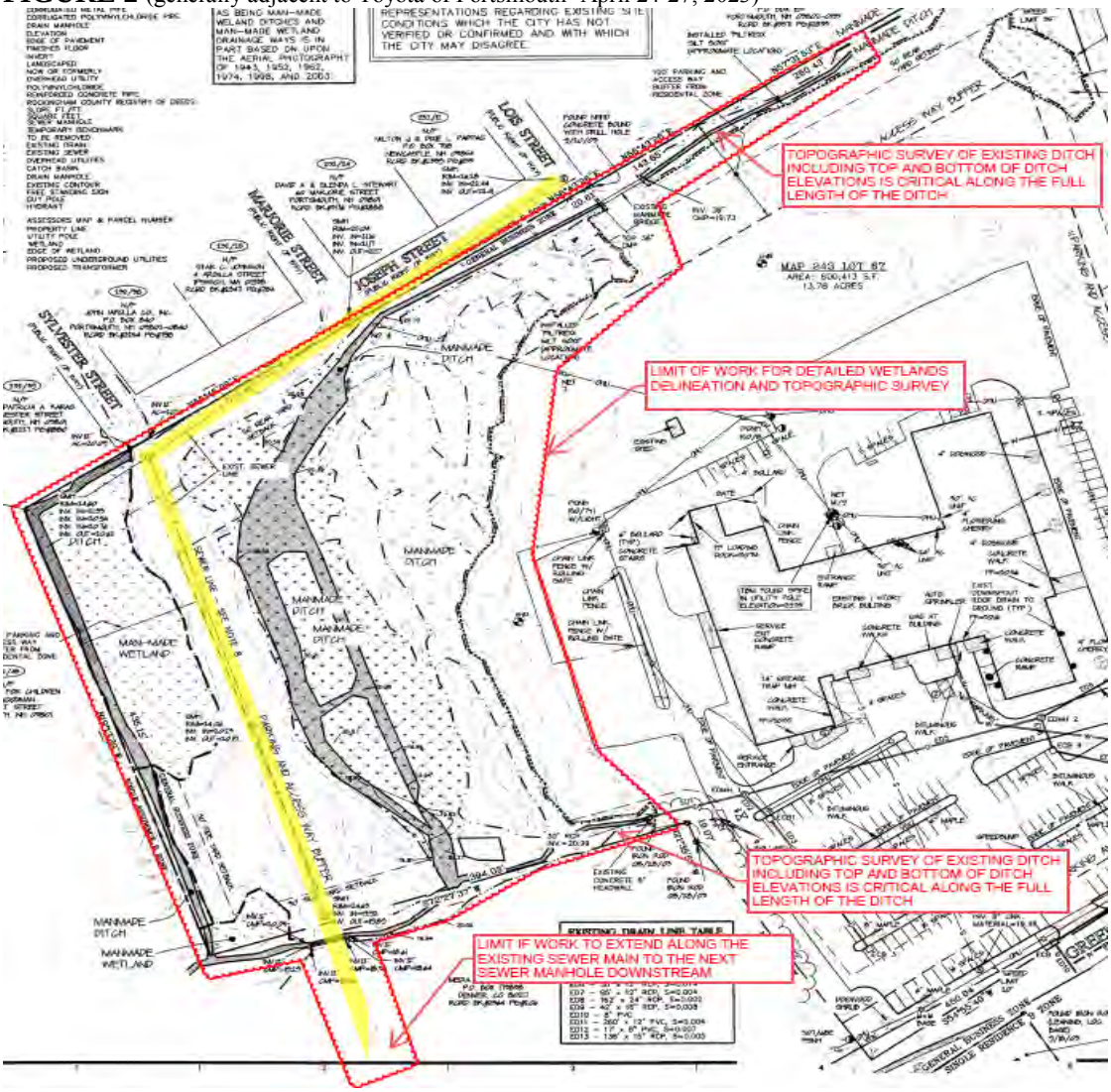


FIGURE 3 (November 13, 2023 and January 23, 2025)

Certification Note

Site investigations were conducted and man-made and natural jurisdictional wetland boundaries (and bank associated with streams in specific locations) were delineated by Marc Jacobs, Certified Wetland Scientist number 090, in April and November 2023, as well as January 2025, according to the standards of the U.S. Army Corps of Engineers – 1987 Wetlands Delineation Manual; the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region; the Code of Administrative Rules, NH Department of Environmental Services - Wetlands Bureau – Env-Wt 100-900 and Article 10, §10.1010 – Environmental Protection Standards of the City of Portsmouth, NH zoning ordinance. Predominant hydric soils were evaluated utilizing the Field Indicators for Identifying Hydric Soils in New England, Version 4, June 2020 and the Field Indicators of Hydric Soils in the United States, Version 8.2, 2018. The status of dominant vegetation as hydrophytic was determined according to the U.S. Army Corps of Engineers - Northcentral and Northeast 2020 Regional Wetland Plant List. Copies of site plans depicting the wetland delineation which have been reviewed by the wetland scientist are individually stamped, signed and dated. This note has been customized for this project. Bank associated with streams is identified per Env-Wt 102.15.

General Methodology

Jurisdictional wetlands were identified and wetland-upland boundaries within the AOI were delineated in the field based upon direct observation and on-the-ground investigations using the technical guidance above. Whereas portions of the AOI were apparently altered by previous site activities, and therefore represent atypical (versus natural) conditions, the delineation utilized protocols for altered wetlands, as well as best professional judgment and prior experience with sites having similar conditions, to ascertain the presence of wetlands and establish the wetland-upland boundary where necessary.[1] With a couple of exceptions noted by specific wetland flag sequence below, site alterations do not appear to be recent.[2]

Solid color pink survey flags were then placed at random intervals to mark wetland-upland boundaries in the field. Each flag series bears a unique letter and each flag a unique number to assist in subsequent field location by instrument survey as well as to ascertain exact field position when referencing site plans during any future site visits or during project design and permitting. The following flag series and numbers were used: A5-A15, E7-E18, I1-I32, J1-J9, K1-K, L1-L27, M1-M10, N1-N136, O1-O17, P1-P12, Q1-Q10, R1-R4, S1-S50, T1-T6, U1-U13, V1-V3, and W1-W9. Where they are depicted on site plans having been prepared in 2023, flags A1-A4, B1-B18, C1-C5, D1-D11, E1-E6, F1-F5, G1-G19 and H1-H4 were placed in 2020.

General Wetland Description

The following section generally describes wetland hydrology, vegetation and soil conditions within the various AOI. More specific information for each wetland area is provided below, generally organized by wetland flag series or, where appropriate, groups of flag series that generally define a discreet wetland area. Wetland classifications according to the National Wetland Inventory and the Cowardin system are also provided.

[1] Site alterations within jurisdictional wetlands may be considered violations of N.H. RSA 482-A: if they were undertaken without permits on or after July 2, 1969.

[2] For the purposes of this report, recent (filling, excavation, regrading, stump removal or other land altering activity) is defined as having occurred within the previous year and is an estimate based upon preliminary observations only. Additional investigations would be necessary to confirm the presence, date of placement and extent of any filled wetlands.

Hydrology

All flags and flag series identify freshwater wetlands. Dominant wetland hydrology for the majority of wetlands in these AOI were historically sustained by a perennial stream.[3] The stream has been channelized and straightened by a combination of excavation and filling. Some of the filling is associated with the installation of sewer utilities while some filling is associated with residential and commercial land development. Our observations suggest that significant wetland acreage has been lost within and adjacent to the AOI over the years due to filling. The channelization of the stream has also diverted some of the stream flow around certain wetland areas but the wetlands are still mostly hydrologically contiguous and the stream continues to play an important, albeit somewhat diminished role in sustaining wetland hydrology. No geographically isolated wetlands have resulted from the stream diversion, especially owing to the installation of various culverts as well as dominant soil types. Wetland area 'N' may have been geographically isolated at one time, partly due to the stream diversion, but subsequent earth moving activity has resulted in a channel that connects this wetland to other wetlands. However, this channel serves mostly to drain the wetland. As a result of the stream diversion, other sources of hydrology, such as sheet flow from surrounding uplands, stormwater from adjacent development and direct precipitation, have taken on increased importance. Increased stormwater inputs have ramifications for water quality, especially if the stormwater is not treated prior to discharge to wetlands.

No primary or secondary vernal pool indicators were observed during site investigations and our preliminary observations suggest that the delineated wetlands do not provide breeding habitat for species customarily associated with vernal pools; however, an exhaustive vernal pool survey was not conducted. These wetlands likely provide significant supporting habitat however.

Vegetation

The largest portion of the AOI comprised by the Portsmouth Toyota property has experienced historic and more recent alterations of the plant community and is therefore dominated by emergent and herbaceous plant species with a few trees and a significant amount of shrubs. The west side of the site is less altered and is constituted by a forested swamp. Dominant vegetation in the tree canopy includes red maple (*Acer rubrum*) and American elm (*Ulmus Americana*), both deciduous species. Portions of the AOI located to the north and west of Portsmouth Toyota are generally forested and/or shrub dominated and are described in the 2020 delineation report. Vegetation is described in more detail by wetland flag series below.

Soils

Hydric soils predominantly involve a mosaic of poorly drained Scitico series (*Typic Endoaquepts*) mineral soils and very poorly drained Maybid series (*Typic Humaquepts*) mineral soils. Scitico and Maybid series soils are derived from silt and clay parent materials of marine origin. We did not distinguish between wetlands with poorly drained soils versus those with very poorly drained soils in the field. Similarly, any fill materials were only evaluated as needed to ascertain if they represent hydric soils and have not been thoroughly assessed or characterized otherwise.

[3] The status of streams as ephemeral, intermittent or perennial is based upon a single observation only and is therefore preliminary. If the definitive jurisdictional status of any stream is required for future design or permitting efforts, additional inspections or investigations will be necessary.

Wetland Flag Series A, B and K

Wetland flag series 'A', 'B' and 'K' generally identify the bank of a low-gradient stream; the channel alignment of which appears to be the result of excavation and filling. The stream is likely perennial although much of the flow is likely constituted by urban storm water runoff. Flags ±A1, ±B1 and ±K1 start at a 36-inch diameter corrugated metal pipe (CMP) with boulder retaining walls. Flag B18 ends at twin 18-inch diameter high-density polyethylene (HDPE) culverts. The slopes on the approach to the HDPE culverts and the mouth of the culverts have been stabilized with riprap. The stream was observed to be flowing during site investigations. Flags A1-A4 were placed in 2020 and this flag series was extended in 2023. The 'B' series flags were also placed during the 2020 site investigations. The classification of this resource is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx). A significant colony of Japanese knotweed (*Polygonum cuspidatum*) was observed along wetland flag series 'K'. The colony had been mowed relatively recently. Other colonies of knotweed exist in various locations within the AOI. Refer to images 1 and 2.

Wetland Flag Series C – F

Wetland flag series 'C – F' identify the toe-of-fill. The fill does not appear to be recent. Wetland flag series F represents an upland island created by fill. Flags E1 and D11 are located to either side of a 10-inch diameter polyvinylchloride (PVC) culvert with a flared-end section comprised of high density polyethylene (HDPE). All flags were placed in 2020 although flags E7-E18 were placed in 2023. Wetlands identified by flag series 'C – F' are hydrologically contiguous to other wetlands outside the AOI by virtue of a 15-inch diameter CMP near wet flags C5 and D1. Classification of the dominant wetland condition delineated by these flag series is Palustrine, Scrub-shrub, Broad-leaved Deciduous (PSS1). Common shrub species include winterberry (*Ilex verticillata*), dogwood (*Cornus* sp.), glossy buckthorn (*Frangula alnus*) and speckled alder (*Alnus incana rugosa*). Willow (*Salix* sp.) trees were common around the periphery of the wetland. Dominant soil conditions involve a complex of poorly drained Scitico series soils and very poorly drained Maybid series soils. Both soil types are derived from marine sediments dominated by silt and clay size soil particles and textures.

Wetland Flag Series I

Wetland flag series 'I' identifies a variety of conditions. Flag I1 starts at a 15-inch diameter CMP. Flags ±I1 to ±I12 and ±I21 to ±I32 identify the toe-of-fill. Flags ±I21 to ±I32 appear to represent the toe-of-fill placed to create athletic fields at the Chase School. Flags ±I12 to ±I21 identify relatively natural vegetation, soil and hydrology conditions. Classification of the dominant wetland conditions delineated by flag series 'I' include Palustrine, Scrub-shrub, Broad-leaved Deciduous (PSS1) and Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated. (PFO1E). Common shrub species include winterberry, dogwood, speckled alder, multiflora rose (*Rosa multiflora*) and glossy buckthorn. Common trees include willow and red maple. Dominant soil conditions involve a complex of poorly drained Scitico series soils and very poorly drained Maybid series soils.

Wetland Flag Series J

Wetland flag series 'J' identifies an upland island that appears to have been created by the placement of fill (dredge spoils). Similar shrub species as those identified along the 'E' and 'I' series were noted in adjacent wetlands and common buckthorn (*Rhamnus cathartica*) was noted along the wetland-upland boundary. A mature swamp white oak (*Quercus bicolor*) tree was observed here.

Wetland Flag Series L

Wetland flag series 'L' identifies a variety of conditions. Flag L1 starts at the downstream end of a 36-inch diameter CMP with a boulder retaining wall. Flags ±L1 to ±L4 and ±L20 to ±L27 generally represent the bank of the stream and mean high water and are the likely result of excavation and/or filling. Flags ±L4 to ±L20 generally represent an area that has highly altered soils and vegetation. The area appears to have been altered more recently than most areas on site. Indeed, the vegetation appeared to have been mowed or cut within the last year. Refer to images 3 and 4 below. Flags ±L26 to ±L27 generally involve a riprap slope. Flag L27 ends at twin 18-inch diameter HDPE culverts. Classification of the dominant wetland condition delineated by flag series 'L' include Palustrine, Emergent, Persistent (PEM1). Common herbaceous vegetation that was observed includes soft rush (*Juncus effusus*), broadleaf cat-tail (*Typha latifolia*), tussock sedge (*Carex stricta*), reed canary grass (*Phalaris arundinacea*) and cranesbill (*Geranium maculatum*). Dominant soil conditions are highly altered and generally involve poorly drained Udorthents series soils. Where the flags identify (stream) bank, the classification of this resource is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx).

Wetland Flag Series M

Wetland flag series 'M' identifies an upland island that appears to have been created inadvertently during other site alterations or activities. Flags ±M1 to ±M4 generally represent the bank of the stream. Nearby wetlands / vegetation between the 'L' and 'M' series flags have been cut within the last year or two. Where the flags identify (stream) bank, the classification of this resource is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx).

Wetland Flag Series N

Wetland flag series 'N' identifies a large area comprised by wetlands that are classified as Palustrine, Emergent, Persistent (PEM1) and Palustrine, Scrub-shrub, Broad-leaved Deciduous (PSS1). The wetland, while altered, represents relatively natural conditions, although the wetland-upland boundary is almost entirely man-made by filling. An obscure swale was observed within the wetland. This swale may have been constructed to support agriculture or it may be the remnants of the former perennial stream channel that existed before the stream was channelized and diverted around this wetland. Significant communities of invasive common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*) were observed within this wetland. Other vegetation commonly observed included willow, speckled alder and dogwood shrubs. Recent site alteration activities were also observed. Refer to images 5 and 6 below.

Flag N1 starts at a buried culvert(s) and boulder retaining wall. Flag N136 ends at a 24-inch diameter reinforced concrete pipe (RCP) and poured concrete headwall. Flags ±N3 to ±N4, ±N5 to ±N6, ±N127 to ±N130 and ±N130 to ±N136 identify the bank of another stream. The stream is likely intermittent, receiving flow from the wetland as well as stormwater runoff from nearby development and associated impervious surfaces upgradient of and adjacent to flag N136. The finger-like wetland projection identified by flags ±N98 to ±N108 may be man-made. More investigations would be necessary to be certain, however it appears that the original wetland has been filled, but wetland characteristics are developing in the topographic depression created by the fill slopes and associated grading. Similar conditions may be responsible for wetlands identified by flags ±N119 to ±N122.

Wetland Flag Series O

Wetland flag series 'O' generally identifies wetlands associated with a likely intermittent stream. Flag O1 starts at a 24-inch diameter RCP and poured concrete headwall. Flags ±O1 to ±O3 and ±O6 to ±O7 identify the bank of the stream. Flag O17 ends at a buried culvert(s) and boulder retaining wall. The stream is likely the result of stormwater runoff as described above but there appears to be a groundwater component as well. The bank and wetland boundary or portions thereof were created by fill. The vegetation community on the side of the stream closest to the AOI would generally be classified as Palustrine Scrub-Shrub, Broad-leaved Deciduous (PSS1). Dominant shrubs included speckled alder, multiflora rose, highbush cranberry (*Viburnum trilobum*), honeysuckle (*Lonicera*) sp.) and dogwood. The stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Mud (R4UB3).

Wetland Flag Series P

Wetland flag series 'P' encloses a densely vegetated upland island that appears to have been created by the placement of fill. Dominant vegetation involves honeysuckle, common buckthorn, glossy buckthorn and autumn olive (*Elaeagnus umbellata*) shrubs.

Flag Series Q

Flag series 'Q' identifies the bank of a likely intermittent stream confined by wetlands identified by the 'N' and 'O' series flags. Solid color blue flags numbered Q1 to Q10 were placed in pairs on either side of the bank but do not appear to be shown on site plans that depict the wetland delineation. We believe however, based upon communications with Doucet Survey and the survey crew in the field during site investigations, that some of the flags were located via survey and that the channel depicted on the plan generally coincides with those flags, except along flags ±O12 to ±O16. The stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Mud (R4UB3). Refer to image 7.

Wetland Flag Series R

Wetland flag series 'R' identifies an isolated wetland that is likely man-made. The area supports a dominance of wetland vegetation (willow, dogwood and alder shrubs) and wetland hydrology, and appears to flow intermittently from flag R1 toward flag N8 on occasion. The soils, while not meeting the hydric soil definition (likely due to prior alteration), provided signs of periodic saturation (signs of shallow flooding were also observed) and it is my opinion that the saturation and flooding occur with a frequency and duration sufficient to meet the definition of a wetland, so we have delineated and flagged the area. The area is best classified as Palustrine Scrub-Shrub, Broad-leaved Deciduous, Excavated (PSS1x).

Wetland Flag Series S

Wetland flag series 'S' identifies a variety of conditions. Flag S1 starts at a buried culvert(s) and boulder retaining wall. Flags ±S1 to ±S3, ±S4 to ±S14 and ±S26 to ±S41 generally identify the toe-of-fill and, in the case of flags ±S4 to ±S14 (and ±S37 to ±S46), likely dredge spoils. Flags ±S3 to ±S4, ±S14 to ±S15, ±S21 to ±S26 and ±S34 to ±S36 generally identify natural conditions. Flags ±S15 to ±S21 and ±S41 to ±S49 identify the bank of the aforementioned diverted perennial stream, which was created by excavation. Exposed bedrock was observed in the bottom and sides of the excavated channel from flags ±S17 to ±S19. Wetlands adjacent to flags ±S21 to ±S41 represent a relatively natural forested condition. These wetlands are best classified as Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated. (PFO1E). Common trees include red maple, American elm and swamp white oak.

Along flags ±S15 to ±S21 and ±S41 to ±S49 the classification of the stream is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx). Downstream of flag S1, to the confluence with the perennial stream, the stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Mud (R4UB3). Flags S47 and S48 are located to either side of twin 18-inch diameter HDPE culverts. Flag S50 ends at a 15-inch diameter CMP. Refer to images 8 and 9.

Flag series T

Flag series 'T' identifies the bank of a likely intermittent stream confined by wetlands identified by the 'S' and 'U' series flags. Solid color blue flags numbered T1 to T6 were placed in pairs on either side of the bank but do not appear to be shown on site plans that depict the wetland delineation. We believe however, based upon communications with Doucet Survey and the survey crew in the field during site investigations, that the flags were located via survey and that the channel depicted on the site plan generally coincides with those flags. The stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Cobble/Gravel (R4UB1) down to its confluence with the diverted perennial stream discussed below. See flag series 'V' and 'W'. Refer to image 10.

Wetland Flag Series U

Wetland flag series 'U' generally identifies wetlands associated with a likely intermittent stream although there appears to be a groundwater component as well, especially along flags U6 to U11. This groundwater may also be associated with a poorly constructed and poorly maintained stormwater detention facility on the adjacent property, which is also causing occasional surface flow to scour a channel near flags ±U6 to ±U8 and along flags ±U12 and ±U13. Flag U1 starts at a buried culvert(s) and boulder retaining wall. Flag U13 ends at or very near the property line but the hydrology continues off site.

Wetland Flag Series V

Wetland flag series 'V' generally identifies two sources of runoff. Flags ±V1 to ±V2 identify the bank of a man-made intermittent, scoured channel resulting from the poorly maintained stormwater facility described above. Flags ±V2 to ±V3+ identify the bank of the stream just downstream of the confluence of the aforementioned intermittent stream and diverted perennial stream. The stream below the confluence is therefore best classified as Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx).

Wetland Flag Series W

Wetland flag series 'W' mostly identifies the bank of the aforementioned diverted perennial stream, which was created by excavation. Exposed bedrock was observed in the bottom of the excavated channel near flag ±W6. Flags W1 to W8 identify the bank of the stream. The stream is best classified as Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx). The area along flags W8 to W9 represents the edge of a large forested wetland which extends off site and is best classified as Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated. Refer to images 8 and 9.

Storm Water Control Measure

The storm water control measure[4] on Marjorie Street was evaluated during site investigations conducted on November 13, 2023 (as part of the larger AOI depicted in Figure 3) and January 23, 2025. It is apparently man-made, chiefly by excavation, and the portion closest to Marjorie Street is lined with riprap stone. Refer to the green shaded area in Figure 4 and Images 11 and 12 below.

As is to be expected, the soils in the storm water control measure are highly altered and possess minimal horizon development that is customary to natural soils. Also to be expected, as a storm water control measure, the soils possess some morphological signs consistent with episodic short-term wetness. However, the soils do not currently meet the definition of a hydric soil per the technical standards cited above in the certification note. This is likely due to significant periods of drying between storm events.

FIGURE 4

The storm water control measure supports a variety of herbaceous and shrub vegetation. A significant community of herbaceous species dominated by sensitive fern (*Onoclea sensibilis*) was observed in the portion of the storm water control measure that is not lined with riprap. Sensitive fern is a facultative wetland species and as such is customarily considered a hydrophyte and an indicator of jurisdictional wetlands in the presence of hydric soils. However, facultative wetland species are also commonly found in upland (non-wetland areas). Sensitive fern is known to colonize altered and natural soils including non-hydric soils that experience periodic wetness.

The storm water control measure likely drains to the south, towards assessor's Lot 38, via intermittent overland flow during larger storm events. There may also be infiltration to groundwater taking place through the bottom of the practice during smaller storm events that do not generate sufficient runoff to result in overland flow. There is however no contiguous wetland connection via hydric soils or hydrophytic vegetation to nearby jurisdictional wetlands identified by the 'E' flag series at the rear of assessor's Lots 26 or 38 which were delineated in 2023.

[4] Storm water control measures were formerly referred to as storm water best management practices.

For the above reasons, the storm water control measure does not possess the three factors (a plant community dominated by hydrophytic plant species, hydric soils and signs of wetland hydrology) necessary to be considered a jurisdictional wetland per state regulation or Portsmouth zoning §10.1014.11.

The conclusion above notwithstanding, if the area was legally constructed as a storm water management practice and subsequently developed the necessary wetland characteristics identified above, thus becoming jurisdictional as a wetland, it may be maintained, repaired, replaced or modified under state law (NH RSA 482-A:3, IV(b)) without a permit.

Similarly, per Portsmouth zoning §10.1013.10, inland (freshwater) wetlands, which are not vernal pools and are less than 10,000 square feet (SF) in area, are not subject to local regulation. November and January are not ideal months in which to make determinations regarding vernal pools. I did not observe any secondary indicator species in 2023 (in the absence of snow cover); the presence of which would suggest that the area is a potential vernal pool. Whereas I also concluded that the area is not a wetland, it was not delineated. Regardless, the storm water control measure does not appear to be ≥10,000 SF in size, but additional calculations or measurements may be necessary to confirm the size of the area.

Invasive Species

Observations of plant species in the AOI which are commonly considered invasive included: purple loosestrife, Japanese knotweed, common reed, Asian bittersweet (*Celastrus orbiculata*), glossy buckthorn, common buckthorn, multiflora rose, Autumn olive, Japanese barberry (*Berberis thunbergii*), garlic mustard (*Alliaria petiolata*) and honeysuckle.

Japanese knotweed, bittersweet and purple loosestrife are considered Type II Priority Invasive Plant Species by the NH Department of Transportation (NHDOT). There is no NHDOT jurisdiction within the AOI, however it should be noted that NHDOT Type II priority invasive plant species can be dispersed by seed *and* vegetative means (root and stem fragments) and thus are very easily spread by typical construction and infrastructure maintenance activities involving soil excavation, transportation and deposition. Infestations of these species are very difficult to control and nearly impossible to eradicate once established. It is therefore recommended that any proposed work areas are inspected prior to alteration so that invasive species can be avoided if possible or a management plan can be developed if invasive species cannot be avoided.

State Jurisdiction

All wetlands and any banks are jurisdictional under NH RSA 482:A and the NH Code of Administrative Rules – Chapter Env-Wt 100-900.[5] With the exception of prime wetlands in certain communities, the NHDES does not require a buffer to freshwater wetlands, to the extent that any work in adjacent uplands does not cause indirect impacts, such as sedimentation, to areas under NHDES jurisdiction.

Shoreland Protection

There are no water bodies located within 250 feet of the AOI that are identified on the Comprehensive List of Water Bodies subject to RSA 483-B, the Shoreland Water Quality Protection Act.

[5] The definition of bank (Env-Wt 102.15) can be difficult to apply in the field, resulting in occasional disagreement with the N.H. Department of Environmental Services over the location of the bank, and correspondingly, where state jurisdiction begins and ends. Should any project need to alter the streams at this location, I encourage you to correspond with NHDES regarding this potential issue prior to design, permitting and/or construction.

Prime Wetlands

The NHDES applies applicable rules and law to all municipally designated prime wetlands (and in certain municipalities all land within 100-feet of municipally designated prime wetlands). Prime wetlands are those wetlands with higher functions and values and receive additional protection under the law. Portsmouth has designated municipal prime wetlands which are recognized by NHDES. Portsmouth prime wetlands receive a 100-foot state buffer. The subject wetlands are not identified as prime wetlands. Refer to Figure 5 below.

FIGURE 5

Priority Resource Areas

Areas that embody bogs, sand dunes, tidal waters, tidal wetlands, undeveloped tidal buffer zone, floodplain wetlands adjacent to a tier 3 or higher watercourse, designated prime wetland or duly established prime wetland buffer zone and/or documented occurrences of protected rare species or habitat are considered Priority Resource Areas (PRA). Projects which propose impacts to jurisdictional areas that involve PRA's are elevated to major project classification for permitting review purposes, with a couple of exceptions. With the possible exception of rare species, remote sensing and direct observation confirm that there are no PRA's within the AOI. However, we have not contacted the Natural Heritage Bureau for information regarding rare species, which we presume will take place during the permitting process for any proposed project going forward.

Local Zoning

Chapter 10 of the Portsmouth Zoning Ordinance, specifically Article 10 – Environmental Protection Standards and Section 10.1010 – Wetland Protection, take jurisdiction over the following areas:

- Any inland wetland area greater than 10,000 SF in size;
- Any vernal pool regardless of size;
- Any non-tidal perennial river or stream; and,
- Any tidal wetlands.

The local zoning requires a buffer of all land within 100–feet of any jurisdictional area. Permitted uses in wetlands and the wetland buffer include any use that does not involve the erection or construction of any structure or impervious surface and will not alter the natural surface configuration by the addition of fill or dredging. Any use or activity not specifically permitted is prohibited unless authorized by the Portsmouth Planning Board pursuant to a Conditional Use Permit (CUP) application after review by the

Portsmouth Conservation Commission. Regarding CUP applications, the following specific criteria for approval apply to public and private utilities within rights-of-way in wetlands and wetland buffers:

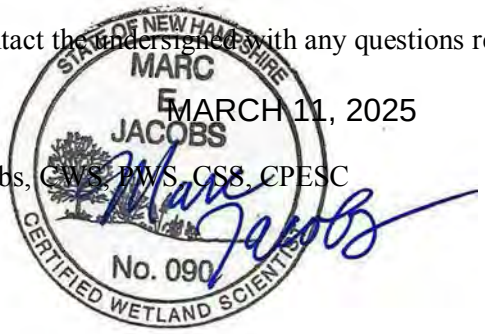
- The proposed construction is in the public interest;
- Design, construction and maintenance methods will utilize best management practices to minimize impact and will include restoration of sites as nearly as possible to the original grade;
- No alternative feasible route exists; and
- Alteration of natural vegetation will occur only to the extent necessary.

The zoning identifies performance standards for stormwater management and vegetation management, including fertilizer and herbicide application, within local jurisdiction. The zoning requires vegetation buffers within the overall 100-foot buffer.

The above represents a brief summary of the applicable local wetland zoning and state jurisdiction. We recommend that you consult this office, the Portsmouth Planning Department or the NHDES for further guidance before proceeding with any design, permitting or construction at this location.

Please contact the undersigned with any questions regarding the above-referenced information.

Cordially,



Marc Jacobs, CWS, PWS, CSS, CPESC

Image 1 – Looking northeast / upstream towards Rt. 1 by-pass at the perennial stream from wetland-upland boundary flag ±K2. Note the knotweed stalks on the right.

Image 2 – Looking southwest / downstream at the perennial stream from wetland-upland boundary flag ±L1.

Image 3 – Looking westerly near wetland-upland boundary flag ±L9. Note the numerous clumps of soft rush.

Image 4 – Looking easterly toward Rt. 1 by-pass. Note the boulder from image 1 above, ruts and standing water.

Image 5 – Looking north from wetland-upland boundary flag ±P2 toward Rt. 1 by-pass. Note wetland-upland boundary flag N91 on right in background. Note wide rut (center) with spoils deposition in foreground.

Image 6 – Looking northwesterly at wetland 'N' from near wetland-upland boundary flag ±N127.

Image 7 – Looking northeast / upstream towards Rt. 1 by-pass at intermittent stream from wetland-upland boundary flags ±N1 and ±O17. Note foreground recently brush hogged.

Image 8 – Looking southeast / downstream at perennial stream from wetland-upland boundary flag ±S21.

Image 9 – Looking northwest / upstream at the perennial stream from wetland-upland boundary flag ±S21. Note forested wetland 'S' on right.

Image 10 – Looking southwest / downstream at the intermittent stream from wetland-upland boundary flags S1 and U1. Note foreground recently brush hogged.

Image 11 – Looking at the storm water control measure on January 23, 2025. Marjorie Street is in the background.

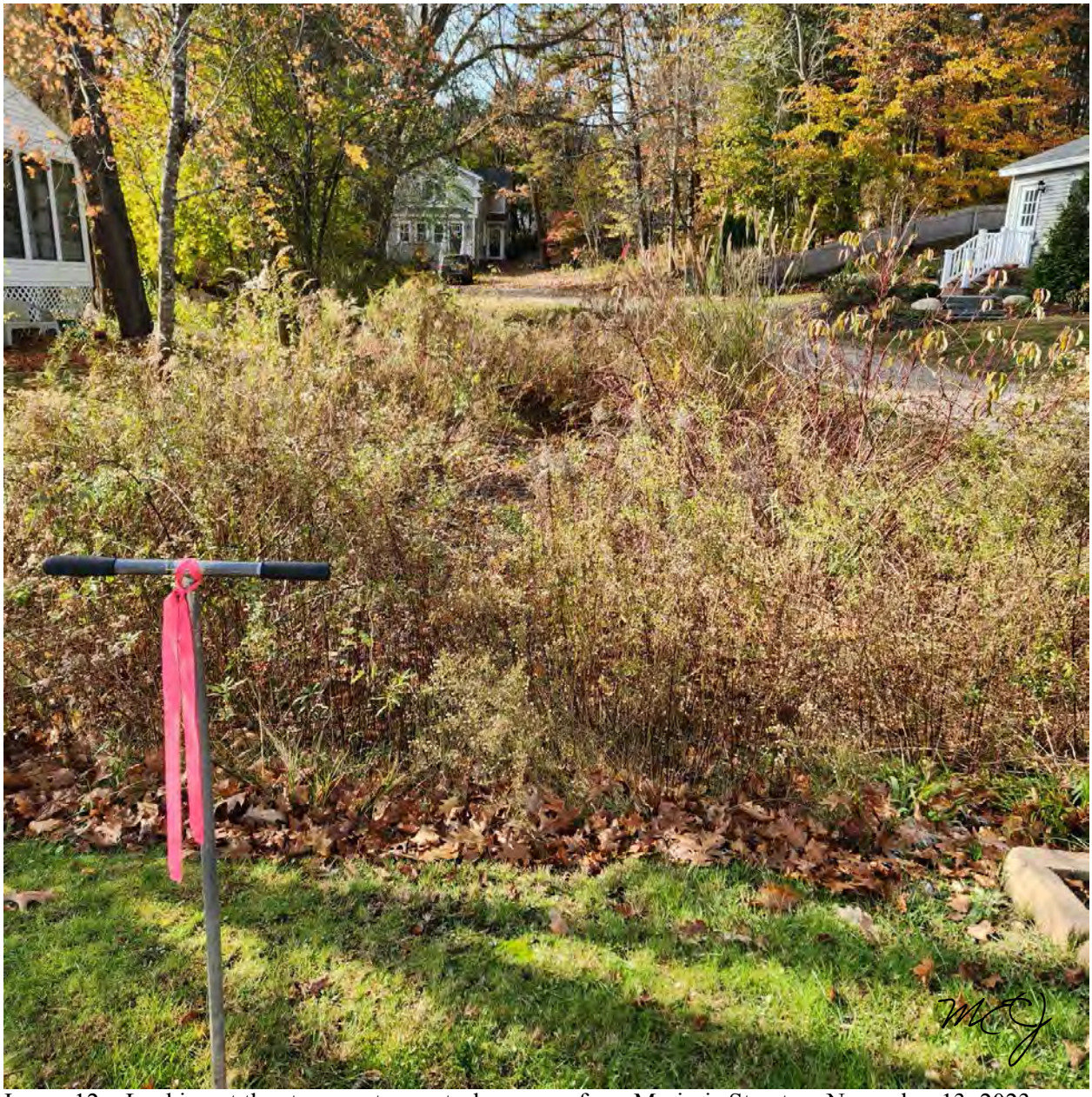


Image 12 – Looking at the storm water control measure from Marjorie Street on November 13, 2023.

Marc E. Jacobs, *CSS, CWS, PWS, CPESC*
Professional Wetland / Soil Scientist
jacobs2wetsoil2004@yahoo.com

VIA EMAIL to jack@doucetsurvey.com

September 21, 2020

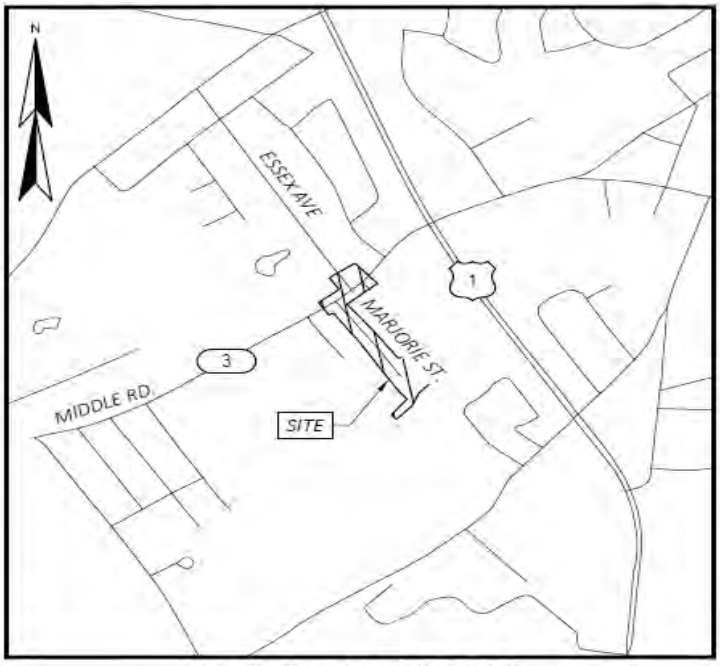
Mr. Jack Kaiser, LLS, Vice-President
Doucet Survey, Inc.
102 Kent Place
Newmarket, NH 03857

Re: Marjorie Street
Portsmouth, NH
DSI #6483

Dear Mr. Kaiser,

The following preliminary remarks summarize observations made during site inspections at the above-referenced location conducted on July 3 and 16, 2020 to identify and delineate wetlands. The approximate area-of-interest (AOI) is depicted below in Figure 1.

FIGURE 1



LOCATION MAP (n.t.s.)

609 Portsmouth Avenue
PO Box 417
Greenland, NH 03840-0417

Phone (603) 686-5097
Fax (603) 686-5142
Mobile (603) 534-SOIL (7645)

Certification Note

Jurisdictional wetlands within the AOI were delineated in July 2020 by Marc Jacobs, Certified Wetland Scientist number 090, according to the standards of the US Army Corps of Engineers - Wetlands Delineation Manual; the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region; the Code of Administrative Rules, NH Department of Environmental Services - Wetlands Bureau – Env-Wt 100-900 and Article 10 – Environmental Protection Standards of the City of Portsmouth, NH Zoning. Soils were evaluated utilizing the Field Indicators for Identifying Hydric Soils in New England, Version 4, April 2017 and the Field Indicators of Hydric Soils in the United States, Version 8, 2016. The indicator status of dominant vegetation as hydrophytic was determined according to the U.S. Army Corps of Engineers - Northcentral and Northeast 2016 Regional Wetland Plant List. Copies of any site plans which depict the delineation that have been reviewed by the wetland scientist are individually stamped, signed and dated. This note has been customized for this project.

General Methodology

Jurisdictional wetlands were identified and wetland-upland boundaries within the AOI were delineated in the field based upon on-the-ground investigations using the technical guidance above. Solid color pink survey flags were then placed at random intervals to mark wetland-upland boundaries in the field. Each flag bears a unique letter and number to assist in subsequent field location by instrument survey as well as to ascertain exact field position when referencing site plans during any future site visits. The following flag sequences were used: A1-A4, B1-B18, C1-C5, D1-D11, E1-E6, F1-F5, G1-G19 and H1-H4.

General Wetland Description

The following section generally describes wetland hydrology, vegetation and soil conditions at this location. More specific information for each wetland area is provided below, organized by wetland flag series or, where appropriate, groups of flag series that generally define a discreet wetland area.

Hydrology

All flags and flag series identify freshwater wetlands. Dominant wetland hydrology historically involved groundwater discharge and sheet flow from upgradient uplands to the north and west. This hydrology has been altered more recently by residential development and associated impervious surfaces which have intercepted precipitation and concentrated the resulting stormwater runoff. We note the absence of catch basins in Marjorie Street however. There is a channel that runs along the south edge of the AOI. The channel appears to be man-made by excavation and filling and confines slow moving surface waters.

No primary or secondary vernal pool indicators were observed during site investigations and, with the possible exception of wetland area ‘G’ below, preliminary observations suggest that the delineated wetlands do not provide breeding habitat for species customarily associated with vernal pools. However, additional investigations during the spring would be necessary to definitively conclude that no vernal pool habitat exists.

Vegetation

The dominant wetland classification according to the National Wetlands Inventory and the Cowardin system involves palustrine forested (PFO) wetlands, except as noted below. Dominant vegetation in the tree canopy includes red maple (*Acer rubrum*), a deciduous species.

Plant species which were observed in the AOI that are customarily considered invasive include multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), Japanese knotweed (*Polygonum cuspidatum*), glossy buckthorn (*Frangula alnus*), common buckthorn (*Rhamnus cathartica*), honeysuckle (*Lonicera* sp.), Asian bittersweet (*Celastrus orbiculatus*), garlic mustard (*Alliaria petiolata*) and purple loosestrife (*Lythrum salicaria*).

The garlic mustard infestation is located near wet flag D7. The infestation appears to be small and might be easily controlled with early intervention. The knotweed infestation is located on the opposite bank of the stream identified by the 'A' and 'B' series wetland flags and therefore may currently be confined to abutting property. Invasive species are often easily transported and spread to other sites during earth moving and construction work.

Soils

Except as noted below, all wet flags generally identify man-made wetland-upland boundaries created by filling and/or excavation activities associated with prior residential and utility construction. (The fill was not deposited recently – within the last few years – but may have been placed after the wetlands law became effective in 1969. Additional investigations would be needed to establish the extent of fill or determine when the fill was placed.) Similarly, several piles of organic yard wastes were observed along the wetland-upland boundary on either side of the unimproved section of Marjorie Street and adjacent to the 'D' and 'G' wetland flag series. Some of the piles are recent and this appears to be an ongoing activity.

Predominant hydric soils involve poorly drained Scitico series (*Typic Endoaquepts*) mineral soils although significant pockets of very poorly drained Maybid series (*Typic Humaquepts*) mineral soils can also be found in some locations. Scitico and Maybid series soils are derived from marine silt and clay parent materials. We did not distinguish between wetlands with poorly drained soils versus those with very poorly drained soils in the field. The fill materials were only evaluated as needed to ascertain if they represent hydric soils and have not been thoroughly assessed or characterized otherwise.

Wetland Flag series A & B

Wetland flags series 'A' and 'B' generally identify the bank of a low-gradient stream that is the result of excavation and filling. Wet flags A1± and B1± start at either end of a 24-inch diameter corrugated metal pipe (CMP) with boulder retaining walls. The stream was observed to be flowing during site investigations although stream velocity was very low, almost stagnant.

Wetland Flag series C – F

Wetland flags series 'C – F' identify the toe-of-fill. Wetland flag series F represents an upland island created by fill. Wet flags E1 and D11 are located to either side of a 10-inch diameter polyvinylchloride (PVC) culvert with a flared-end section comprised of high density polyethylene (HDPE). A trickle was observed to be discharging from this culvert during site investigations. The origin of this discharge is unclear given the absence of a stormwater management system within Marjorie Street. Wetlands identified by flag series 'C – F' are hydrologically contiguous to other wetlands outside the AOI by virtue of a 15-inch diameter CMP near wet flags C5 and D1.

Wetland Flag series G

Wetland flags series 'G' identifies the toe-of-fill. Palustrine scrub-shrub wetlands with a minor emergent wetland component exist in the area between wet flags G1-G3± and G17-G19±. Based upon our

observations of physical attributes and occasional adult wood frogs (*Lithobates sylvaticus*), this area may have more potential to provide vernal pool habitat than other areas within the AOI. Wetlands identified by flag series 'G' extend outside the AOI that was investigated so it is unclear if there are other upgradient wetlands that drain to these wetlands but remote sensing suggests that wetland 'G' does not appear to be hydrologically contiguous to other wetlands outside the AOI (or the stream identified by wetland flag series 'A' and 'B') and therefore may be isolated. It appears however that the area easily exceeds 10,000 square feet (SF) in size and as a result is jurisdictional pursuant to local zoning.

Wetland Flag series H

Wetland flag series H identifies a geographically isolated wetland created by filling. The area is very sparsely vegetated. The soils were saturated during site investigations but no flooding or ponding was observed and evidence suggests that the area infrequently ponds or ponds for very short durations such that the area is incapable of providing viable vernal pool habitat. We do not have an exact calculation regarding the surface area of this wetland but it would appear that the area is too small to be jurisdictional under Portsmouth zoning.

State Jurisdiction

All wetlands and any banks are jurisdictional under NH RSA 482:A and the NH Code of Administrative Rules – Chapter Env-Wt 100-900. With the exception of prime wetlands in certain communities, the NHDES does not require a buffer to freshwater wetlands, to the extent that any work in adjacent uplands does not cause indirect impacts, such as sedimentation, to areas under NHDES jurisdiction.

Shoreland Protection

There are no water bodies identified on the Comprehensive List of Water Bodies subject to RSA 483-B, the Shoreland Water Quality Protection Act, which are located within 250 feet of the AOI.

Prime Wetlands

The NHDES applies applicable rules and law to all municipally designated prime wetlands (and in certain municipalities all land within 100-feet of municipally designated prime wetlands). Prime wetlands are those wetlands with higher functions and values and receive additional protection under the law. Portsmouth has designated municipal prime wetlands which are recognized by NHDES. The subject wetlands are not identified as prime wetlands. Portsmouth prime wetlands receive a 100-foot state buffer. Refer to Figure 2 below.

FIGURE 2

Priority Resource Areas

Areas that embody bogs, sand dunes, tidal waters, tidal wetlands, undeveloped tidal buffer zone, floodplain wetlands adjacent to a tier 3 or higher watercourse, designated prime wetland or duly established prime wetland buffer zone and/or documented occurrences of protected rare species or habitat are considered Priority Resource Areas (PRA). Projects which propose impacts to jurisdictional areas that involve PRA's are elevated to major project classification for permitting review purposes, with a couple of exceptions. With the possible exception of rare species, remote sensing and direct observation confirm that there are no PRA's within the AOI. We have not contacted the Natural Heritage Bureau for information regarding rare species, which we presume will take place during the permitting process for any proposed project going forward.

Local Zoning

Chapter 10 of the Portsmouth Zoning Ordinance, specifically Article 10 – Environmental Protection Standards and Section 10.1010 – Wetland Protection, take jurisdiction over the following areas:

- Any inland wetland area greater than 10,000 SF in size;
- Any vernal pool regardless of size;
- Any non-tidal perennial river or stream; and,
- Any tidal wetlands.

The local zoning requires a buffer of all land within 100–feet of any jurisdictional area. Permitted uses in wetlands and the wetland buffer include any use that does not involve the erection or construction of any structure or impervious surface and will not alter the natural surface configuration by the addition of fill or dredging. Any use or activity not specifically permitted is prohibited unless authorized by the Portsmouth Planning Board by Conditional Use Permit (CUP) after review by the Portsmouth Conservation Commission. Regarding CUP applications, the following specific criteria for approval apply to public and private utilities within rights-of-way in wetlands and wetland buffers:

- The proposed construction is in the public interest;
- Design, construction and maintenance methods will utilize best management practices to minimize impact and will include restoration of sites as nearly as possible to the original grade;
- No alternative feasible route exists; and
- Alteration of natural vegetation will occur only to the extent necessary.

The zoning identifies performance standards for stormwater management and vegetation management, including fertilizer and herbicide application, within local jurisdiction. The zoning requires vegetation buffers within the overall 100-foot buffer.

The above represents a brief summary of the applicable local wetland zoning and state jurisdiction. We recommend that you consult this office, the Portsmouth Planning Department or the NHDES for further guidance before proceeding with any design, permitting or construction at this location.

Please contact the undersigned with any questions regarding the above-referenced information.

Cordially,

Marc Jacobs, CWS, PWS, CSS, CPESC

STATE OF NEW HAMPSHIRE MARC E. JACOBS NO. 090 CERTIFIED WETLAND SCIENTIST

WRIGHT-PIERCE
Engineering a Better Environment

230 Commerce Way, Suite 302
Portsmouth, NH 03801
603.430.3728 | wright-pierce.com

May 29, 2025

Samantha Collins
Conservation Commission Chair
1 Junkins Ave
Portsmouth, NH 03801

SUBJECT: 15 Marjorie St Sewer Service Replacement - WCUP

Dear Samantha,

Please find, described herein and attached, our application for a Wetlands Conditional Use Permit for 15 Marjorie St Sewer Service Replacement.

15 Marjorie St has an existing sewer service connected to a sewer main which will be decommissioned. The first step to decommissioning the sewer main included construction of a new pump station at 80 Marjorie St which will be completed in May 2025. This project will include installing a new 6" PVC sewer service for 15 Marjorie St. The service will be approximately 295 linear feet with two cleanouts before tying into the new Marjorie St Pump Station collection system. The sewer service will be connected to the 8" AC sewer main on Marjorie St with a wye and cleanout configuration. In support of the sewer service work, a new driveway will be constructed for access to 15 Marjorie St. The existing driveway will be returned to a vegetated area with New England Wetlands Seed Mix. A 12" PVC culvert will be installed under the new driveway to convey stormwater flow towards the wetlands area.

The scope of work described above will occur within a wetlands 100-ft buffer area. Areas that will be disturbed for pipe installation and demolition of the existing driveway will be re-vegetated with a New England Wetlands Seed Mix to enhance the buffer area. Additionally, the new driveway will use porous pavement as specified in Attachment 3.

As noted in the online application, this project is expected to include 5,437 sq. ft. of temporary disturbance. There will not be any new impervious areas installed. The new driveway will be constructed of porous pavement which will provide improved stormwater management than the existing compacted gravel driveway. Overall, this project is expected to enhance the wetland buffer area and will not have any impacts within a wetland area.

The following attachments provide further details on the project:

1. WCUP Application Checklist
2. Site Plan and Disturbance Areas
3. Porous Pavement Specification

4. Porous Pavement Operations and Maintenance Plan

Sincerely,
WRIGHT-PIERCE

Andrew Morrill, PE
Project Manager
andy.morrill@wright-pierce.com

cc:
Erich Fiedler, PE – City of Portsmouth
Christine Sproviero – City of Portsmouth
Lauren King, EIT – Wright-Pierce

WRIGHT-PIERCE
Engineering a Better Environment

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: Matt and Beth Reichl Date Submitted: 05.28.2025

Application # (in City's online permitting): LU-24-118

Site Address: 15 Marjorie St Map: 232 Lot: 41

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
✔	Complete application form submitted via the City's web-based permitting program	ONLINE
✔	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	Detailed in Plan and Narrative

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	ONLINE
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	setbacks, locations of wetlands, new and existing impervious areas are shown
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	Detailed in Plan and Narrative
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Narrative and Landscape Plan

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Wetland buffer enhancement plan. **(10.1017.25)**	Landscape Plan
✔	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	N/A
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	Storm Water Management Plan included
✔	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	parallel to buffer strip
✔	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	Plant native species, No pest/herbacides
✔	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	Permiable pavement to match right of way installed by DPW
✔	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	Pavement Maintenace plan included
✔	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	Site Plan and landscape plan
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	In submission Materials
✔	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	N/A

Applicant's Signature: Timothy Hron **Date:** 05.28.2025

2

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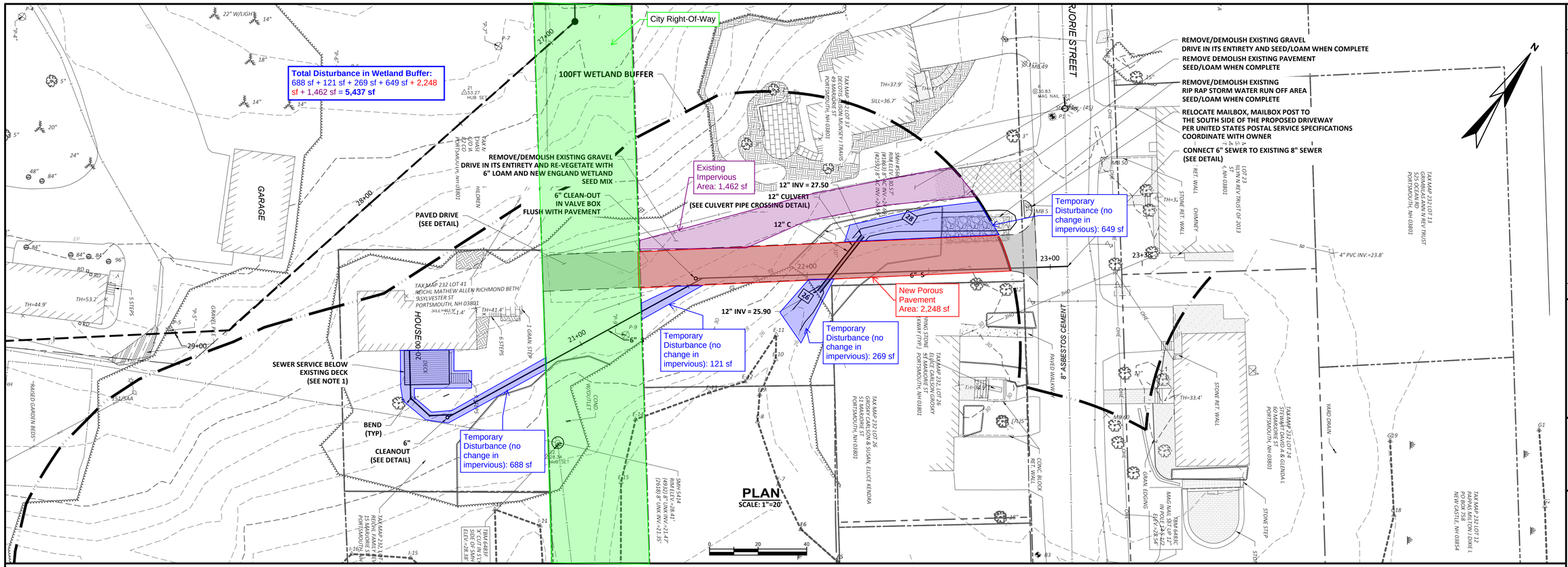

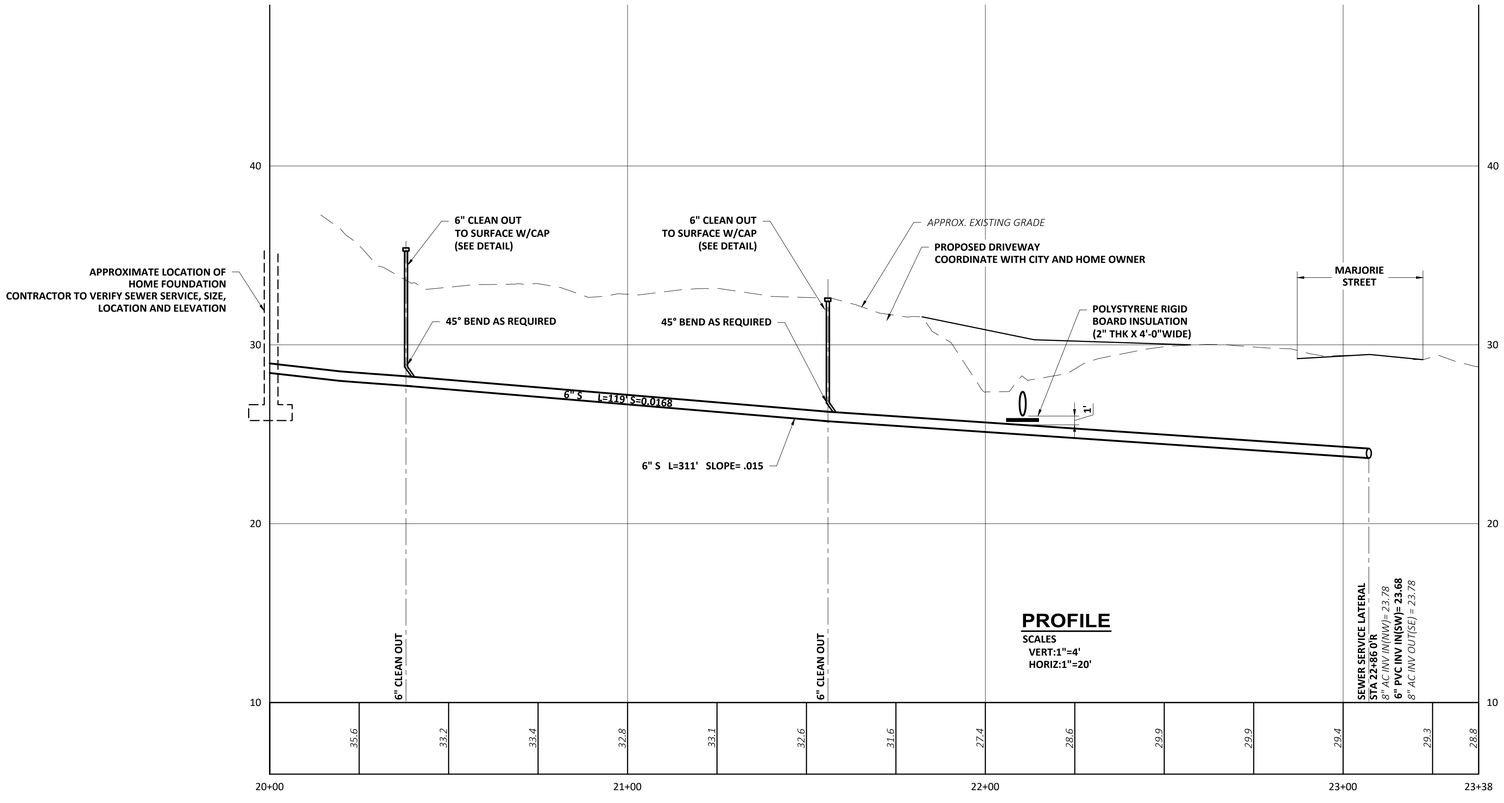

ABBREVIATION	DESCRIPTION	SIZE	MATERIAL
S	GRAVITY SEWER	6-8"	SDR 35 PVC
C	CULVERT	12"	SDR 35 PVC

NOTES:

1. CONTRACTOR TO COORDINATE REMOVAL OF EXISTING DECK WITH OWNER FOR THE INSTALLATION OF THE NEW SEWER SERVICE. CONSTRUCT A NEW SET OF TEMPORARY STAIRS FOR ACCESS TO THE HOME.

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: C3500
DESIGNED:
CAD COORD:
CAD:
CHECKED:
DATE:
APPROVED:
DATE:
SUBMISSION:

WRIGHT-PIERCE
230 COMMERCE WAY, SUITE 302, PORTSMOUTH, NH 03801

CITY OF PORTSMOUTH, NEW HAMPSHIRE
SEWER SERVICE IMPROVEMENTS

REICHEL HOME SEWER SERVICE
PLAN AND PROFILE

DRAWING
C-2

3

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SECTION 02513A

POROUS BITUMINOUS CONCRETE PAVING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work Included:
   1. Furnish all plant, labor, equipment and materials required to install porous bituminous concrete pavement. Furnish all plant, labor, equipment and materials required to install all layers or aggregates, filter fabric and underdrain below the porous bituminous concrete pavement.

B. Work Not Included: Removal and replacement of paving for the convenience of the Contractor will not be considered for payment.

C. Related Work Specified Elsewhere (When Applicable): Earthwork, Bituminous Concrete Pavement and pavement markings.

1.2 SUBMITTALS AND MEETINGS

A. Contractor shall submit to the Engineer a proposed design for the porous pavement material. Gradations, abrasion, degradation, angularity, hardness and all other applicable test results for all aggregates to be used in the mix shall be submitted. The porous pavement will be discussed at the prepave conference(s).

B. Delivery slips shall be furnished with each load of mix delivered to the project. Information shall include:
   1. Vehicle identification.
   2. Date.
   3. Project.
   4. Identification of material.
   5. Gross, tare and net weights.
   6. Signed by the bituminous concrete producer.
   7. Stamped by a licensed public weighmaster.

PART 2 - PRODUCTS

2.1 POROUS AGGREGATE MEDIA COURSES- MATERIALS

A. Porous Media Infiltration Beds. Porous media infiltration beds are located below the porous asphalt mix. Gradation and compaction requirements are listed in Table 1. Washed aggregate for the choker course and reservoir course shall meet the following:
   - Maximum Wash Loss of 0.5% (AASHTO T 11 ***I*** ASTM C 117)
   - Maximum Abrasion Loss of 10% for 100 revolutions, and maximum of 50% for 500 revolutions. (AASHTO T 96 ***I*** ASTM C 131)

B. A choker course of crushed stone, meeting the requirements of AASHTO M 43 Standard Size No. 57 shall be located directly below the porous pavement mix at a minimum thickness of 4".

C. A filter course of poorly graded sand (modified 304.1) is located below the choker course. Filter course material shall have a hydraulic conductivity (also

referred to as coefficient of permeability) of 10 to 60 ft/day at 95% standard proctor compaction (AASHTO T 99) unless otherwise approved by the Engineer. The filter course shall be located directly below the choker course at a minimum thickness of 12".

D. A filter blanket that is an intermediate setting bed (3/8-inch pea gravel), located below the filter course at a minimum thickness of 3".

E. A reservoir course of crushed stone meeting the requirements of AASHTO M 43 Standard Size No. 3 is located over the subgrade materials at minimum thickness of 4".

Table 1. - Gradations and compaction of choker, filter and reservoir course materials.

US Standard Sieve Size	Percent Passing (%)			
Sieve Size inch (mm)	Choker Course (AASHTO Standard Size No. 57)	Filter Course (Modified NHDOT 304.1)	Reservoir Course (AASHTO Standard Size No.3)	Reservoir Course Alternative* (AASHTO Standard Size No.5)
6 (150)		100		
2.5 (63)		-	100	
2 (50)		-	90-100	
1.5 (37.5)	100	-	35-70	100
1 (25)	95-100	-	0-15	90-100
0.75 (19)	-	-	-	20-55
0.50 (12.5)	25-60	-	0-5	0-10
0.375 (9.5)	-	-	-	0-5
No.4 (4.75)	0-10	70-100	-	-
No.8 (2.36)	0-5	-	-	-
No.200 (0.075)	-	0-6**	-	-
%Compaction (AASHTO T 99)	95	95	95	95

* Alternate gradations (e.g. AASHTO Standard Size No. 5) may be accepted upon Engineer's approval.

** Preferably less than 4% fines

2.2. POROUS PAVEMENT MIX- MATERIALS

Bituminous materials used for asphalt cement binder shall meet the properties specified in AASHTO M 320. The grade of asphalt cement binder for this project shall be PG 64-28 SBR with 5 pounds of fibers per ton of asphalt mix. The dosage of fiber additives shall be either 0.25 percent cellulose fibers or 0.4 percent mineral fibers by total mixture mass. Table 2 provides the Porous Asphalt Mix Criteria. Porous pavement shall be applied at a minimum thickness of 4".

Table 2 - Porous Asphalt Mix Design Criteria

Sieve Size (inch/mm)	Percent Passing (%)
0.75 (19)	100
0.50 (12.5)	85-100
0.375 (9.5)	55-75
No. 4 (4.75)	10-25
No 8 (2.36)	5-10
No. 200 (0.075)	2-4
Binder Content (AASHTO T 164)	6-6.5%
Fiber Content by Total Mixture Mass	0.25 cellulose or 0.4% mineral
Air Void Content (ASTM D6752/AASHTO T 275)	16.0-22.0%
Draindown (ASTM D 6390)_*	<0.3%
Retained Tensile Strength (AASHTO T 283)**	>80%

* Cellulose or mineral fibers may be used to reduce draindown.

** If the TSR (retained tensile strength) values fall below 80% when tested per NAPA IS 131 (with a single freeze thaw cycle rather than 5), then in Step 4, the contractor shall employ an antistrip additive, such as hydrated lime (ASTM C977) or a fatty amine, to raise the TSR value.

PART 3 – EXECUTION AND CONSTRUCTION REQUIREMENTS

3.1 GENERAL

A. Porous media aggregate bases shall only be compacted to establish sound contact between particles. Overcompaction must be avoided to protect the infiltration capacity of the soil materials.

B. Material delivered to the spreader not having a temperature between 275° and 325° F (135° and 163° F), within 10° F (6° C) of the compaction temperature for the approved mix design, will not be used.

C. Rollers shall move at a slow but uniform speed with the drive roll or drive wheels nearest the paver, except on steep grades. Static rollers shall not operate at speeds in excess of 6 mph (10 km/h). All courses shall be rolled until all roller marks are eliminated. The compaction objective is 16% - 19% in-place void content (Core-Lok test, AASHTO TP-69). When ordered by the Engineer, density tests shall be taken at the beginning of the porous pavement course construction to establish the correct rolling patterns that will achieve the required density.

D. Breakdown rolling shall occur when the mix temperature is between 135-163°C (275 to 325°F). Intermediate rolling shall occur when the mix temperature is between 93-135°C (200 to 275°F). Finish rolling shall occur when the mix temperature is between 66-93°C (150 to 200°F). The cessation temperature occurs at approximately 79°C (l75°F).

END OF SECTION

4

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OPERATION & MAINTENANCE PLAN FOR POROUS PAVEMENT STORMWATER CONTROL MEASURE

Documentation Requirements

Property owner of parcel 232/41 (Map/Lot) shall be responsible for ensuring the proper operation and maintenance of the porous pavement stormwater control measure as required by the criteria below. Stormwater Control Measures (porous pavement) locations are identified in Attachment 1 of the permit application.

Regular inspection and maintenance is critical to the effective operation of porous pavement. Inspection and cleaning logs shall be maintained. The maintenance log, below, shall summarize inspections, maintenance performed, any corrective actions taken, and the name of the inspector. Disposal of any accumulated sediment must be in accordance with applicable local, state, and federal regulations.

Operation & Maintenance Procedures

Monitor pavement to ensure that the surface drains properly after storms. As needed and at least annually, clean the surface using vacuum sweeping machines. A power washer or compressed blower may be used to carefully remove any particles and sediment from the pavement surface. Disposal of the accumulated sediment and hydrocarbons must be in accordance with applicable local, state, and federal guidelines and regulations. Annually, inspect the surface for deterioration or spalling. Keep landscaped areas well maintained to prevent soil from being transported onto the pavement.

No winter sanding of porous surfaces is allowed. Minimize salt use during winter months. Never reseal or repave with impermeable materials. Visual inspections are an integral part of system maintenance. This includes monitoring pavement to ensure water drainage, debris accumulation, and surface deterioration.

Regular Inspection and Maintenance Activities

Activities	Frequency
CLOGGING AND SYSTEM PERFORMANCE	
Check adjacent vegetated or landscaped areas for signs of erosion and run-on to porous pavement. Remedy: Stabilize areas, repair or replace any damaged structural parts.	Whenever vacuuming adjacent permeable pavements
Check for standing water remaining on the surface of the pavement after a precipitation event within 30 minutes. Remedy: Use of a power washer or compressed air blower at an angle of 30 degrees or less can be effective, particularly in combination with a vacuum or vacuum sweeper.	1-2 times per year
Check for standing water remaining on the surface of the pavement after a precipitation event within 30 minutes. Remedy: Use of a power washer or compressed air blower at an angle of 30 degrees or less can be effective, particularly in combination with a vacuum or vacuum sweeper.	
Check for debris accumulation, particularly in the winter.	

Activities	Frequency
Remedy: Loose debris such as leaves or trash can be removed using a power/leaf blower or gutter broom. Fall and spring cleanup should be accompanied by pavement vacuuming.	
Check for accumulation of sediment and organic debris on the pavement surface. Remedy: Regular use of a vacuum sweeper can remove sediment and organic debris. The sweeper may be fitted with water jets.	
PAVEMENT CONDITION	
Check for accumulation of snow or other stockpiles of materials such as sand/salt, mulch, soil, yard waste, etc. Stockpiling of these materials on permeable pavements can lead to premature clogging. Remedy: Remove stockpile if possible and check for clogging in storage area.	
Check for damage to pavement Remedy: Repairs should be repaired as they are identified	As Needed

POROUS PAVEMENT MAINTENANCE LOG

Inspection Activity	Yes / No	Corrective Action
Observance of accumulated sediment, organic debris, or trash		
Observance of standing water		
Damage to pavement such as deterioration or spalling		
Observance of erosion contributing to run on		
Other (specify)		

PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH

680 Peverly Hill Road
Portsmouth, NH 03801
(603) 427-1530

I, Christine Sproviero, Project Manager for the City of Portsmouth's Public Works Department, authorize Wright Pierce to submit a wetland conditional use permit application on the City's behalf for the purpose of constructing a new sewer service to 15 Marjorie Street, Tax Map 232-41.

Wednesday, May 21, 2025

Alison and Travis Munsey
49 Marjorie Street
Portsmouth, NH 03801

Christine Sproviero
City of Portsmouth

To whom it may concern,

We, Alison and Travis Munsey, owners of the property at 49 Marjorie Street, tax map 232 lot 37, authorize the City of Portsmouth to apply for a Wetland Conditional Use Permit for wetland impacts on our property for the purpose of constructing a new sewer service to the property located at 15 Marjorie Street, tax map 232 lot 41.

Please reach out with any questions or concerns.

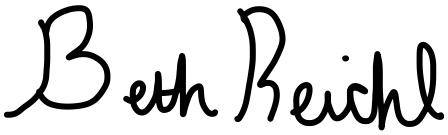
Thank you,

Alison and Travis Munsey

Good Morning –

We, Beth Ann Reichl and Mathew Allen Reichl, executors of the Reichl Family Irrevocable Trust, owners of the property located at 15 Marjorie Street, Portsmouth, NH, 03801 at tax map 232 lot 41, authorize the City of Portsmouth to apply for a Wetland Conditional Use Permit for wetland impacts on our property for the purposes of constructing a new sewer service to the property.

Very respectfully,



Beth Ann Reichl

Mathew Allen Reichl

Marc E. Jacobs, *CSS, CWS, PWS, CPESC*
Professional Wetland / Soil Scientist
jacobs2wetsoil2004@yahoo.com

VIA EMAIL to: andy.morrill@wright-pierce.com

March 11, 2025

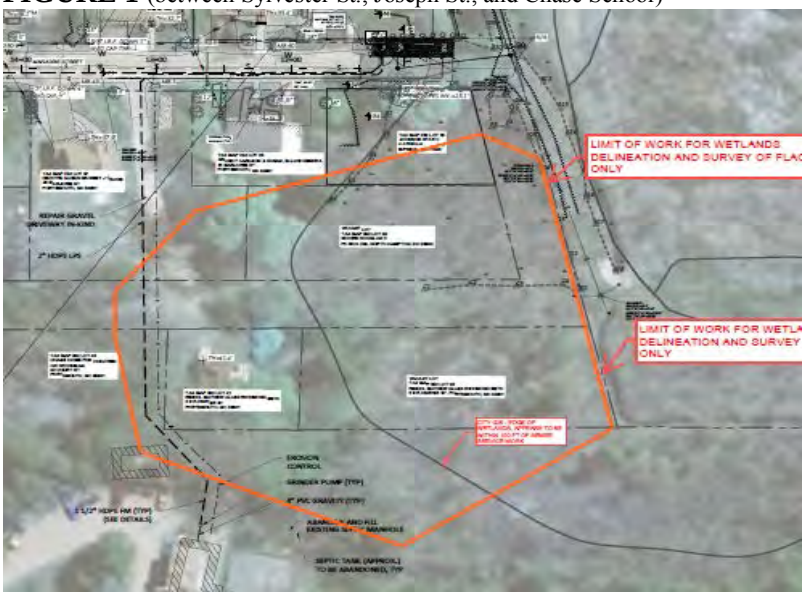
Mr. Andy Morrill, P.E.
Wright-Pierce
230 Commerce Way, Suite 302
Portsmouth, NH 03801

Re: Marjorie, Joseph and Sylvester Streets, Greenleaf Avenue, Portsmouth Toyota, Chase School
Portsmouth, NH

Dear Mr. Morrill,

The following preliminary remarks summarize observations made during site inspections conducted at the above-referenced locations between April 24 and April 27, 2023 as well as on November 13, 2023 and January 23, 2025 to identify and delineate jurisdictional wetlands. The approximate areas-of-interest (AOI) are depicted below in Figures 1-3. Previous delineation adjacent to or including portions of these AOI, primarily at the end of Marjorie Street, took place in July 2020 and is described in a report dated September 21, 2020, which was also prepared by this office and is appended to the back of this report. This report replaces the delineation report dated August 21, 2023.

FIGURE 1 (between Sylvester St., Joseph St., and Chase School)



609 Portsmouth Avenue
PO Box 417
Greenland, NH 03840-0417

Phone (603) 686-5097
Fax (603) 686-5142
Mobile (603) 534-SOIL (7645)

FIGURE 2 (generally adjacent to Toyota of Portsmouth- April 24-27, 2023)

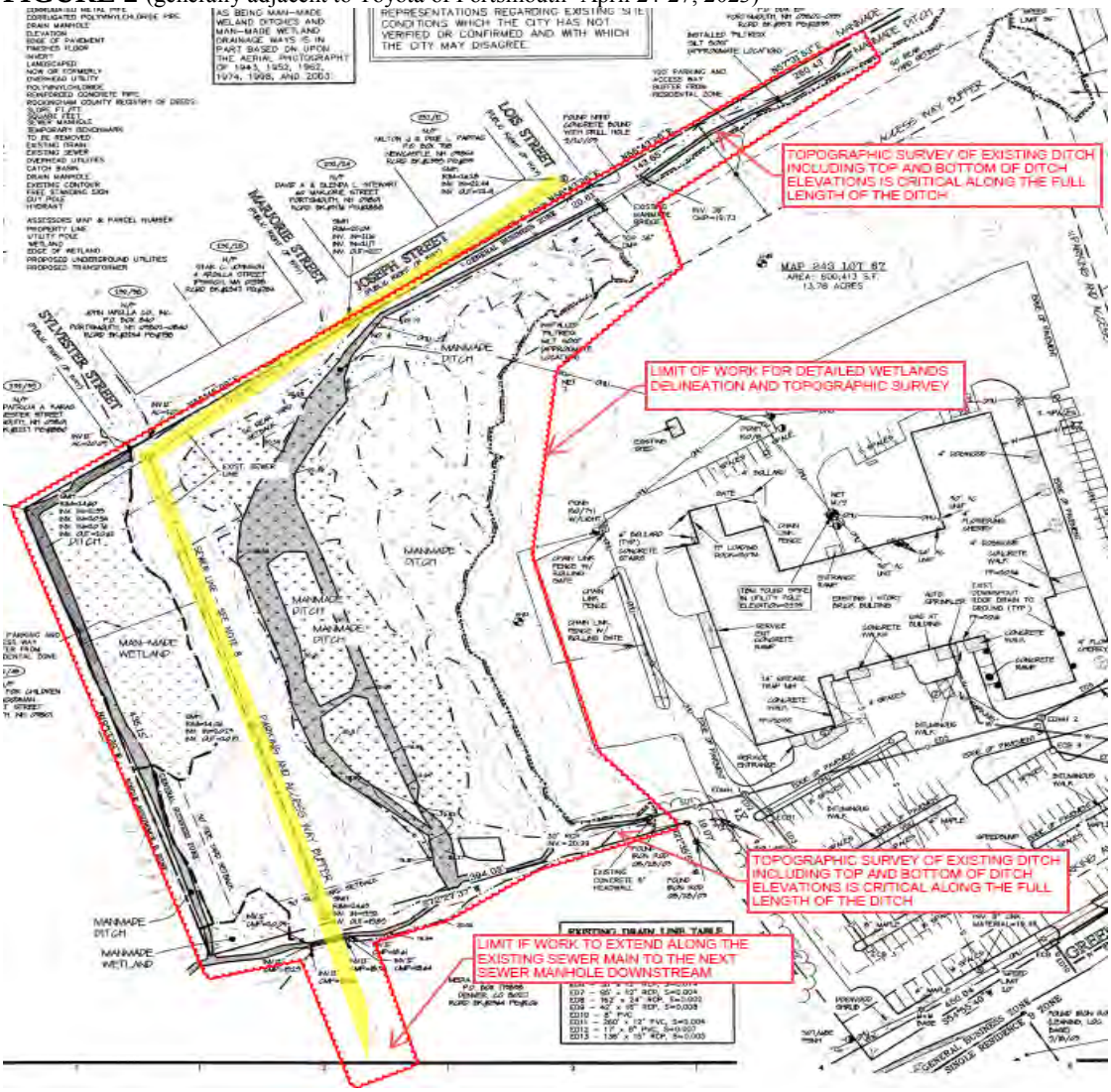


FIGURE 3 (November 13, 2023 and January 23, 2025)

Certification Note

Site investigations were conducted and man-made and natural jurisdictional wetland boundaries (and bank associated with streams in specific locations) were delineated by Marc Jacobs, Certified Wetland Scientist number 090, in April and November 2023, as well as January 2025, according to the standards of the U.S. Army Corps of Engineers – 1987 Wetlands Delineation Manual; the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region; the Code of Administrative Rules, NH Department of Environmental Services - Wetlands Bureau – Env-Wt 100-900 and Article 10, §10.1010 – Environmental Protection Standards of the City of Portsmouth, NH zoning ordinance. Predominant hydric soils were evaluated utilizing the Field Indicators for Identifying Hydric Soils in New England, Version 4, June 2020 and the Field Indicators of Hydric Soils in the United States, Version 8.2, 2018. The status of dominant vegetation as hydrophytic was determined according to the U.S. Army Corps of Engineers - Northcentral and Northeast 2020 Regional Wetland Plant List. Copies of site plans depicting the wetland delineation which have been reviewed by the wetland scientist are individually stamped, signed and dated. This note has been customized for this project. Bank associated with streams is identified per Env-Wt 102.15.

General Methodology

Jurisdictional wetlands were identified and wetland-upland boundaries within the AOI were delineated in the field based upon direct observation and on-the-ground investigations using the technical guidance above. Whereas portions of the AOI were apparently altered by previous site activities, and therefore represent atypical (versus natural) conditions, the delineation utilized protocols for altered wetlands, as well as best professional judgment and prior experience with sites having similar conditions, to ascertain the presence of wetlands and establish the wetland-upland boundary where necessary.[1] With a couple of exceptions noted by specific wetland flag sequence below, site alterations do not appear to be recent.[2]

Solid color pink survey flags were then placed at random intervals to mark wetland-upland boundaries in the field. Each flag series bears a unique letter and each flag a unique number to assist in subsequent field location by instrument survey as well as to ascertain exact field position when referencing site plans during any future site visits or during project design and permitting. The following flag series and numbers were used: A5-A15, E7-E18, I1-I32, J1-J9, K1-K, L1-L27, M1-M10, N1-N136, O1-O17, P1-P12, Q1-Q10, R1-R4, S1-S50, T1-T6, U1-U13, V1-V3, and W1-W9. Where they are depicted on site plans having been prepared in 2023, flags A1-A4, B1-B18, C1-C5, D1-D11, E1-E6, F1-F5, G1-G19 and H1-H4 were placed in 2020.

General Wetland Description

The following section generally describes wetland hydrology, vegetation and soil conditions within the various AOI. More specific information for each wetland area is provided below, generally organized by wetland flag series or, where appropriate, groups of flag series that generally define a discreet wetland area. Wetland classifications according to the National Wetland Inventory and the Cowardin system are also provided.

[1] Site alterations within jurisdictional wetlands may be considered violations of N.H. RSA 482-A: if they were undertaken without permits on or after July 2, 1969.

[2] For the purposes of this report, recent (filling, excavation, regrading, stump removal or other land altering activity) is defined as having occurred within the previous year and is an estimate based upon preliminary observations only. Additional investigations would be necessary to confirm the presence, date of placement and extent of any filled wetlands.

Hydrology

All flags and flag series identify freshwater wetlands. Dominant wetland hydrology for the majority of wetlands in these AOI were historically sustained by a perennial stream.[3] The stream has been channelized and straightened by a combination of excavation and filling. Some of the filling is associated with the installation of sewer utilities while some filling is associated with residential and commercial land development. Our observations suggest that significant wetland acreage has been lost within and adjacent to the AOI over the years due to filling. The channelization of the stream has also diverted some of the stream flow around certain wetland areas but the wetlands are still mostly hydrologically contiguous and the stream continues to play an important, albeit somewhat diminished role in sustaining wetland hydrology. No geographically isolated wetlands have resulted from the stream diversion, especially owing to the installation of various culverts as well as dominant soil types. Wetland area 'N' may have been geographically isolated at one time, partly due to the stream diversion, but subsequent earth moving activity has resulted in a channel that connects this wetland to other wetlands. However, this channel serves mostly to drain the wetland. As a result of the stream diversion, other sources of hydrology, such as sheet flow from surrounding uplands, stormwater from adjacent development and direct precipitation, have taken on increased importance. Increased stormwater inputs have ramifications for water quality, especially if the stormwater is not treated prior to discharge to wetlands.

No primary or secondary vernal pool indicators were observed during site investigations and our preliminary observations suggest that the delineated wetlands do not provide breeding habitat for species customarily associated with vernal pools; however, an exhaustive vernal pool survey was not conducted. These wetlands likely provide significant supporting habitat however.

Vegetation

The largest portion of the AOI comprised by the Portsmouth Toyota property has experienced historic and more recent alterations of the plant community and is therefore dominated by emergent and herbaceous plant species with a few trees and a significant amount of shrubs. The west side of the site is less altered and is constituted by a forested swamp. Dominant vegetation in the tree canopy includes red maple (*Acer rubrum*) and American elm (*Ulmus Americana*), both deciduous species. Portions of the AOI located to the north and west of Portsmouth Toyota are generally forested and/or shrub dominated and are described in the 2020 delineation report. Vegetation is described in more detail by wetland flag series below.

Soils

Hydric soils predominantly involve a mosaic of poorly drained Scitico series (*Typic Endoaquepts*) mineral soils and very poorly drained Maybid series (*Typic Humaquepts*) mineral soils. Scitico and Maybid series soils are derived from silt and clay parent materials of marine origin. We did not distinguish between wetlands with poorly drained soils versus those with very poorly drained soils in the field. Similarly, any fill materials were only evaluated as needed to ascertain if they represent hydric soils and have not been thoroughly assessed or characterized otherwise.

[3] The status of streams as ephemeral, intermittent or perennial is based upon a single observation only and is therefore preliminary. If the definitive jurisdictional status of any stream is required for future design or permitting efforts, additional inspections or investigations will be necessary.

Wetland Flag Series A, B and K

Wetland flag series 'A', 'B' and 'K' generally identify the bank of a low-gradient stream; the channel alignment of which appears to be the result of excavation and filling. The stream is likely perennial although much of the flow is likely constituted by urban storm water runoff. Flags ±A1, ±B1 and ±K1 start at a 36-inch diameter corrugated metal pipe (CMP) with boulder retaining walls. Flag B18 ends at twin 18-inch diameter high-density polyethylene (HDPE) culverts. The slopes on the approach to the HDPE culverts and the mouth of the culverts have been stabilized with riprap. The stream was observed to be flowing during site investigations. Flags A1-A4 were placed in 2020 and this flag series was extended in 2023. The 'B' series flags were also placed during the 2020 site investigations. The classification of this resource is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx). A significant colony of Japanese knotweed (*Polygonum cuspidatum*) was observed along wetland flag series 'K'. The colony had been mowed relatively recently. Other colonies of knotweed exist in various locations within the AOI. Refer to images 1 and 2.

Wetland Flag Series C – F

Wetland flag series 'C – F' identify the toe-of-fill. The fill does not appear to be recent. Wetland flag series F represents an upland island created by fill. Flags E1 and D11 are located to either side of a 10-inch diameter polyvinylchloride (PVC) culvert with a flared-end section comprised of high density polyethylene (HDPE). All flags were placed in 2020 although flags E7-E18 were placed in 2023. Wetlands identified by flag series 'C – F' are hydrologically contiguous to other wetlands outside the AOI by virtue of a 15-inch diameter CMP near wet flags C5 and D1. Classification of the dominant wetland condition delineated by these flag series is Palustrine, Scrub-shrub, Broad-leaved Deciduous (PSS1). Common shrub species include winterberry (*Ilex verticillata*), dogwood (*Cornus* sp.), glossy buckthorn (*Frangula alnus*) and speckled alder (*Alnus incana rugosa*). Willow (*Salix* sp.) trees were common around the periphery of the wetland. Dominant soil conditions involve a complex of poorly drained Scitico series soils and very poorly drained Maybid series soils. Both soil types are derived from marine sediments dominated by silt and clay size soil particles and textures.

Wetland Flag Series I

Wetland flag series 'I' identifies a variety of conditions. Flag I1 starts at a 15-inch diameter CMP. Flags ±I1 to ±I12 and ±I21 to ±I32 identify the toe-of-fill. Flags ±I21 to ±I32 appear to represent the toe-of-fill placed to create athletic fields at the Chase School. Flags ±I12 to ±I21 identify relatively natural vegetation, soil and hydrology conditions. Classification of the dominant wetland conditions delineated by flag series 'I' include Palustrine, Scrub-shrub, Broad-leaved Deciduous (PSS1) and Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated. (PFO1E). Common shrub species include winterberry, dogwood, speckled alder, multiflora rose (*Rosa multiflora*) and glossy buckthorn. Common trees include willow and red maple. Dominant soil conditions involve a complex of poorly drained Scitico series soils and very poorly drained Maybid series soils.

Wetland Flag Series J

Wetland flag series 'J' identifies an upland island that appears to have been created by the placement of fill (dredge spoils). Similar shrub species as those identified along the 'E' and 'I' series were noted in adjacent wetlands and common buckthorn (*Rhamnus cathartica*) was noted along the wetland-upland boundary. A mature swamp white oak (*Quercus bicolor*) tree was observed here.

Wetland Flag Series L

Wetland flag series 'L' identifies a variety of conditions. Flag L1 starts at the downstream end of a 36-inch diameter CMP with a boulder retaining wall. Flags ±L1 to ±L4 and ±L20 to ±L27 generally represent the bank of the stream and mean high water and are the likely result of excavation and/or filling. Flags ±L4 to ±L20 generally represent an area that has highly altered soils and vegetation. The area appears to have been altered more recently than most areas on site. Indeed, the vegetation appeared to have been mowed or cut within the last year. Refer to images 3 and 4 below. Flags ±L26 to ±L27 generally involve a riprap slope. Flag L27 ends at twin 18-inch diameter HDPE culverts. Classification of the dominant wetland condition delineated by flag series 'L' include Palustrine, Emergent, Persistent (PEM1). Common herbaceous vegetation that was observed includes soft rush (*Juncus effusus*), broadleaf cat-tail (*Typha latifolia*), tussock sedge (*Carex stricta*), reed canary grass (*Phalaris arundinacea*) and cranesbill (*Geranium maculatum*). Dominant soil conditions are highly altered and generally involve poorly drained Udorthents series soils. Where the flags identify (stream) bank, the classification of this resource is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx).

Wetland Flag Series M

Wetland flag series 'M' identifies an upland island that appears to have been created inadvertently during other site alterations or activities. Flags ±M1 to ±M4 generally represent the bank of the stream. Nearby wetlands / vegetation between the 'L' and 'M' series flags have been cut within the last year or two. Where the flags identify (stream) bank, the classification of this resource is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx).

Wetland Flag Series N

Wetland flag series 'N' identifies a large area comprised by wetlands that are classified as Palustrine, Emergent, Persistent (PEM1) and Palustrine, Scrub-shrub, Broad-leaved Deciduous (PSS1). The wetland, while altered, represents relatively natural conditions, although the wetland-upland boundary is almost entirely man-made by filling. An obscure swale was observed within the wetland. This swale may have been constructed to support agriculture or it may be the remnants of the former perennial stream channel that existed before the stream was channelized and diverted around this wetland. Significant communities of invasive common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*) were observed within this wetland. Other vegetation commonly observed included willow, speckled alder and dogwood shrubs. Recent site alteration activities were also observed. Refer to images 5 and 6 below.

Flag N1 starts at a buried culvert(s) and boulder retaining wall. Flag N136 ends at a 24-inch diameter reinforced concrete pipe (RCP) and poured concrete headwall. Flags ±N3 to ±N4, ±N5 to ±N6, ±N127 to ±N130 and ±N130 to ±N136 identify the bank of another stream. The stream is likely intermittent, receiving flow from the wetland as well as stormwater runoff from nearby development and associated impervious surfaces upgradient of and adjacent to flag N136. The finger-like wetland projection identified by flags ±N98 to ±N108 may be man-made. More investigations would be necessary to be certain, however it appears that the original wetland has been filled, but wetland characteristics are developing in the topographic depression created by the fill slopes and associated grading. Similar conditions may be responsible for wetlands identified by flags ±N119 to ±N122.

Wetland Flag Series O

Wetland flag series 'O' generally identifies wetlands associated with a likely intermittent stream. Flag O1 starts at a 24-inch diameter RCP and poured concrete headwall. Flags ±O1 to ±O3 and ±O6 to ±O7 identify the bank of the stream. Flag O17 ends at a buried culvert(s) and boulder retaining wall. The stream is likely the result of stormwater runoff as described above but there appears to be a groundwater component as well. The bank and wetland boundary or portions thereof were created by fill. The vegetation community on the side of the stream closest to the AOI would generally be classified as Palustrine Scrub-Shrub, Broad-leaved Deciduous (PSS1). Dominant shrubs included speckled alder, multiflora rose, highbush cranberry (*Viburnum trilobum*), honeysuckle (*Lonicera*) sp.) and dogwood. The stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Mud (R4UB3).

Wetland Flag Series P

Wetland flag series 'P' encloses a densely vegetated upland island that appears to have been created by the placement of fill. Dominant vegetation involves honeysuckle, common buckthorn, glossy buckthorn and autumn olive (*Elaeagnus umbellata*) shrubs.

Flag Series Q

Flag series 'Q' identifies the bank of a likely intermittent stream confined by wetlands identified by the 'N' and 'O' series flags. Solid color blue flags numbered Q1 to Q10 were placed in pairs on either side of the bank but do not appear to be shown on site plans that depict the wetland delineation. We believe however, based upon communications with Doucet Survey and the survey crew in the field during site investigations, that some of the flags were located via survey and that the channel depicted on the plan generally coincides with those flags, except along flags ±O12 to ±O16. The stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Mud (R4UB3). Refer to image 7.

Wetland Flag Series R

Wetland flag series 'R' identifies an isolated wetland that is likely man-made. The area supports a dominance of wetland vegetation (willow, dogwood and alder shrubs) and wetland hydrology, and appears to flow intermittently from flag R1 toward flag N8 on occasion. The soils, while not meeting the hydric soil definition (likely due to prior alteration), provided signs of periodic saturation (signs of shallow flooding were also observed) and it is my opinion that the saturation and flooding occur with a frequency and duration sufficient to meet the definition of a wetland, so we have delineated and flagged the area. The area is best classified as Palustrine Scrub-Shrub, Broad-leaved Deciduous, Excavated (PSS1x).

Wetland Flag Series S

Wetland flag series 'S' identifies a variety of conditions. Flag S1 starts at a buried culvert(s) and boulder retaining wall. Flags ±S1 to ±S3, ±S4 to ±S14 and ±S26 to ±S41 generally identify the toe-of-fill and, in the case of flags ±S4 to ±S14 (and ±S37 to ±S46), likely dredge spoils. Flags ±S3 to ±S4, ±S14 to ±S15, ±S21 to ±S26 and ±S34 to ±S36 generally identify natural conditions. Flags ±S15 to ±S21 and ±S41 to ±S49 identify the bank of the aforementioned diverted perennial stream, which was created by excavation. Exposed bedrock was observed in the bottom and sides of the excavated channel from flags ±S17 to ±S19. Wetlands adjacent to flags ±S21 to ±S41 represent a relatively natural forested condition. These wetlands are best classified as Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated. (PFO1E). Common trees include red maple, American elm and swamp white oak.

Along flags ±S15 to ±S21 and ±S41 to ±S49 the classification of the stream is: Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx). Downstream of flag S1, to the confluence with the perennial stream, the stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Mud (R4UB3). Flags S47 and S48 are located to either side of twin 18-inch diameter HDPE culverts. Flag S50 ends at a 15-inch diameter CMP. Refer to images 8 and 9.

Flag series T

Flag series 'T' identifies the bank of a likely intermittent stream confined by wetlands identified by the 'S' and 'U' series flags. Solid color blue flags numbered T1 to T6 were placed in pairs on either side of the bank but do not appear to be shown on site plans that depict the wetland delineation. We believe however, based upon communications with Doucet Survey and the survey crew in the field during site investigations, that the flags were located via survey and that the channel depicted on the site plan generally coincides with those flags. The stream is best classified as Riverine, Intermittent, Unconsolidated Bottom, Cobble/Gravel (R4UB1) down to its confluence with the diverted perennial stream discussed below. See flag series 'V' and 'W'. Refer to image 10.

Wetland Flag Series U

Wetland flag series 'U' generally identifies wetlands associated with a likely intermittent stream although there appears to be a groundwater component as well, especially along flags U6 to U11. This groundwater may also be associated with a poorly constructed and poorly maintained stormwater detention facility on the adjacent property, which is also causing occasional surface flow to scour a channel near flags ±U6 to ±U8 and along flags ±U12 and ±U13. Flag U1 starts at a buried culvert(s) and boulder retaining wall. Flag U13 ends at or very near the property line but the hydrology continues off site.

Wetland Flag Series V

Wetland flag series 'V' generally identifies two sources of runoff. Flags ±V1 to ±V2 identify the bank of a man-made intermittent, scoured channel resulting from the poorly maintained stormwater facility described above. Flags ±V2 to ±V3+ identify the bank of the stream just downstream of the confluence of the aforementioned intermittent stream and diverted perennial stream. The stream below the confluence is therefore best classified as Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx).

Wetland Flag Series W

Wetland flag series 'W' mostly identifies the bank of the aforementioned diverted perennial stream, which was created by excavation. Exposed bedrock was observed in the bottom of the excavated channel near flag ±W6. Flags W1 to W8 identify the bank of the stream. The stream is best classified as Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated (R2UBFx). The area along flags W8 to W9 represents the edge of a large forested wetland which extends off site and is best classified as Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated. Refer to images 8 and 9.

Storm Water Control Measure

The storm water control measure[4] on Marjorie Street was evaluated during site investigations conducted on November 13, 2023 (as part of the larger AOI depicted in Figure 3) and January 23, 2025. It is apparently man-made, chiefly by excavation, and the portion closest to Marjorie Street is lined with riprap stone. Refer to the green shaded area in Figure 4 and Images 11 and 12 below.

As is to be expected, the soils in the storm water control measure are highly altered and possess minimal horizon development that is customary to natural soils. Also to be expected, as a storm water control measure, the soils possess some morphological signs consistent with episodic short-term wetness. However, the soils do not currently meet the definition of a hydric soil per the technical standards cited above in the certification note. This is likely due to significant periods of drying between storm events.

FIGURE 4

The storm water control measure supports a variety of herbaceous and shrub vegetation. A significant community of herbaceous species dominated by sensitive fern (*Onoclea sensibilis*) was observed in the portion of the storm water control measure that is not lined with riprap. Sensitive fern is a facultative wetland species and as such is customarily considered a hydrophyte and an indicator of jurisdictional wetlands in the presence of hydric soils. However, facultative wetland species are also commonly found in upland (non-wetland areas). Sensitive fern is known to colonize altered and natural soils including non-hydric soils that experience periodic wetness.

The storm water control measure likely drains to the south, towards assessor's Lot 38, via intermittent overland flow during larger storm events. There may also be infiltration to groundwater taking place through the bottom of the practice during smaller storm events that do not generate sufficient runoff to result in overland flow. There is however no contiguous wetland connection via hydric soils or hydrophytic vegetation to nearby jurisdictional wetlands identified by the 'E' flag series at the rear of assessor's Lots 26 or 38 which were delineated in 2023.

[4] Storm water control measures were formerly referred to as storm water best management practices.

For the above reasons, the storm water control measure does not possess the three factors (a plant community dominated by hydrophytic plant species, hydric soils and signs of wetland hydrology) necessary to be considered a jurisdictional wetland per state regulation or Portsmouth zoning §10.1014.11.

The conclusion above notwithstanding, if the area was legally constructed as a storm water management practice and subsequently developed the necessary wetland characteristics identified above, thus becoming jurisdictional as a wetland, it may be maintained, repaired, replaced or modified under state law (NH RSA 482-A:3, IV(b)) without a permit.

Similarly, per Portsmouth zoning §10.1013.10, inland (freshwater) wetlands, which are not vernal pools and are less than 10,000 square feet (SF) in area, are not subject to local regulation. November and January are not ideal months in which to make determinations regarding vernal pools. I did not observe any secondary indicator species in 2023 (in the absence of snow cover); the presence of which would suggest that the area is a potential vernal pool. Whereas I also concluded that the area is not a wetland, it was not delineated. Regardless, the storm water control measure does not appear to be ≥10,000 SF in size, but additional calculations or measurements may be necessary to confirm the size of the area.

Invasive Species

Observations of plant species in the AOI which are commonly considered invasive included: purple loosestrife, Japanese knotweed, common reed, Asian bittersweet (*Celastrus orbiculata*), glossy buckthorn, common buckthorn, multiflora rose, Autumn olive, Japanese barberry (*Berberis thunbergii*), garlic mustard (*Alliaria petiolata*) and honeysuckle.

Japanese knotweed, bittersweet and purple loosestrife are considered Type II Priority Invasive Plant Species by the NH Department of Transportation (NHDOT). There is no NHDOT jurisdiction within the AOI, however it should be noted that NHDOT Type II priority invasive plant species can be dispersed by seed *and* vegetative means (root and stem fragments) and thus are very easily spread by typical construction and infrastructure maintenance activities involving soil excavation, transportation and deposition. Infestations of these species are very difficult to control and nearly impossible to eradicate once established. It is therefore recommended that any proposed work areas are inspected prior to alteration so that invasive species can be avoided if possible or a management plan can be developed if invasive species cannot be avoided.

State Jurisdiction

All wetlands and any banks are jurisdictional under NH RSA 482:A and the NH Code of Administrative Rules – Chapter Env-Wt 100-900.[5] With the exception of prime wetlands in certain communities, the NHDES does not require a buffer to freshwater wetlands, to the extent that any work in adjacent uplands does not cause indirect impacts, such as sedimentation, to areas under NHDES jurisdiction.

Shoreland Protection

There are no water bodies located within 250 feet of the AOI that are identified on the Comprehensive List of Water Bodies subject to RSA 483-B, the Shoreland Water Quality Protection Act.

[5] The definition of bank (Env-Wt 102.15) can be difficult to apply in the field, resulting in occasional disagreement with the N.H. Department of Environmental Services over the location of the bank, and correspondingly, where state jurisdiction begins and ends. Should any project need to alter the streams at this location, I encourage you to correspond with NHDES regarding this potential issue prior to design, permitting and/or construction.

Prime Wetlands

The NHDES applies applicable rules and law to all municipally designated prime wetlands (and in certain municipalities all land within 100-feet of municipally designated prime wetlands). Prime wetlands are those wetlands with higher functions and values and receive additional protection under the law. Portsmouth has designated municipal prime wetlands which are recognized by NHDES. Portsmouth prime wetlands receive a 100-foot state buffer. The subject wetlands are not identified as prime wetlands. Refer to Figure 5 below.

FIGURE 5

Priority Resource Areas

Areas that embody bogs, sand dunes, tidal waters, tidal wetlands, undeveloped tidal buffer zone, floodplain wetlands adjacent to a tier 3 or higher watercourse, designated prime wetland or duly established prime wetland buffer zone and/or documented occurrences of protected rare species or habitat are considered Priority Resource Areas (PRA). Projects which propose impacts to jurisdictional areas that involve PRA's are elevated to major project classification for permitting review purposes, with a couple of exceptions. With the possible exception of rare species, remote sensing and direct observation confirm that there are no PRA's within the AOI. However, we have not contacted the Natural Heritage Bureau for information regarding rare species, which we presume will take place during the permitting process for any proposed project going forward.

Local Zoning

Chapter 10 of the Portsmouth Zoning Ordinance, specifically Article 10 – Environmental Protection Standards and Section 10.1010 – Wetland Protection, take jurisdiction over the following areas:

- Any inland wetland area greater than 10,000 SF in size;
- Any vernal pool regardless of size;
- Any non-tidal perennial river or stream; and,
- Any tidal wetlands.

The local zoning requires a buffer of all land within 100–feet of any jurisdictional area. Permitted uses in wetlands and the wetland buffer include any use that does not involve the erection or construction of any structure or impervious surface and will not alter the natural surface configuration by the addition of fill or dredging. Any use or activity not specifically permitted is prohibited unless authorized by the Portsmouth Planning Board pursuant to a Conditional Use Permit (CUP) application after review by the

Portsmouth Conservation Commission. Regarding CUP applications, the following specific criteria for approval apply to public and private utilities within rights-of-way in wetlands and wetland buffers:

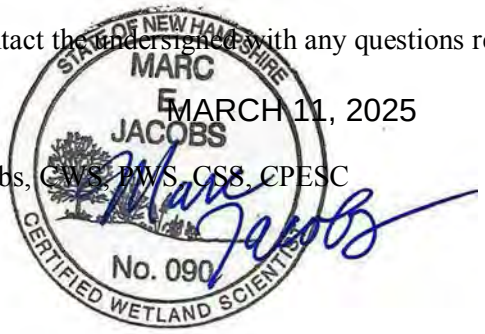
- The proposed construction is in the public interest;
- Design, construction and maintenance methods will utilize best management practices to minimize impact and will include restoration of sites as nearly as possible to the original grade;
- No alternative feasible route exists; and
- Alteration of natural vegetation will occur only to the extent necessary.

The zoning identifies performance standards for stormwater management and vegetation management, including fertilizer and herbicide application, within local jurisdiction. The zoning requires vegetation buffers within the overall 100-foot buffer.

The above represents a brief summary of the applicable local wetland zoning and state jurisdiction. We recommend that you consult this office, the Portsmouth Planning Department or the NHDES for further guidance before proceeding with any design, permitting or construction at this location.

Please contact the undersigned with any questions regarding the above-referenced information.

Cordially,



Marc Jacobs, CWS, PWS, CSS, CPESC

Image 1 – Looking northeast / upstream towards Rt. 1 by-pass at the perennial stream from wetland-upland boundary flag ±K2. Note the knotweed stalks on the right.

Image 2 – Looking southwest / downstream at the perennial stream from wetland-upland boundary flag ±L1.

Image 3 – Looking westerly near wetland-upland boundary flag ±L9. Note the numerous clumps of soft rush.

Image 4 – Looking easterly toward Rt. 1 by-pass. Note the boulder from image 1 above, ruts and standing water.

Image 5 – Looking north from wetland-upland boundary flag ±P2 toward Rt. 1 by-pass. Note wetland-upland boundary flag N91 on right in background. Note wide rut (center) with spoils deposition in foreground.

Image 6 – Looking northwesterly at wetland 'N' from near wetland-upland boundary flag ±N127.

Image 7 – Looking northeast / upstream towards Rt. 1 by-pass at intermittent stream from wetland-upland boundary flags ±N1 and ±O17. Note foreground recently brush hogged.

Image 8 – Looking southeast / downstream at perennial stream from wetland-upland boundary flag ±S21.

Image 9 – Looking northwest / upstream at the perennial stream from wetland-upland boundary flag ±S21. Note forested wetland 'S' on right.

Image 10 – Looking southwest / downstream at the intermittent stream from wetland-upland boundary flags S1 and U1. Note foreground recently brush hogged.

Image 11 – Looking at the storm water control measure on January 23, 2025. Marjorie Street is in the background.

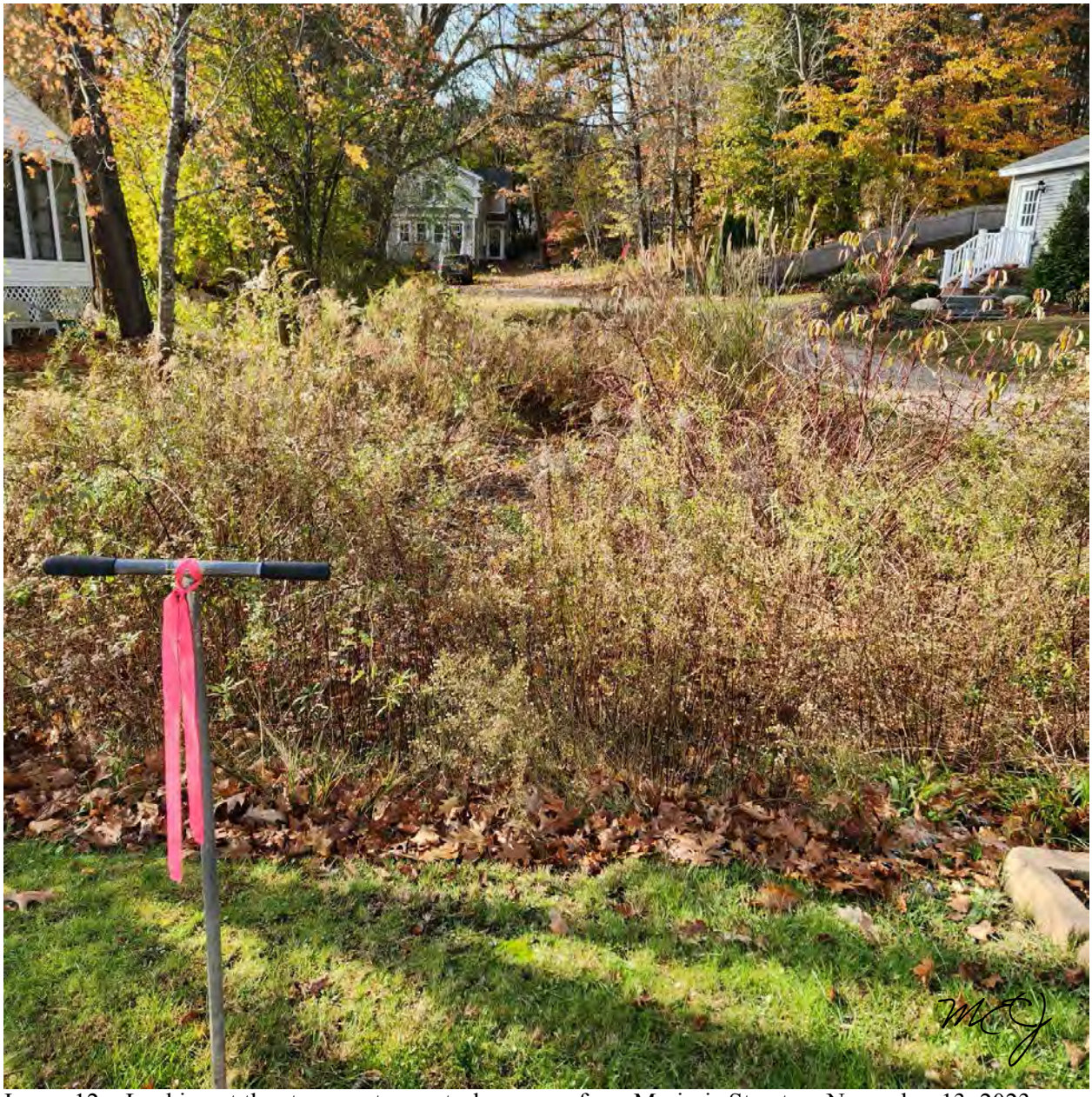


Image 12 – Looking at the storm water control measure from Marjorie Street on November 13, 2023.

Marc E. Jacobs, *CSS, CWS, PWS, CPESC*
Professional Wetland / Soil Scientist
jacobs2wetsoil2004@yahoo.com

VIA EMAIL to jack@doucetsurvey.com

September 21, 2020

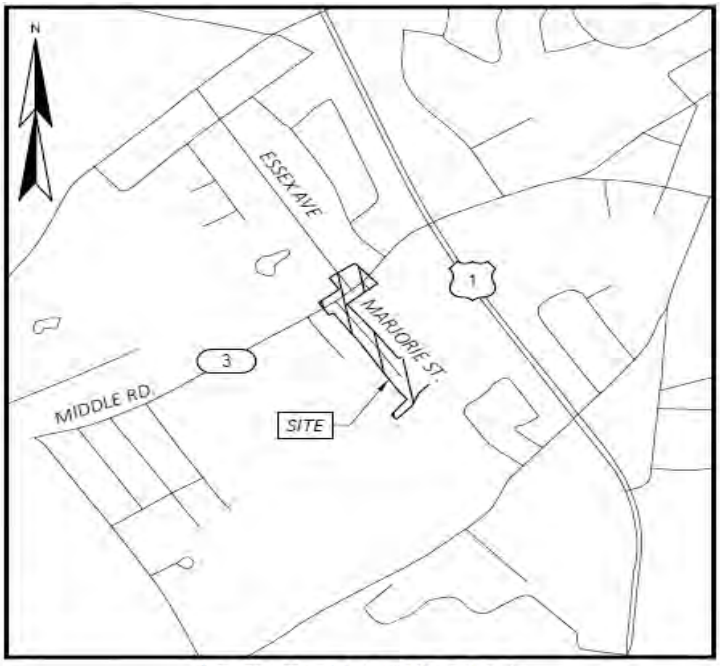
Mr. Jack Kaiser, LLS, Vice-President
Doucet Survey, Inc.
102 Kent Place
Newmarket, NH 03857

Re: Marjorie Street
Portsmouth, NH
DSI #6483

Dear Mr. Kaiser,

The following preliminary remarks summarize observations made during site inspections at the above-referenced location conducted on July 3 and 16, 2020 to identify and delineate wetlands. The approximate area-of-interest (AOI) is depicted below in Figure 1.

FIGURE 1



LOCATION MAP (n.t.s.)

609 Portsmouth Avenue
PO Box 417
Greenland, NH 03840-0417

Phone (603) 686-5097
Fax (603) 686-5142
Mobile (603) 534-SOIL (7645)

Certification Note

Jurisdictional wetlands within the AOI were delineated in July 2020 by Marc Jacobs, Certified Wetland Scientist number 090, according to the standards of the US Army Corps of Engineers - Wetlands Delineation Manual; the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region; the Code of Administrative Rules, NH Department of Environmental Services - Wetlands Bureau – Env-Wt 100-900 and Article 10 – Environmental Protection Standards of the City of Portsmouth, NH Zoning. Soils were evaluated utilizing the Field Indicators for Identifying Hydric Soils in New England, Version 4, April 2017 and the Field Indicators of Hydric Soils in the United States, Version 8, 2016. The indicator status of dominant vegetation as hydrophytic was determined according to the U.S. Army Corps of Engineers - Northcentral and Northeast 2016 Regional Wetland Plant List. Copies of any site plans which depict the delineation that have been reviewed by the wetland scientist are individually stamped, signed and dated. This note has been customized for this project.

General Methodology

Jurisdictional wetlands were identified and wetland-upland boundaries within the AOI were delineated in the field based upon on-the-ground investigations using the technical guidance above. Solid color pink survey flags were then placed at random intervals to mark wetland-upland boundaries in the field. Each flag bears a unique letter and number to assist in subsequent field location by instrument survey as well as to ascertain exact field position when referencing site plans during any future site visits. The following flag sequences were used: A1-A4, B1-B18, C1-C5, D1-D11, E1-E6, F1-F5, G1-G19 and H1-H4.

General Wetland Description

The following section generally describes wetland hydrology, vegetation and soil conditions at this location. More specific information for each wetland area is provided below, organized by wetland flag series or, where appropriate, groups of flag series that generally define a discreet wetland area.

Hydrology

All flags and flag series identify freshwater wetlands. Dominant wetland hydrology historically involved groundwater discharge and sheet flow from upgradient uplands to the north and west. This hydrology has been altered more recently by residential development and associated impervious surfaces which have intercepted precipitation and concentrated the resulting stormwater runoff. We note the absence of catch basins in Marjorie Street however. There is a channel that runs along the south edge of the AOI. The channel appears to be man-made by excavation and filling and confines slow moving surface waters.

No primary or secondary vernal pool indicators were observed during site investigations and, with the possible exception of wetland area ‘G’ below, preliminary observations suggest that the delineated wetlands do not provide breeding habitat for species customarily associated with vernal pools. However, additional investigations during the spring would be necessary to definitively conclude that no vernal pool habitat exists.

Vegetation

The dominant wetland classification according to the National Wetlands Inventory and the Cowardin system involves palustrine forested (PFO) wetlands, except as noted below. Dominant vegetation in the tree canopy includes red maple (*Acer rubrum*), a deciduous species.

Plant species which were observed in the AOI that are customarily considered invasive include multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), Japanese knotweed (*Polygonum cuspidatum*), glossy buckthorn (*Frangula alnus*), common buckthorn (*Rhamnus cathartica*), honeysuckle (*Lonicera* sp.), Asian bittersweet (*Celastrus orbiculatus*), garlic mustard (*Alliaria petiolata*) and purple loosestrife (*Lythrum salicaria*).

The garlic mustard infestation is located near wet flag D7. The infestation appears to be small and might be easily controlled with early intervention. The knotweed infestation is located on the opposite bank of the stream identified by the 'A' and 'B' series wetland flags and therefore may currently be confined to abutting property. Invasive species are often easily transported and spread to other sites during earth moving and construction work.

Soils

Except as noted below, all wet flags generally identify man-made wetland-upland boundaries created by filling and/or excavation activities associated with prior residential and utility construction. (The fill was not deposited recently – within the last few years – but may have been placed after the wetlands law became effective in 1969. Additional investigations would be needed to establish the extent of fill or determine when the fill was placed.) Similarly, several piles of organic yard wastes were observed along the wetland-upland boundary on either side of the unimproved section of Marjorie Street and adjacent to the 'D' and 'G' wetland flag series. Some of the piles are recent and this appears to be an ongoing activity.

Predominant hydric soils involve poorly drained Scitico series (*Typic Endoaquepts*) mineral soils although significant pockets of very poorly drained Maybid series (*Typic Humaquepts*) mineral soils can also be found in some locations. Scitico and Maybid series soils are derived from marine silt and clay parent materials. We did not distinguish between wetlands with poorly drained soils versus those with very poorly drained soils in the field. The fill materials were only evaluated as needed to ascertain if they represent hydric soils and have not been thoroughly assessed or characterized otherwise.

Wetland Flag series A & B

Wetland flags series 'A' and 'B' generally identify the bank of a low-gradient stream that is the result of excavation and filling. Wet flags A1± and B1± start at either end of a 24-inch diameter corrugated metal pipe (CMP) with boulder retaining walls. The stream was observed to be flowing during site investigations although stream velocity was very low, almost stagnant.

Wetland Flag series C – F

Wetland flags series 'C – F' identify the toe-of-fill. Wetland flag series F represents an upland island created by fill. Wet flags E1 and D11 are located to either side of a 10-inch diameter polyvinylchloride (PVC) culvert with a flared-end section comprised of high density polyethylene (HDPE). A trickle was observed to be discharging from this culvert during site investigations. The origin of this discharge is unclear given the absence of a stormwater management system within Marjorie Street. Wetlands identified by flag series 'C – F' are hydrologically contiguous to other wetlands outside the AOI by virtue of a 15-inch diameter CMP near wet flags C5 and D1.

Wetland Flag series G

Wetland flags series 'G' identifies the toe-of-fill. Palustrine scrub-shrub wetlands with a minor emergent wetland component exist in the area between wet flags G1-G3± and G17-G19±. Based upon our

observations of physical attributes and occasional adult wood frogs (*Lithobates sylvaticus*), this area may have more potential to provide vernal pool habitat than other areas within the AOI. Wetlands identified by flag series 'G' extend outside the AOI that was investigated so it is unclear if there are other upgradient wetlands that drain to these wetlands but remote sensing suggests that wetland 'G' does not appear to be hydrologically contiguous to other wetlands outside the AOI (or the stream identified by wetland flag series 'A' and 'B') and therefore may be isolated. It appears however that the area easily exceeds 10,000 square feet (SF) in size and as a result is jurisdictional pursuant to local zoning.

Wetland Flag series H

Wetland flag series H identifies a geographically isolated wetland created by filling. The area is very sparsely vegetated. The soils were saturated during site investigations but no flooding or ponding was observed and evidence suggests that the area infrequently ponds or ponds for very short durations such that the area is incapable of providing viable vernal pool habitat. We do not have an exact calculation regarding the surface area of this wetland but it would appear that the area is too small to be jurisdictional under Portsmouth zoning.

State Jurisdiction

All wetlands and any banks are jurisdictional under NH RSA 482:A and the NH Code of Administrative Rules – Chapter Env-Wt 100-900. With the exception of prime wetlands in certain communities, the NHDES does not require a buffer to freshwater wetlands, to the extent that any work in adjacent uplands does not cause indirect impacts, such as sedimentation, to areas under NHDES jurisdiction.

Shoreland Protection

There are no water bodies identified on the Comprehensive List of Water Bodies subject to RSA 483-B, the Shoreland Water Quality Protection Act, which are located within 250 feet of the AOI.

Prime Wetlands

The NHDES applies applicable rules and law to all municipally designated prime wetlands (and in certain municipalities all land within 100-feet of municipally designated prime wetlands). Prime wetlands are those wetlands with higher functions and values and receive additional protection under the law. Portsmouth has designated municipal prime wetlands which are recognized by NHDES. The subject wetlands are not identified as prime wetlands. Portsmouth prime wetlands receive a 100-foot state buffer. Refer to Figure 2 below.

FIGURE 2

Priority Resource Areas

Areas that embody bogs, sand dunes, tidal waters, tidal wetlands, undeveloped tidal buffer zone, floodplain wetlands adjacent to a tier 3 or higher watercourse, designated prime wetland or duly established prime wetland buffer zone and/or documented occurrences of protected rare species or habitat are considered Priority Resource Areas (PRA). Projects which propose impacts to jurisdictional areas that involve PRA's are elevated to major project classification for permitting review purposes, with a couple of exceptions. With the possible exception of rare species, remote sensing and direct observation confirm that there are no PRA's within the AOI. We have not contacted the Natural Heritage Bureau for information regarding rare species, which we presume will take place during the permitting process for any proposed project going forward.

Local Zoning

Chapter 10 of the Portsmouth Zoning Ordinance, specifically Article 10 – Environmental Protection Standards and Section 10.1010 – Wetland Protection, take jurisdiction over the following areas:

- Any inland wetland area greater than 10,000 SF in size;
- Any vernal pool regardless of size;
- Any non-tidal perennial river or stream; and,
- Any tidal wetlands.

The local zoning requires a buffer of all land within 100–feet of any jurisdictional area. Permitted uses in wetlands and the wetland buffer include any use that does not involve the erection or construction of any structure or impervious surface and will not alter the natural surface configuration by the addition of fill or dredging. Any use or activity not specifically permitted is prohibited unless authorized by the Portsmouth Planning Board by Conditional Use Permit (CUP) after review by the Portsmouth Conservation Commission. Regarding CUP applications, the following specific criteria for approval apply to public and private utilities within rights-of-way in wetlands and wetland buffers:

- The proposed construction is in the public interest;
- Design, construction and maintenance methods will utilize best management practices to minimize impact and will include restoration of sites as nearly as possible to the original grade;
- No alternative feasible route exists; and
- Alteration of natural vegetation will occur only to the extent necessary.

The zoning identifies performance standards for stormwater management and vegetation management, including fertilizer and herbicide application, within local jurisdiction. The zoning requires vegetation buffers within the overall 100-foot buffer.

The above represents a brief summary of the applicable local wetland zoning and state jurisdiction. We recommend that you consult this office, the Portsmouth Planning Department or the NHDES for further guidance before proceeding with any design, permitting or construction at this location.

Please contact the undersigned with any questions regarding the above-referenced information.

Cordially,

Marc Jacobs, CWS, PWS, CSS, CPESC

STATE OF NEW HAMPSHIRE MARC E. JACOBS NO. 090 CERTIFIED WETLAND SCIENTIST

Marc E. Jacobs, *CSS, CWS, PWS, CPESC*
Professional Wetland / Soil Scientist
jacobs2wetsoil2004@yahoo.com

M E M O R A N D U M

VIA: First class mail/Certified/Facsimile/Hand Delivery/Overnight/**E-mail**

TO: Andy Morrill, P.E.

FROM: Marc Jacobs, CWS, CSS, CPESC

DATE: February 3, 2025

SUBJECT: Marjorie Street
Portsmouth, N.H.

RE: Assessor's Map 232 / Lot 37

STATE OF NEW HAMPSHIRE MARC E. JACOBS No. 090 CERTIFIED WETLAND SCIENTIST
February 3, 2025

The purpose of this memorandum is to summarize my observations regarding potential jurisdictional wetlands within the area-of-interest (AOI) on the above-referenced lot on Marjorie Street. The AOI is identified on Figure 1 below by a yellow polygon. A site inspection was conducted on January 23, 2025. Refer to Image 1.

Figure 1

609 Portsmouth Avenue
PO Box 417
Greenland, NH 03840-0417

Phone (603) 686-5097
Fax (603) 686-5142
Mobile (603) 534-SOIL (7645)

I originally inspected and evaluated the AOI on November 13, 2023 as part of site investigations and delineation of a larger AOI that included this AOI. The AOI generally represents a storm water management best management practice. It is apparently man-made, chiefly by excavation, and the portion closest to Marjorie Street is lined with riprap stone. Refer to Image 2.

As is to be expected, the soils in the AOI are highly altered and possess minimal horizon development. Also to be expected, as a storm water management practice, the soils possess some morphological signs consistent with episodic short-term wetness. However, the soils do not currently meet the definition of a hydric soil per:

- Field Indicators for Identifying Hydric Soils in New England, Version 4, June 2020
- Field Indicators of Hydric Soils in the United States, Version 8.2, 2018.

The AOI supports a variety of herbaceous and shrub vegetation. A significant community of herbaceous species dominated by sensitive fern (*Onoclea sensibilis*) was observed in the portion of the storm water management feature that is not lined with riprap. Sensitive fern is a facultative wetland species and as such is customarily considered an indicator of jurisdictional wetlands in the presence of hydric soils. Facultative wetland species can also commonly be found in upland (non-wetland areas). Sensitive fern is known to colonize altered and natural soils including non-hydric soils that experience periodic wetness.

The AOI likely drains to the south, towards Lot 38, via intermittent overland flow during larger storm events. There may also be infiltration to groundwater taking place through the bottom of the practice during smaller storm events that do not generate sufficient runoff to result in overland flow. There is no contiguous wetland connection via hydric soils or hydrophytic vegetation however to nearby jurisdictional wetlands at the rear of Lots 26 or 38 which were delineated in 2023.

For the above reasons, the AOI does not possess the three factors (a plant community dominated by hydrophytic plant species, hydric soils and signs of wetland hydrology) necessary to be considered a jurisdictional wetland per state regulation or Portsmouth zoning §10.1014.11.

The conclusion above notwithstanding, if the area was legally constructed as a storm water management practice and subsequently developed the necessary wetland characteristics identified above, thus becoming jurisdictional as a wetland, it may be maintained, repaired, replaced or modified under state law (NH RSA 482-A:3, IV(b)) without a permit.

Similarly, per Portsmouth zoning §10.1013.10, inland (freshwater) wetlands, which are not vernal pools and are less than 10,000 square feet (SF) in area, are not subject to local regulation. November and January are not ideal months in which to make determinations regarding vernal pools, however I did not observe any features in 2023 (without snow cover) which suggest that the area is a potential vernal pool. Whereas I concluded that the area is not a wetland, it was not delineated. That fact notwithstanding, the storm water practice does not appear to be 10,000 SF in size, but additional calculations or measurements may be necessary to confirm the size of the area.

Image 1 – Looking at the area-of-interest. Marjorie Street is in the background.

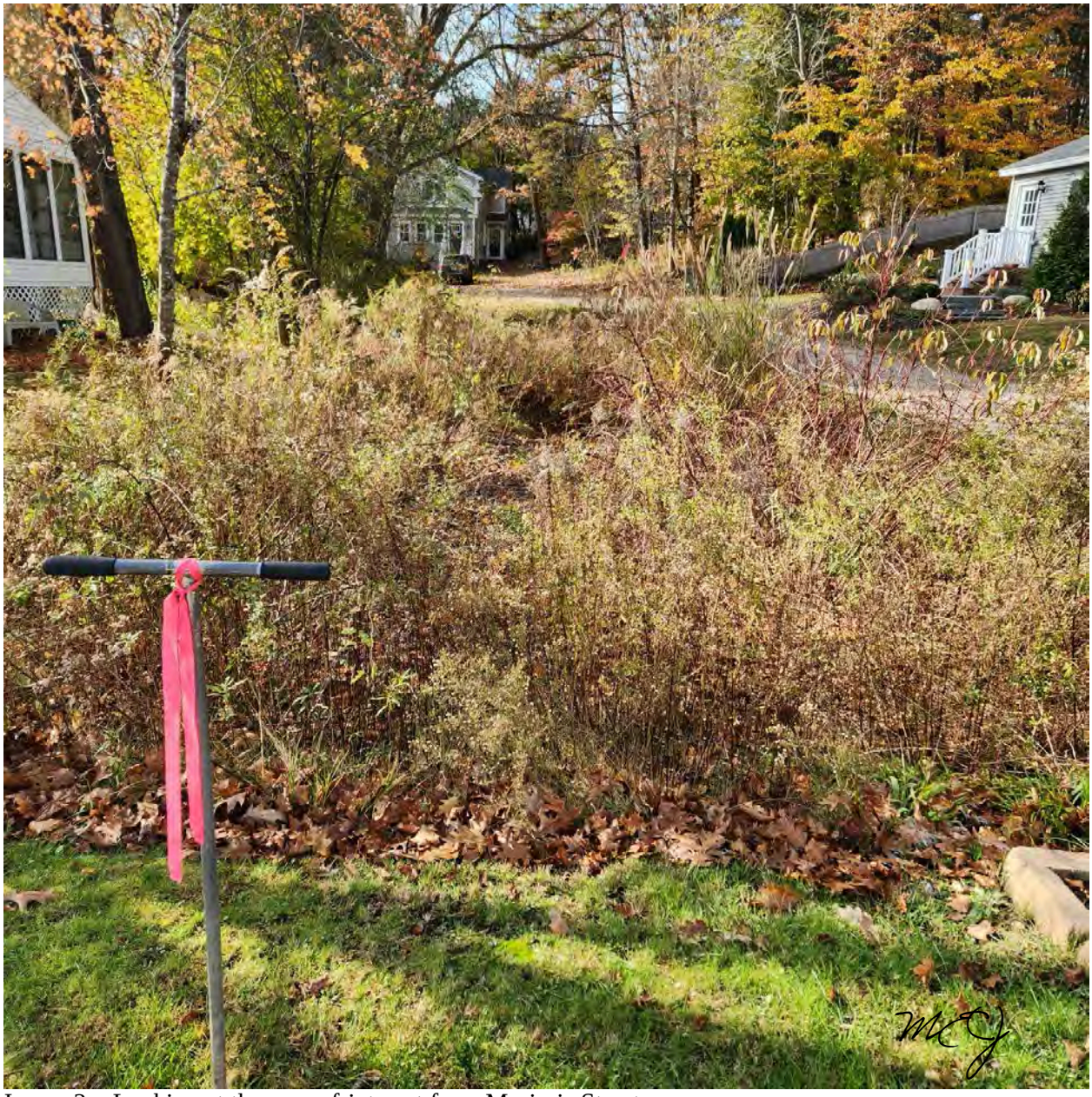


Image 2 – Looking at the area-of-interest from Marjorie Street.

May 28, 2025

100 International Drive, Suite 152, Portsmouth, NH 03801
Tel: 603.431.3937

Samantha Collins, Chair
City of Portsmouth Conservation Commission
City of Portsmouth, NH
1 Junkins Avenue, 3rd Floor
Portsmouth, NH 03801

Re: **Wetland Conditional Use Permit Application Package**
Coakley Road EV Charging 1, LLC Electric Vehicle Charging Station Development
Port Inn and Suites
505 US-1 Bypass, Portsmouth, NH 03801

Dear Ms. Collins:

Weston & Sampson Engineers, Inc. (Weston & Sampson) is submitting this Wetland Conditional Use Permit Application Package to be filed with the City of Portsmouth Planning Board and Conservation Commission for the above-mentioned project on behalf of New Leaf Energy d/b/a Coakley Road EV Charging 1, LLC (the Applicant). The project parcel is located at 505 US-1 Bypass (Map-Lot 0234-0005-0000) in Portsmouth, New Hampshire, and is owned by GIRI PORTSMOUTH 505 LLC. The project parcel is located in the Gateway Corridor (G1) zoning district. The proposed project involves the installation of four (4) dual-port electric vehicle (EV) charging stations, for a total of eight (8) charging spaces (with 1 ADA space), and associated electric equipment at an existing commercial property.

Filing Details

In support of this Wetland Conditional Use Permit Application Package, we have attached one (1) physical copy of the following supporting materials (application package was also submitted online via ViewPoint Cloud):

- Attachment A: Wetland Conditional Use Permit Application Checklist
- Attachment B: Project Narrative & Analysis Criteria Response
- Attachment C: Design Plans
- Attachment D: Site Photos
- Attachment E: Wetland Delineation Report
- Attachment F: Owner Authorization Form
- Fee Checks
    - As estimated by ViewPoint Cloud online permitting system and paid online

Should you have any further questions or require any additional information, please feel free to contact us by phone at (978) 532-1900 or by email at mauserr@wseinc.com.

Sincerely,
WESTON & SAMPSON ENGINEERS, INC.

Rebecca Mauser-Hoye, PE, CEA
Project Manager

Devin Herrick, CWS
Technical Specialist I

cc: Jonathan Salsman, PE – New Leaf Energy

Weston & Sampson

westonandsampson.com

100 International Drive, Suite 152
Portsmouth, NH 03801
tel: 603.431.3937

Wetland Conditional Use Permit

May 2025

PORT INN AND SUITES
505 US-1, PORTSMOUTH, NH
ELECTRIC VEHICLE CHARGING STATION

PREPARED FOR:
NEW LEAF ENERGY

SUBMITTED TO:
City of Portsmouth Conservation Commission
City of Portsmouth Planning Board

Attachment A - Wetland Conditional Use Permit Application Checklist

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: Coakley Road EV Charging 1, LLC Date Submitted: May 28, 2025

Application # (in City's online permitting): LU-25-66

Site Address: 505 US-1 Bypass, Portsmouth, NH 03801 Map: 0234 Lot: 0005

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
X	Complete application form submitted via the City's web-based permitting program	ViewPoint Cloud Online Land Use Application LU-25-66
X	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	ViewPoint Cloud Online Land Use Application LU-25-66. 2 Hard copies delivered to Planning Dept. on May 28, 2025

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
X	Basic property and wetland resource information. **(10.1017.21)**	Project Narrative - Page 5, Attachment C - Site Plans & Attachment E - Wetland Delineation Report
X	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	Project Narrative - Page 6-7
X	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	Project Narrative - Page 7
X	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Project Narrative - Page 7

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
X	Wetland buffer enhancement plan. **(10.1017.25)**	Project Narrative - Page 8 & Attachment C - Site Plans
N/A	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	Project is not within a tidal wetland or tidal wetland buffer
X	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	Project Narrative - Page 9
X	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	Project Narrative - Page 9
X	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	Project Narrative - Page 9-10
N/A	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	No new pavement is proposed within the wetland buffer. Impervious within buffer is reduced.
N/A	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	No porous pavement is proposed
X	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	Attachment C - Site Plans
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
X	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	See Cover Letter and Project Narrative
N/A	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	Project does not required a NHDES Stand Dredge and Fill Permit

Applicant's Signature: _____ **Date:** 5/27/25

Attachment B - Project Narrative

PROJECT NARRATIVE

Introduction

Coakley Road EV Charging 1, LLC (the Applicant) proposes the installation of four (4) dual-port electric vehicle chargers, for a total of eight (8) EV charging spaces with one (1) ADA space and associated electric equipment at an existing commercial property. The project limit of work encompasses approximately 0.18 acres of the approximately 2.56-acre site, located at 505 US-1 Bypass, Portsmouth, New Hampshire (Map-Lot 0234-0005-0000). The project site is located in the Gateway Corridor (G1) zoning district. The property is not located within any overlay districts according to the publicly available mapping layers on the Portsmouth GIS site.

The property currently includes two hotel buildings, impervious bituminous concrete driveway and parking spaces, and a grassed median that also includes a concrete recreational pool area. The site is bounded by Coakley Road to the north, Borthwick Avenue to the south, and US Route-1 Bypass and a car dealership to the east. Hodgson Brook runs southeasterly along the southern boundary of the site. Another commercial hotel property is located to the east of the project property and on the other side of Hodgson Brook.

Hodgson Brook and its associated wetland resource areas are located near the property site according to the City of Portsmouth Wetland Buffers layer on their GIS site. A Weston & Sampson NH Certified Wetland Scientist (CWS), trained in the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) conducted a wetland delineation on May 16, 2025. The CWS observed the following jurisdictional wetland resources at the site subject to (or potentially subject to) regulation under RSA 482-A Fill and Dredge in Wetlands. The Wetland Delineation Report is included in this application package as Attachment E:

- Nontidal (Freshwater) Wetland
- Bank – Perennial Stream / River

The Hodgson Brook wetland areas extend partially into the property boundary along the western boundary, but not within the limit of work. The 100-foot wetland buffer, the 40-foot[1] Vegetated Buffer Strip, and the 50-foot and 75-foot Limited Cut Areas from both the nontidal wetland and the Hodgson Brook extend into the project site limit of work.

This Wetland Conditional Use Permit Application Package was submitted online via ViewPoint Cloud on May 28, 2025 as a single PDF document. Two (2) hard copies of the Application Package were transmitted to the City of Portsmouth Planning Department on May 28, 2025. One hard copy is for the Portsmouth Conservation Commission and the other for the Portsmouth Planning Board. The following Wetland Conditional Use Permit application package is hereby submitted to the Planning Department as required by Section 10.240 of the City of Portsmouth, New Hampshire Zoning Ordinance adopted December 21, 2009 ("the Ordinance") in accordance with Sections 10.1017 and 10.1018 of the Ordinance.

Proposed Project

The project pacel is owned by GIRI PORTSMOUTH 505 LLC. The project is classified in the City of Portsmouth, New Hampshire Zoning Ordinance, adopted December 21, 2009 (the "Zoning Ordinance"), as an Accessory Use - "EV Fueling Space B". The project is permitted in the G1 zoning district via a Conditional Use Permit (CUP) granted by the Planning Board according to Section 10.440 Table of Uses Accessory Use 19.70 EV Fueling Space B in the Zoning Ordinance.

As currently designed, the proposed project includes the installation of four (4) EV charging stations, for a total of eight (8) charging spaces with one (1) ADA space in the existing parking lot of the Port Inn and Suites. The EV chargers will be Level 3 chargers that will be publicly accesible for both hotel guests and the general public.

[1] *Per Ordinance Section 10.1018.22, the slope of the Hodgson Brook is greater than 10% for at least 10 feet in the direction perpendicular to the edge of the jurisdictional area. The required width of the Vegetated Buffer Strop shall be 40-feet from the edge of the wetland (top of bank was used) instead of the 25-foot buffer.*

The project will involve the installation of EV charging towers, trenching for electric utility, and installation of required electrical equipment such as transformers and associated equipment pads and overhead utility poles.

The proposed project will not change the traffic flow in or out of the site. The project is proposed in an area that is currently paved/impervious and is currently being used for parking (though the area is not striped). Please see the site photos included in Attachment D.

The project is proposed on land that is already developed and requires limited development in open space (i.e., approximately 173 sf of development for the transformer/concrete equipment pads). The project proposes returning an area of approximately 958 sf that is currently asphalt pavement back to grassed area, increasing the natural buffer for Hodgson Brook. In total, the project will return a net total of 785 sf from impervious back to pervious. This will allow impervious area to be located further away from the Hodgson Brook than existing conditions. Removing existing pavement will enhance the wetland buffer by increasing vegetated area immediately adjacent to Hodgson Brook.

The following table provides a summary of the permanent and temporary impacts proposed as part of the project, within the limit of work:

Table 1 Proposed Impacts

100-ft Buffer Zone			
Type of Impact	Temporary Impact	Permanent Impact	Total Impacts
Return existing pavement to pervious (grassed area)	0	958	958
Electrical trenching (returned to existing conditions)	303	0	303
Concrete Equipment Pad Installation	0	173	173
Cumulative	303 SF	1131 SF	1434 SF
Net Gain Pervious Area	-	785 SF	785 SF
40-ft Vegetated Buffer Strip[2]			
Type of Impact	Temporary Impact	Permanent Impact	Total Impacts
Return existing pavement to pervious (grassed area)	0	958	958
Electrical trenching (returned to existing conditions)	179	0	179
Concrete Equipment Pad Installation	0	0	0
Cumulative	179 SF	958 SF	1137 SF
50-ft and 75-ft Limited Cut Area[2]			
Type of Impact	Temporary Impact	Permanent Impact	Total Impacts
Return existing pavement to pervious (grassed area)	0	958	958
Electrical trenching (returned to existing conditions)	63	0	63
Concrete Equipment Pad Installation	0	0	0
Cumulative	63 SF	958 SF	1021 SF

1. *Permanent impacts are characterized by areas within the Limit of Work which will result in changes to the substrate or changes in grade. Temporary impacts are characterized by areas within the Limit of Work which will return to the same substrate type and grade upon completion of the work.*

2. *Per section 10.1018.22 of the Zoning Ordinance, the 50-ft Limited Cut Area is based off the Inland Wetland and the 75-ft Limited Cut Area is based off the Non-Tidal perennial stream of river. Please see Footnote 1 for information regarding the 40-ft Vegetated Buffer Strip.*

On behalf of the developer, Weston & Sampson has developed a set of plans (Attachment C) that are intended to meet requirements set forth in the Ordinance for the G1 zoning district in which the project is proposed. Below is a summary of the parking and loading space aspects of the project:

Table 2 Parking and Loading Spaces:

Dimension	Existing	Proposed
Number of Parking Spaces	57	Removal of 1 space Addition of 8 EV (with 1 ADA) Spaces Total Spaces = 64
Number of Loading Spaces	0	0

Below is a summary of the dimensional aspects of the project:

Table 3 Dimensional and Density Regulations:

Requirements	Existing	Proposed
Minimum Frontage	Unchanged	Unchanged
Front Yard Setback [1,2]	8' 3"	10'
Minimum Side Yard Setback	Unchanged	Unchanged
Minimum Rear Yard Setback	Unchanged	Unchanged
Maximum Building Height	Unchanged	Unchanged

1. *Existing setbacks measured from the property line to the closest hotel building onsite. Please consider that the Port Inn & Suites was constructed in 1955 and thus may not comply with the current lot standards in the G1 zoning district.*
2. *Proposed setbacks measured from the property line to the nearest structure which is the transformer concrete equipment pad. Please note the proposed electrical equipment will be screened with a vegetative buffer.*

Project Representatives

The name of the Site Owner is:

GIRI PORTSMOUTH 505 INC.
2300 Crown Colony Drive, Suite 203
Quincy, MA 02169
Contact: Ashish Sangani

The name of the Project Developer & Applicant is:

Coakley Road EV Charging 1 LLC
55 Technology Drive, Suite 102
Lowell, MA 01851
Contact: Ilan Gutherz
Phone: (978) 483-0037
Email: igutherz@newleafenergy.com

The name and contact information of the Engineer authorized to represent the Project Developer:

Weston & Sampson Engineers, Inc.
100 International Drive, #152
Portsmouth, NH 03801
Contact: Rebecca Mauser-Hoye, P.E., CEA
Phone: (603) 570-6308
e-mail: mauserr@wseinc.com

Project Schedule

The following is an estimated schedule related to permitting and construction of this project.

Construction: August 2025 – October 2025

The developer is planning to start construction following receipt of all permits as early as July/August 2025 with a construction completion date of October 2025.

Wetland Conditional Use Permit Application Instructions

The following information is requested in the Wetland Conditional Use Permit Application Instructions. The location of the requested information within the application package is listed below the bullet point in italicized font:

- Description of site and proposed construction
  - *Project Narrative – Proposed Project*
- Total area of inland wetland or vernal pool (both on and off the parcel)
  - *Total area of inland wetland (both on and off the parcel): 455,698 sf (from Portsmouth GIS)*
  - *Total area of vernal pool: Not applicable*
- Impacted jurisdictional Area(s) (i.e. vernal pool, inland wetland, inland wetland buffer, tidal wetland or tidal wetland buffer)
  - *Impacted jurisdictional area: inland wetland buffer*
- Distance of proposed structure or activity to the edge of wetland
  - *Distance of proposed structure or activity to the edge of wetland: 11 ft*
- Total wetland area and/or wetland buffer area on the lot
  - *Total wetland area on the lot: 24,232 sf (Updated based on May 16, 2025 wetland delineation)*
  - *Total 100-Foot wetland buffer on the lot: 74,993 sf (Updated based on May 16, 2025 wetland delineation)*
  - *Total Limited Cut Area on the lot: 60,562 sf*
  - *Total Vegetated Buffer Strip Area on the lot: 44,577 sf*
- Total wetland area and/or wetland buffer area to be disturbed on the lot (based on amount of limit of work within the identified buffer)
  - *Total wetland area to be disturbed on the lot: 0 sf*
  - *Total 100-foot wetland buffer area to be disturbed on the lot: 7,966 sf*
  - *Total 50-foot and 75-foot Limited Cut Area to be disturbed: 6,147 sf*
  - *Total 40-foot Vegetated Buffer Strip to be disturbed: 3,561 sf*
  - *See Table 1 above for permanent versus temporary impacts*
- Project representatives – names and contact information
  - *Project Narrative – Proposed Project*
- Plans meeting the requirements of Section 101.1017.20 of the Zoning Ordinance
  - *Attachment C*

The applicant understands that the Planning Board or Conservation Commission may require the opinion of a qualified independent Certified Wetland Scientists and may seek their services. The applicant understands that they will be culpable for the cost of this independent review.

The applicant understands that a site walk can be requested by either the applicant or the commissioner and stakes or markers should be placed to show the location of proposed changes to the property prior to the site walk.

The applicant is committed to installing permanent wetland boundary markers, as requested by the City, which will be installed along the delineated wetland boundary once construction is completed.

Compliance with Bylaws

Provisions of the Ordinance relating to the project, followed by an analysis of the project's compliance with applicable provisions (in underlined font), are listed below. The outlined regulations represent an analysis primarily applicable to Section 10.1017 Conditional Uses and 10.1018 Stormwater Standards of the Ordinance.

City of Portsmouth, New Hampshire Zoning Ordinance
Section 10.1017 Conditional Uses

10.1017.10 General

The Planning Board is authorized to grant a conditional use permit for any use not specifically permitting in Section 10.1016.10, subject the procedures and findings are set forth herein.

Acknowledged.

10.1017.20 Application Requirements

10.1017.21 The application shall be in a form prescribed by the Planning Board, and shall include the following information:

(1) Location and area of lot and proposed activities and uses;

See site plans included in Attachment C.

(2) Location and area of all jurisdictional areas (vernal pool, inland wetland, tidal wetland, river or stream) on the lot and within 250 feet of the lot;

See site plans included in Attachment C and Wetland Delineation Report included in Attachment E. Jurisdictional areas in proximity to and/or on the lot include: 1) Nontidal (Freshwater) Wetland located to the north of the lot and 2) Bank – Perennial Stream/River located to the west of the lot, associated with the Hodgson Brook.

(3) Location and area of wetland buffers on the lot;

See site plans included in Attachment C and Wetland Delineation Report included in Attachment E. The 100-foot wetland buffer, the 40-foot Vegetated Buffer Strip, and the 50-foot and 75-foot Limited Cut Areas are located within the lot and are shown on the attached plans.

(4) Description of proposed construction, demolition, fill, excavation, or any other alteration of the wetland or wetland buffer;

See Project Narrative – Proposed Project.

(5) Setbacks of proposed alterations from property lines, jurisdictional areas and wetland buffers;

See Project Narrative – Table 3 Dimensional and Density Regulations for proposed alterations from property lines. See Project Narrative - Wetland Conditional Use Permit Application Instructions for jurisdiction areas and wetland buffers (also noted above in Sections (2) and (3)).

(6) Location and area of wetland impact, new impervious surface, previously disturbed upland;

See site plans included in Attachment C and Table 1 in the Project Narrative for location and area of wetland buffer impacts.
Wetland Impacts: Wetland impacts are not proposed as part of the project.
New Impervious Surface: Approximately 173 sf of concrete equipment pads are proposed in existing grass cover in the median in the parking lot.
Previously Disturbed Uplands: The proposed project is located entirely within previously disturbed upland areas. The project proposed to reduce impervious cover within the wetland buffer and returns a current paved area of approximately 958 sf to pervious grass.

(7) Location and description of existing trees to be removed, other landscaping, grade changes, fill extensions, rip rap, culverts, utilities;

The project does not propose to remove any trees or landscaping apart from the 173 sf of equipment and transformer pads proposed in the existing grassed median.
The project does not propose grade changes, fill extensions, riprap, or culverts.
The project proposes to install an underground electrical conduit from the equipment pads to the charging stations. The trench will be a temporary impact within the existing paved area and will be returned to pavement following construction. A new riser pole is proposed along Coakley Road to tie in the existing electric utility to the site, via an overhead line.
Four (4) EV charging stations will be installed within the limit of work and existing paved area.

(8) Dimensions and uses of existing and proposed buildings and structures.

The existing buildings and structures will not be affected by this project. This project does not propose any buildings. See the site plans included in Attachment C for dimensions of the proposed project.

(9) Any other information necessary to describe the proposed construction or alteration.

See the Project Narrative.

10.1017.22 Where the proposed project will involve the temporary or permanent alteration of more than 250 sq. ft. of wetland and/or wetland buffer, the application shall provide information about the affected wetland and wetland buffer as follows:

(1) Up to 1,000 sq. ft. of alteration to the wetland: a wetland characterization that describes the type of wetland (e.g., emergent, scrub-shrub, forested), the percent of invasive species, and whether the wetland is seasonally flooded.

The project does not propose any alteration to the wetland resource itself.

(2) More than 1,000 sq. ft. of alteration to the wetland: a functions and values assessment equivalent to the model set forth in Appendix A of The Highway Methodology Workbook Supplement – Wetland Functions and Values: A Descriptive Approach, NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999, as amended.

The project does not propose any alteration to the wetland resource itself.

(3) More than 250 sq. ft. of alteration to the wetland buffer (regardless of the amount of alteration to the wetland): a description of the 100-foot buffer including vegetation type, the percent of the buffer with invasive species, and the percent of the buffer that is paved or developed.

The project proposes approximately 7,966 sf of alteration to the wetland buffer. The 100-foot buffer extends quite far onto the project property.

The vegetation type observed within the wetland and stream buffer was a mix of herbaceous, shrub, and tree cover. Within the limit of work, vegetation was limited to areas of maintained grass and landscape plantings were on hotel property.

Invasive species observed within the wetland and stream buffer included glossy buckthorn, multi-flora rose, and Asiatic bittersweet. Within the limit of work, no invasive species were observed (0% of limit of work).

Within the limit of work, 78.5% of the 100-foot wetland and stream buffer is paved/impervious.

10.1017.23 The application shall describe the impact of the proposed project with specific reference to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way), and shall demonstrate that the proposed site alteration is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Ordinance.

See the compliance analysis for Section 10.1017.50 below.

10.1017.24 Where feasible, the application shall include removal of impervious surfaces at least equal in area to the area of impervious surface impact. The intent of this provision is that the project will not result in a net loss of pervious surface within a jurisdictional wetland buffer. If it is not feasible to remove impervious surfaces from the wetland buffer at least equal in area to the area of new impervious surface impact, the application shall include a wetland buffer enhancement plan that describes how the wetland functions and values will be enhanced to offset the proposed impact.

The project proposes a reduction of impervious surfaces within the wetland buffer. Approximately 958 sf of existing paved area is proposed to be returned to pervious grass cover between the proposed project and the wetland, within the 100-ft buffer.

The project proposes approximately 173 sf of new impervious area, which includes the concrete equipment pads within the grassed median, located further from the wetland than the returned pervious area.

Ultimately the project proposes to return a net total of 785 sf of impervious area to pervious area. The project ensures there is a net gain of pervious surface within the jurisdictional wetland buffer. Therefore, a wetland buffer enhancement plan is not required for the project.

10.1017.25 A wetland buffer enhancement plan shall be designed to enhance the functions of the jurisdictional wetland and/or wetland buffer on the lot, and to offset the impact of the proposed project.

(1) The wetland buffer enhancement plan shall include a combination of new plantings, invasive species removal, habitat creation areas, improved site hydrology, or protective easements provided offsite.

The project proposes a net gain of pervious surface for the site by returning a portion of existing impervious pavement to grass cover, therefore a wetland buffer enhancement plan is not required for the project. The returned area is located between the project and the wetland. The project proposes development only in currently developed upland areas. See the site plans located in Attachment C. Additional plantings could potentially be installed at the City's request.

(2) Where the vegetated buffer strip contains grass or non-native plantings, or is otherwise not intact, the first priority of the wetland buffer enhancement plan shall be to include revegetation of the vegetated buffer strip with native, low-maintenance shrubs and other woody vegetation.

The vegetated buffer (and new pervious area) between the project and the wetland resource could potentially be vegetated with native, low-maintenance shrubs and other woody vegetation, at the City's request.

10.1017.26 Where the proposed project involves a use, activity or alteration in a tidal wetland or tidal wetland buffer, the application shall include a living shoreline strategy to preserve the existing natural shoreline and/or encourage establishment of a living shoreline through restoration, as applicable. Said living shoreline strategy shall be implemented unless the Planning Board determines that it is not feasible.

The project does not involve activity within a tidal wetland or tidal wetland buffer.

10.1017.50 Criteria for Approval
Any proposed development, other than installation of utilities within a right-of-way, shall comply with all of the following criteria:

(1) The land is reasonably suited to the use, activity or alteration.

The proposed use is essentially parking spaces, which are currently located on the project parcel. The proposed location for the EV charging spaces is currently paved and is currently being used for parking as seen in the site photos included in Attachment D.

(2) There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

The majority of the parking for the second hotel building is currently located within the wetland buffer. The project is proposed in an area already paved and used for parking.

Areas within the parcel boundary, outside the wetland buffer, are already improved by parking, driveways, and the first hotel building.

(3) There will be no adverse impact on the wetland functional values of the site or surrounding properties;

The proposed area for the project is already paved and the proposed project will not impact the wetland or surrounding properties.

(4) Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals; and

The project proposes a net gain in pervious area within the wetland buffer. Alteration to the existing natural vegetation and woodland is not proposed.

(5) The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.

The proposed project does not propose negative impact to areas and environments under the jurisdiction of this Section.

(6) Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

Approximately 785 sf of wetland buffer will be returned to a natural state.

Section 10.1018 Performance Standards

10.1018.10 Stormwater Management

All construction activities and uses of buildings, structures, and land within wetlands and wetland buffers shall be carried out so as to minimize the volume and rate of stormwater runoff, the amount of erosion, and the export of sediment from the site. All such activities shall be conducted in accordance with Best Management Practices for stormwater management including but not limited to:

1. New Hampshire Stormwater Manual, NHDES, current version.
2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.

All construction activities, uses of buildings, structures, and land within wetlands and wetland buffers will be carried out according to all applicable Federal, State, and Local regulations including those listed above.

Please note, the existing catch basin (CB1), located between the limit of work and Hodgson Brook, to the west of the project site, will not be removed or altered. The opening in the bituminous curb, located upgradient of CB1, will remain. Alterations to the existing stormwater structures and/or new stormwater structures are not proposed as part of the project.

10.1018.20 Vegetation Management

10.1018.22 If the vegetated buffer strip specified in Section 10.1018.21 contains an area that has a slope of 10% or more for at least 10 feet in a direction perpendicular to the edge of the jurisdictional area, the required width of the vegetated buffer strip shall be increased to 55 feet from the edge of a vernal pool and to 40 feet from the edge of any other wetland.

Please see Footnote 1. The Vegetated Buffer Strip was increased to 40-feet from the top of bank of Hodgson Brook and the freshwater wetland.

10.1018.23 Removal or cutting of vegetation:

(1) Chemical control of vegetation is prohibited in all areas of a wetland or wetland buffer.

The project will not use chemical control of vegetation.

(2) The removal or cutting of vegetation is prohibited in a wetland or vegetated buffer strip, except that non-chemical control of plants designated by the State of New Hampshire as "New Hampshire Prohibited Invasive Species" is permitted.

The project does not propose removal or cutting of vegetation within the wetland or vegetated buffer strip.

The project does propose approximately 173 sf of removal of grass from the grassed median.

(3) The removal of more than 50% of trees greater than 6" diameter at breast height (dbh) is prohibited in the limited cut area.

The project does not propose the removal of any trees.

10.1018.24 Fertilizers

(1) The use of any fertilizer is prohibited in a wetland, vegetated buffer strip or limited cut area.
(2) The use of fertilizers other than low phosphate and slow release nitrogen fertilizers is prohibited in any part of a wetland buffer.

The project does not propose the use of any fertilizers.

10.1018.25 Pesticides and herbicides:

The use of pesticides or herbicides is prohibited in a wetland or wetland buffer, except that application of pesticides by a public agency for public health purposes is permitted.

The project does not propose the use of pesticides or herbicides.

10.1018.30 Porous Pavement in Wetland Buffer

10.1018.31 All new pavement installed in a wetland buffer shall be porous pavement. The Planning Board may allow exceptions to this requirement where it can be demonstrated that the height of ground water, condition of soil, or other factors as described in the application are not appropriate for porous pavement.

No new pavement is proposed within the wetland buffer.

Trenching for the electric conduit within the existing pavement will be conducted between the equipment pads and the charging stations. The trench is expected to be approximately 3-feet wide and 101-feet long, for a total of 303 sf. Following construction, the trench will be paved to match pre-existing conditions.

173 sf of concrete equipment pad is proposed within the grassed median for the installation of electrical appurtenances required to support the EV charging stations.

10.1018.32 An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan addressing erosion control, periodic removal of sediment and debris from the porous surfaces, snow management, and repairs.

The project does not propose any porous pavement.

10.1018.40 Wetland Boundary Markers

Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction.

See the site plans included in Attachment C and the Wetland Delineation Report in Attachment E.

Attachment C - Design Plans

PERMIT SET

PORT INN AND SUITES
505 US-1, PORTSMOUTH, NH 03801
ELECTRIC VEHICLE CHARGING STATION

GENERAL NOTES

1. AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE THE EPC PROVIDER HIRED BY THE SYSTEM/PROJECT OWNER.
2. WHEN THERE IS A CONFLICT BETWEEN THESE GENERAL NOTES AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, LOCAL ELECTRICAL CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK AND THOSE CODES AND STANDARDS LISTED IN THESE DRAWINGS.
4. THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A CONSTRUCTION LEVEL DESIGN AND ASSOCIATED DRAWINGS AND DETAILS.
5. COORDINATE THESE DRAWINGS WITH SPECIFICATIONS AND MANUFACTURER INSTALLATION AND OPERATION MANUALS.
6. UNLESS OTHERWISE NOTED, THE DESIGN REPRESENTED ON THESE PLANS IS BASED ON THE INFORMATION AND CRITERIA LISTED IN THE "BASIS OF DESIGN" SECTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH INFORMATION IN PREPARATION OF THE CONSTRUCTION DESIGN.
7. THE EXISTING CONDITIONS REPRESENTED ON THESE PLANS ARE BASED ON PUBLICLY AVAILABLE INFORMATION AND THE SITE DISCOVERY SUMMARIZED IN THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF SUCH INFORMATION AND SUPPLEMENT WITH ANY ADDITIONAL REQUIRED INFORMATION.
8. UNLESS INDICATED AS EXISTING (E), ALL PROPOSED MATERIALS AND EQUIPMENT SHALL BE CONSIDERED TO BE NEW.
9. ALL EQUIPMENT AND COMPONENTS SHALL BE MOUNTED IN COMPLIANCE WITH THE MANUFACTURER'S REQUIREMENTS, CONSTRUCTION DETAILS, AND/OR PRUDENT INDUSTRY STANDARDS.
10. TO THE EXTENT THAT TREES AND OTHER FEATURES AFFECT THE SYSTEM'S INSTALLATION, THEY WILL BE REMOVED AN REPLACED WITH LIKE-KIND WHEN POSSIBLE. IF NOT POSSIBLE CONTRACTOR TO DISCUSS SOLUTIONS WITH SITE OWNER

PROJECT SCOPE

THIS PROJECT CONSISTS OF THE INSTALLATION OF AN ELECTRIC VEHICLE CHARGING STATION PER THE SYSTEM DESCRIPTION, BELOW. THE CHARGERS WILL BE INSTALLED AS SHOWN IN THE SITE PLANS ATTACHED. THE ELECTRIC VEHICLE CHARGING STATION WILL BE INTERCONNECTED WITH ITS OWN SEPARATE ELECTRICAL SERVICE.

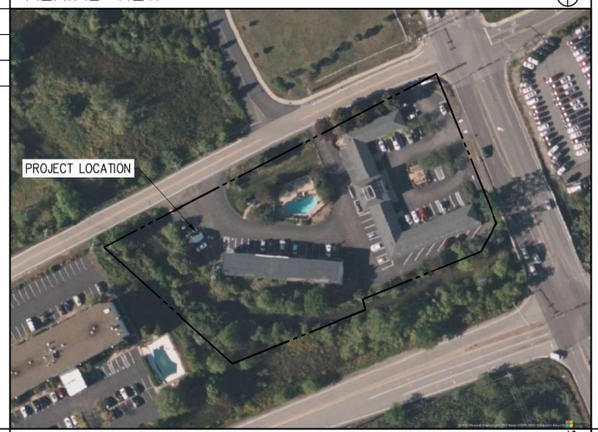
SYSTEM DESCRIPTION

NUMBER OF CHARGING STATIONS	4
NUMBER OF CHARGING SPACES (TOTAL)	8
ACCESSIBLE CHARGING SPACES	1

*REFER TO ELECTRICAL DRAWINGS FOR SYSTEM SPECIFICATIONS.

LOCATION MAP

AERIAL VIEW



DRAWING LIST

SHEET NUMBER	SHEET TITLE
T-1.0	TITLE PAGE
SURVEY	
1 OF 1	LIMITED ALTA/NSPS LAND TITLE SURVEY
CIVIL	
C-1.0	OVERALL PLAN
C-2.0	SITE PREPARATION AND DEMOLITION PLAN
C-2.1	SITE PLAN
C-5.0	CIVIL DETAILS
C-5.1	CIVIL DETAILS
ELECTRICAL	
E-0.0	ELECTRICAL NOTES
E-1.0	AC SINGLE LINE DIAGRAM
E-2.0	PLAN DETAILS
E-3.0	ELECTRICAL SCHEDULES

APPLICABLE CODES AND STANDARDS

ALL WORK SHALL COMPLY WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY AUTHORITY HAVING JURISDICTION:
NH STATE BUILDING CODE
NH STATE ELECTRICAL CODE
NH FIRE PREVENTION REGULATIONS
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC 360)
AMERICAN CONCRETE INSTITUTE
AMERICANS WITH DISABILITIES ACTS DESIGN STANDARDS (ADADS)
2010 ADA DESIGN STANDARDS
U.S. ACCESS BOARD DESIGN RECOMMENDATIONS FOR ACCESSIBLE ELECTRIC VEHICLE CHARGING STATIONS TECHNICAL ASSISTANCE DOCUMENT
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
UL (UNDERWRITERS LABORATORIES, INC.) STANDARDS
CITY OF PORTSMOUTH ZONING BYLAWS

PROJECT DIRECTORY

SYSTEM / PROJECT OWNER
COAKLEY ROAD EV CHARGING 1, LLC

LAND OWNER / HOST
GIRI PORTSMOUTH 505 INC.

AUTHORITY HAVING JURISDICTION
CITY OF PORTSMOUTH
1 JUNKINS AVE, PORTSMOUTH, NH 03801

UTILITY
EVERSOURCE

APPLICANT
FIRM: COAKLEY ROAD EV CHARGING 1, LLC
CONTACT: JONATHAN SALSMAN, PE
PHONE: (800) 818-5249

CIVIL ENGINEER
FIRM: WESTON & SAMPSON ENGINEERS, INC.
CONTACT: JEFFREY W. SANTACRUCE, PE PTOE
PHONE: (978) 532-1900

ELECTRICAL ENGINEER
FIRM: LIG CONSULTANTS
CONTACT: TONY MORREALE, PE
PHONE: (508) 381-3371

BASIS OF DESIGN

ALTA/NSPS LAND TITLE SURVEY:
NORTHEAST SURVEY CONSULTANTS
FEBRUARY 7, 2025

WETLAND DELINEATION REPORT:
WESTON & SAMPSON ENGINEERS, INC.
MAY 2025

new leaf energy
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 808-4273
FAX: (888) 943-6778
WWW.NEWLEAFENERGY.COM

NOT FOR CONSTRUCTION

Weston & Sampson
Weston & Sampson Engineers, Inc.
150 Dow Street, Tower 4, Suite 350
Manchester, NH 03101
978.532.1900 800.SAMPSON
www.westonandsampson.com

STATE OF NEW HAMPSHIRE
JEFFREY W. SANTACRUCE
No. 10650
LICENSED PROFESSIONAL ENGINEER

Jeffrey W Santacruce

PORT INN AND SUITES
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER:
ENG24-1702

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
0	04/23/25	RWG	JWS	ISSUED FOR PERMITTING
1	05/09/25	RWG	JWS	REVISED FOR PERMITTING
2	05/28/25	RWG	JWS	REVISED FOR PERMITTING

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

T-1.0
TITLE PAGE

TITLE EXCEPTIONS:

The following exceptions are derived from a commitment for title insurance prepared by Stewart Title Guaranty Company, commitment #2392151, commitment date 8-7-2024.

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I – Requirements are met. **(not a survey matter)**
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof. **(not a survey matter)**
3. Discrepancies, conflicts in boundary lines, shortages in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records. **(see Significant Observations for any such matters found by this survey)**
4. Liens for taxes and assessments, which become due and payable subsequent to the date of the commitment. **(not a survey matter)**
5. IF THE INSURED PREMISES IS A CONDOMINIUM UNIT: Covenants, conditions, restrictions, reservations, easements, liens for assessments, options, powers of attorney, and limitations on title, created by the laws of the State of the insured premises or set forth in the Master Deed or Declaration of Condominium, in the related By-Laws, in the Declaration of Trust, or Site Plans and Floor Plans as duly recorded in the appropriate land records office and as the same may have been lawfully amended, and in any instrument creating the estate or interest insured by this policy. **(not a survey matter)**
6. Any inaccuracy in the area, square footage, or acreage of land described in Schedule A. The Company does not insure the area, square footage, or acreage of the land. **(not a survey matter)**
7. Water and sewer easements referred to or set forth in instruments recorded in the Rockingham County Registry of Deeds in Book 1314, Page 221. **(plotted)**
8. Utility Easement granted to New Hampshire Electric Cooperative and New England Telephone & Telegraph Company by instrument recorded at Book 1318, Page 452 of the Rockingham County Registry of Deeds. **(not plottable due to vague description)**
9. Terms and conditions of the condemnation proceedings instituted by the United States of America for the purpose of establishing a perpetual drainage easement as set forth in an instruments recorded in the Rockingham County Registry of Deeds in Book 1533, Page 216 and Book 3107, Page 950. **(plotted)**
10. Utility Easement to the State of New Hampshire as evidenced by instrument recorded at Book 2569, Page 1557 of the Rockingham County Registry of Deeds. **(not plottable due to vague description; generally covers right to install traffic signals on locus; generally area impacted is called out)**
11. Terms and conditions of Cable Television Installation and Service Agreement as set forth in an instrument recorded in the Rockingham County Registry of Deeds in Book 2769, Page 2271. **(not a survey matter)**
12. Notes, rights of way, rights, easements, restrictions, covenants, conditions and other matters depicted on a Plan recorded in the Rockingham County Registry of Deeds in Plan Number D-30041. **(said plan was used in the preparation of this survey)**
13. Commercial Mortgage, Security Agreement and Assignment of Leases and Rents from Girl Portsmouth 505 Inc to Kennebunk Savings Bank dated July 10, 2019 in the original principal amount of $5,912,000.00, recorded with said Registry at Book 6015, Page 2244. **(not a survey matter)**

SURVEY NOTES:

1: The ALTA/NSPS certification given hereon is limited to the proposed facility and access and does not cover the entire locus parcel.
2: Field survey by EDM Total Station, RTK GPS & RTK Drone.
3: The horizontal datum of this plan is the New Hampshire Coordinate System North American Datum 1983 (2011), the vertical datum is North American Vertical Datum 1988, both are based on RTK GPS observations taken on site.
4: According to Federal Emergency Management Agency maps, the entire locus parcels are located in areas designated as "Zone X" (areas of minimal flooding, no shading). Community Panel No. 33015C 0259 F – Effective Date: 1/29/2021.
5: A zoning report or letter was not provided to the surveyor, all zoning information given hereon is taken from the City of Portsmouth website. The locus parcel and all abutting parcels are located in the Gateway Corridor (G1) zoning district.
6: The locations of utility structures shown hereon are from observed field evidence only, this plan may not depict the exact location of underground utilities & does not show all of the utilities which exist within the premises surveyed. Please contact dig-safe at 1-888-344-7233 before excavation.
7: At the time of the ALTA survey there was no observed evidence of active earth moving work. At the time of the ALTA survey there was no observed evidence of building construction or building additions.
8: As allowed under Section 3.Ev and 6.B of the 2021 ALTA/NSPS Minimum Standard Detail Requirements, this survey exceeds the maximum allowable Relative Positional Precision due to the size and configuration of the surveyed property, and the relief, vegetation and improvements on the surveyed property.
9: No wetland delineations were observed or provided to the surveyor.
10: Distance to nearest intersecting street (Borthwick Avenue) is 93'±.

SIGNIFICANT OBSERVATIONS

None found.

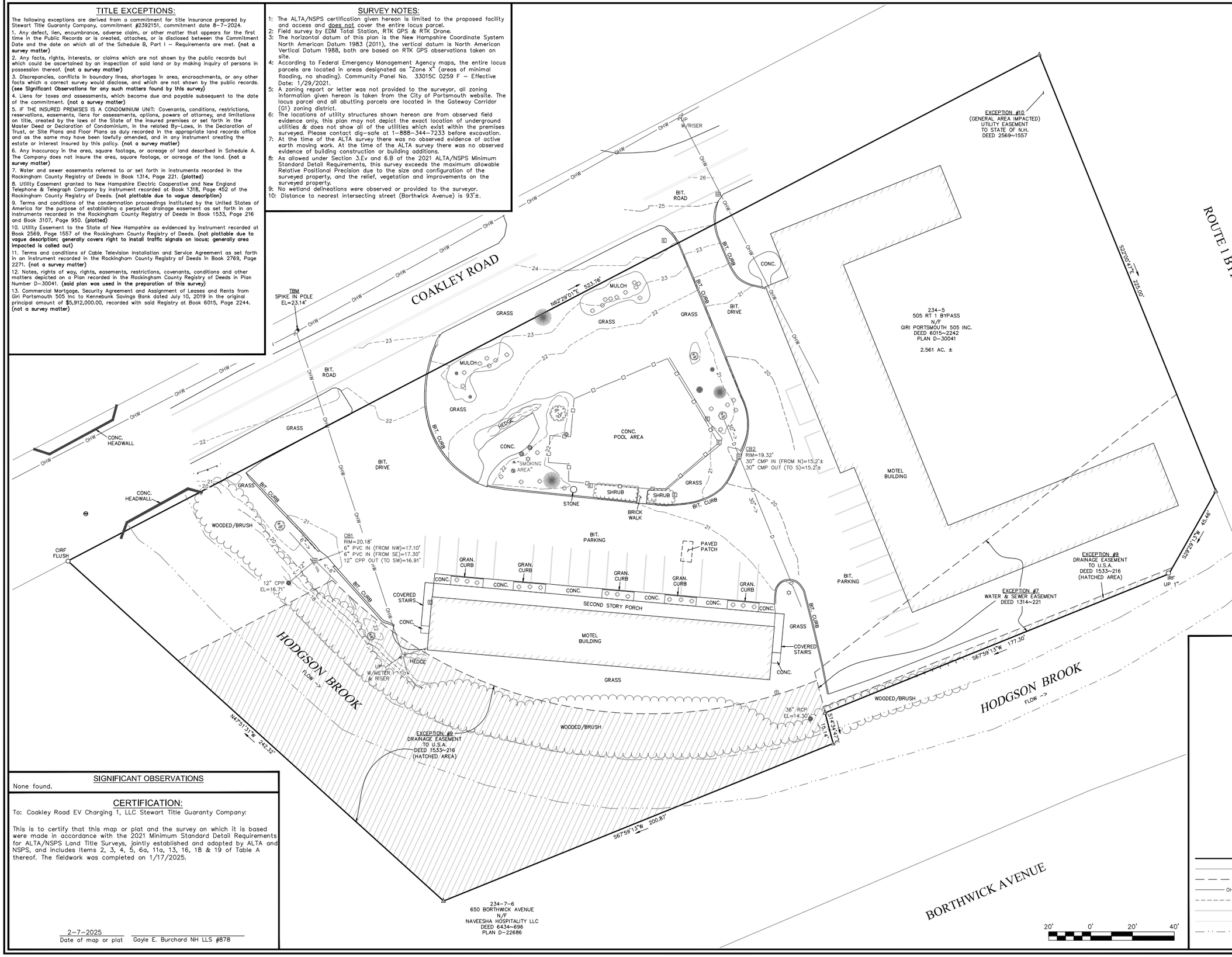
CERTIFICATION:

To: Coakley Road EV Charging 1, LLC Stewart Title Guaranty Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 5, 6a, 11a, 13, 16, 18 & 19 of Table A thereof. The fieldwork was completed on 1/17/2025.

2-7-2025 — Date of map or plat

Gayle E. Burchard NH LLS #878



LEGEND:

234-5	ASSESSOR'S ID
N/F	NOW OR FORMERLY
IPF/IRF ○	IRON PIPE OR ROD FOUND
CIRF ○	CAPPED ROD FOUND
△	CALCULATED POINT
⬟	TEMPORARY BENCHMARK (TBM)
	UTILITY POLE
	GUY WIRE ANCHOR
	LIGHT POLE
	ELECTRIC BOX
	TELECOM. BOX
	PIPE INLET OR OUTLET
	CATCH BASIN
	MANHOLE
	GAS METER
	SIGN POST
	TREE
	BUSH
	LOCUS PROPERTY LINE
	ABUTTERS LINE
	EASEMENT LINE
OHW	OVERHEAD WIRES
	CONTOUR LINE
	WHITE PAINT LINE
	YELLOW PAINT LINE
	APPROX. EDGE OF WATER

NORTHEAST SURVEY CONSULTANTS
3 TERRY STREET
SUITE 1 UNIT 8
EASTHAMPTON, MA 01027
(413) 203-5144

NHGS NAD83

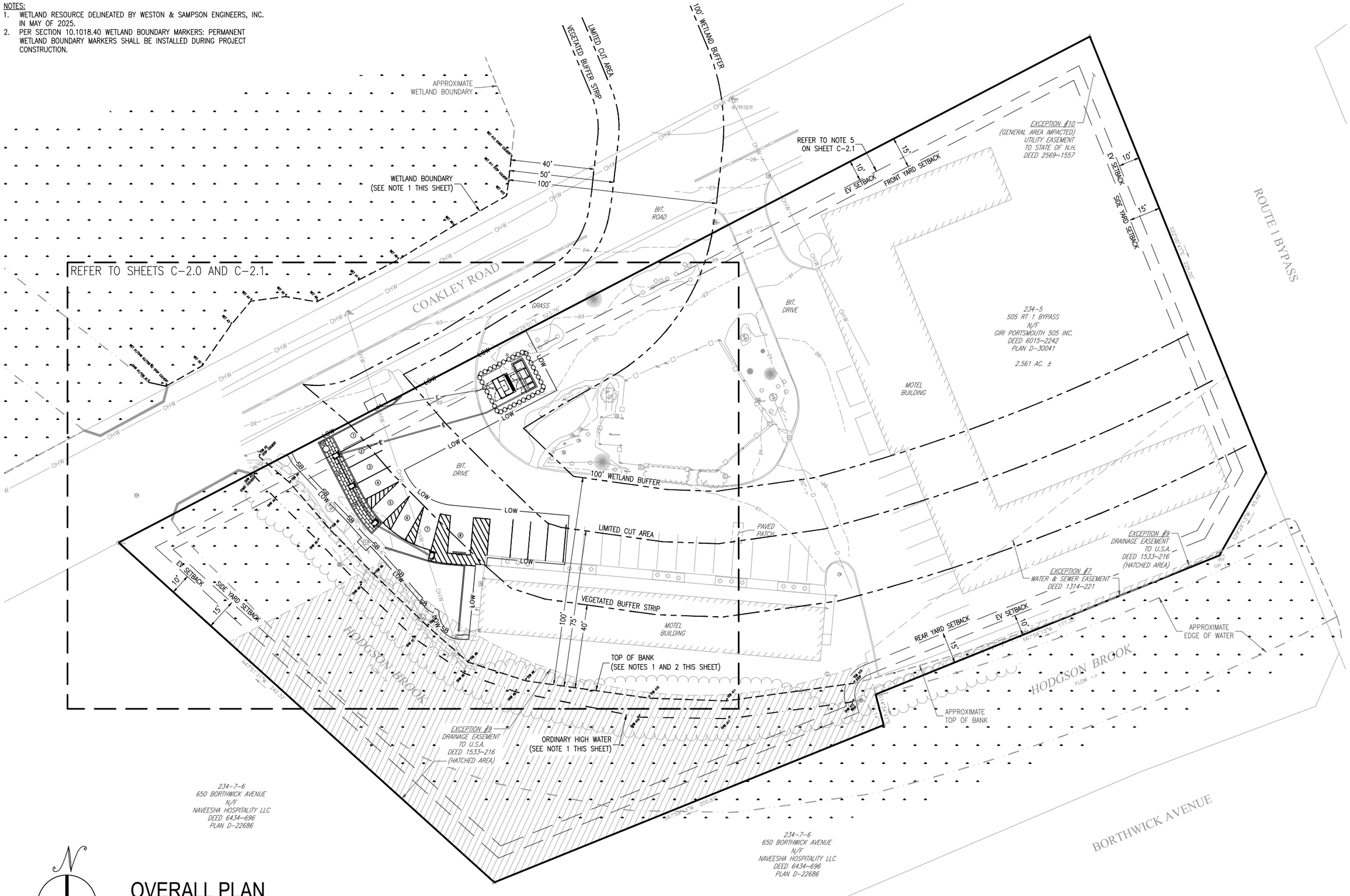
505 ROUTE 1 BYPASS

SURVEYOR:	–
ENGINEER:	–
DRAFTING:	GEB
DESIGN:	JDG
FIELD WORK:	MAK ESL
HORZ. SCALE:	1"=20'
PROJECT NUMBER:	24-346
VERT. SCALE:	–
DRAWING NAME:	24-346.DWG
DATE:	2-7-2025

LIMITED ALTA/NSPS LAND TITLE SURVEY
OF LAND IN
PORTSMOUTH, NH
PREPARED FOR
COAKLEY ROAD EV CHARGING 1, LLC

SHEET NO. 1 OF 1

NOTES:
1. WETLAND RESOURCE DELINEATED BY WESTON & SAMPSON ENGINEERS, INC. IN MAY OF 2025.
2. PER SECTION 10.1018.40 WETLAND BOUNDARY MARKERS: PERMANENT WETLAND BOUNDARY MARKERS SHALL BE INSTALLED DURING PROJECT CONSTRUCTION.



OVERALL PLAN

SCALE: 1" = 20'

new leaf energy
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 808-4273
FAX: (888) 843-6778
WWW.NEWLEAFENERGY.COM

NOT FOR CONSTRUCTION

Weston & Sampson
Weston & Sampson Engineers, Inc.
100 One Street, Tower 4, Suite 350
Manchester, NH 03101
978.532.1900 800.SAMPSON
www.westonandsampson.com

STATE OF NEW HAMPSHIRE
JEFFREY W. SANTACRUCE
No. 10650
LICENSED PROFESSIONAL ENGINEER

Jeffrey W Santacruce

PORT INN AND SUITES
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER: ENG24-1702

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
0	04/23/25	RWG	JWS	ISSUED FOR PERMITTING
1	05/09/25	RWG	JWS	REVISED FOR PERMITTING
2	05/28/25	RWG	JWS	REVISED FOR PERMITTING

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-1.0
OVERALL PLAN

NOTES:
1. ALL VEGETATIVE SURFACES THAT BECOME DISTURBED FROM THE WORK SHALL BE STABILIZED WITH GRASS COVER. ALL PAVED SURFACES THAT BECOME DISTURBED FROM THE WORK SHALL BE RESTORED TO MATCH EXISTING CONDITION, UNLESS OTHERWISE SHOWN.
2. COORDINATE ANY REQUIRED REMOVAL OF EXISTING SITE FEATURES (CURBING & TREES ETC) WITH LANDOWNER.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY CONSTRUCTION FENCING AND GATES TO PROTECT WORK AREA AND MATERIAL/EQUIPMENT STORAGE. THE LOCATION OF FENCING/GATES SHALL BE COORDINATED WITH THE OWNER/ENGINEER PRIOR TO INSTALLATION. PRIVACY SLATS, IF REQUIRED BY OWNER, SHALL BE PROVIDED. SUFFICIENT SUPPORTS/BALLASTS SHALL BE PROVIDED TO ACCOUNT FOR WINDS LOADS PARTICULARLY THOSE ASSOCIATED WITH PRIVACY SLATS.

COAKLEY ROAD

TBM SPIKE IN POLE EL=23.14

EXISTING UTILITY POLE

EXISTING OVERHEAD LINE

WETLAND BOUNDARY

WET A1/OHW A2/TOB A2 STOP CULVERT

CONC. HEADWALL

VEGETATED BUFFER STRIP

LIMITED CUT AREA

REFER TO NOTE 5 ON SHEET C-2.1

10' EV SETBACK

15' FRONT YARD SETBACK

N62°29'01"E 523.76'

MULCH

GRASS

BIT. ROAD

50'

40'

234-5
505 RT 1 BYPASS
N/F
GIRI PORTSMOUTH 505 INC.
DEED 6015~2242
PLAN D-30041
2.561 AC. ±

HEDGE

100' WETLAND BUFFER

CONC. POOL AREA

BIT. DRIVE

"SMOKING AREA"

BRICK WALK

SHRUB

BIT. CURB

STONE

REMOVE CURBING AND PAVEMENT WITHIN HATCHED AREAS. LOAM AND SEED DISTURBED AREAS AND STABILIZE WITH GRASS COVER, UNLESS OTHERWISE SHOWN.

PARKING STRIPING TO BE REMOVED AND ADJUSTED (REFER TO SHEET C-2.1 FOR LAYOUT)

BIT. PARKING

GRANITE CURB

CONC.

SECOND STORY PORCH

COVERED STAIRS

DP W/ METER RISER

BOW

VEGETATED BUFFER STRIP

MOTEL BUILDING

40'

75'

100'

TOP OF BANK

WOODED/BRUSH

OHW A1 START CULVERT

OHW A2

OHW A3

OHW A4

OHW A5

OHW A6

OHW A7

OHW A8

OHW A9

P TOB A1

P TOB A2

P TOB A3

P TOB A4

P TOB A5

P TOB A6

P TOB A7

P TOB A8

P TOB A9

P TOB A10

P TOB A11

7 C-5.0 SEDIMENT BARRIER

11 C-5.0 INSTALL INLET PROTECTION AS REQUIRED (TYP)

CB1
RIM=20.18'
6" PVC IN (FROM NW)=17.10'
6" PVC IN (FROM SE)=17.30'
12" CPP OUT (TO SW)=16.91'

12" CPP EL=16.71'

CIRF FLUSH

EXCEPTION #9
DRAINAGE EASEMENT
TO U.S.A.
DEED 1533~216
(HATCHED AREA)

HODGSON BROOK FLOW

ORDINARY HIGH WATER

REFER TO NOTE 5 ON SHEET C-2.1

10' EV SETBACK

15' SIDE YARD SETBACK

234-7-6
650 BORTHWICK AVENUE
N/F
NAVEESHA HOSPITALITY LLC
DEED 6434~696
PLAN D-22686

N47°51'31"W 242.32'

SITE PREPARATION AND DEMOLITION PLAN

SCALE: 1" = 10'

0 10' 20'

new leaf energy
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
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STATE OF NEW HAMPSHIRE
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LICENSED PROFESSIONAL ENGINEER

Jeffrey W Santacruce

PORT INN AND SUITES
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER: ENG24-1702

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2	05/28/25	RWG	JWS	REVISED FOR PERMITTING

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-2.0
SITE PREPARATION AND DEMOLITION PLAN

NOTES:
1. ALL VEGETATIVE SURFACES THAT BECOME DISTURBED FROM THE WORK SHALL BE STABILIZED WITH GRASS COVER. ALL PAVED SURFACES THAT BECOME DISTURBED FROM THE WORK SHALL BE RESTORED TO MATCH EXISTING CONDITION, UNLESS OTHERWISE SHOWN.
2. REFER TO ELECTRICAL DRAWINGS FOR FURTHER INFORMATION.
3. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION.
4. COORDINATE ANY REQUIRED REMOVAL OF EXISTING SITE FEATURES (CURBING & TREES ETC) WITH LANDOWNER.
5. PER SECTION 10.843.34 OF THE CITY OF PORTSMOUTH, NEW HAMPSHIRE ZONING ORDINANCE – EXCEPT FOR EV FUELING SPACE, ALL ABOVE GROUND EV CHARGING SUPPORT EQUIPMENT SHALL BE SET BACK 10 FEET FROM ALL LOT LINES.

COAKLEY ROAD

TBM SPIKE IN POLE EL=23.14

EXISTING UTILITY POLE

EXISTING OVERHEAD LINE

WETLAND BOUNDARY

WET A1/OHW A2/TOB A2 STOP CULVERT

CONC. HEADWALL

1 C-5.1 2 C-5.1 5 C-5.1 6 C-5.1 INSTALL POST MOUNTED SIGNAGE AS REQUIRED (TYP)

3 C-5.0 4 C-5.0 UNDERGROUND ELECTRICAL CONDUIT (TYP) (NOTE 2)

NEW RISER POLE (NOTE 2)

TAPER FROM 6" REVEAL TO 0" AT DRIVEWAY

TRASH RECEPTACLE

TOB A3 P STOP CULVERT

OHW A3 START CULVERT

OHW A4 P

WOODED/BRUSH

CIRF FLUSH

MAINTAIN FLOW OF SURFACE DRAINAGE TO EXISTING CATCH BASIN. ENSURE NO PONDING WILL OCCUR ON PARKING SURFACE.

ACCESSIBLE EV CHARGING SPACE 6 C-5.0

4" PARKING STRIPING (MATCH EXISTING COLOR) (100% ACRYLIC TYPE)

5 C-5.0 NEW BITUMINOUS CURBING (TYP)

2 C-5.0 EV CHARGING STATION WITH BOLLARDS (TYP)

SMART POLE FOR LIGHTING (TYP)

REFER TO NOTE 5 ON SHEET C-2.1

EV SETBACK 10' SIDE YARD SETBACK 15'

CB1
RIM=20.18'
6" PVC IN (FROM NW)=17.10'
6" PVC IN (FROM SE)=17.30'
12" CPP OUT (TO SW)=16.91'

12" CPP EL=16.71'

EXCEPTION #9
DRAINAGE EASEMENT TO U.S.A.
DEED 1533~216
(HATCHED AREA)

HODGSON BROOK FLOW

N47°51'31"W 242.32'

234-7-6
650 BORTHWICK AVENUE
N/F
NAVEESHA HOSPITALITY LLC
DEED 6434~696
PLAN D-22686

ORDINARY HIGH WATER

TOP OF BANK

WHEEL STOP 7 C-5.1

INSTALL POST MOUNTED SIGNAGE AS REQUIRED (TYP) 1 C-5.1 2 C-5.1 3 C-5.1 4 C-5.1

VEGETATED BUFFER STRIP

LIMITED CUT AREA

REFER TO NOTE 5 ON SHEET C-2.1

EV SETBACK 10' FRONT YARD SETBACK 15'

MULCH

GRASS

N62°29'01"E 523.76'

EQUIPMENT PAD (TYP) (NOTES 2 AND 3) 1 C-5.0

BOLLARD (TYP) 2 C-5.0

LANDSCAPE SCREENING

100' WETLAND BUFFER

234-5
505 RT 1 BYPASS
N/F
GIRI PORTSMOUTH 505 INC.
DEED 6015~2242
PLAN D-30041

2.561 AC. ±

CONC. POOL AREA

"SMOKING AREA"

BRICK WALK

SHRUB

BIT. CURB

STONE

BIT. DRIVE

BIT. PARKING

GRANITE CURB

CONC.

COVERED STAIRS

SECOND STORY PORCH

HEDGE

UP W/ METER & RISER

MOTEL BUILDING

40' 75' 100'

SITE PLAN

SCALE: 1" = 10'

0 10' 20'

new leaf energy
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 898-1273
FAX: (888) 843-6778
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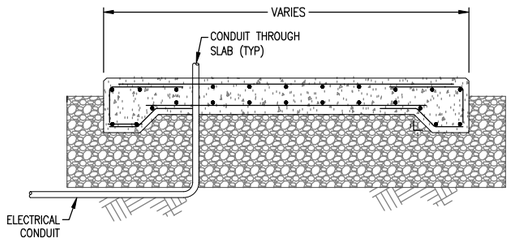
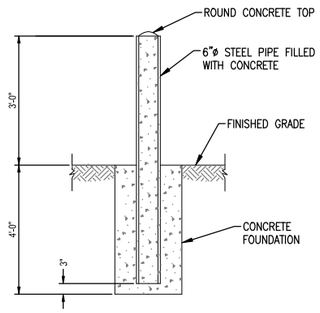
C-2.1
SITE PLAN



NOTES:
1. FINAL FOUNDATION DESIGN TO BE PROVIDED PRIOR TO CONSTRUCTION.
2. SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

1 TYPICAL CONCRETE EQUIPMENT PAD SECTION

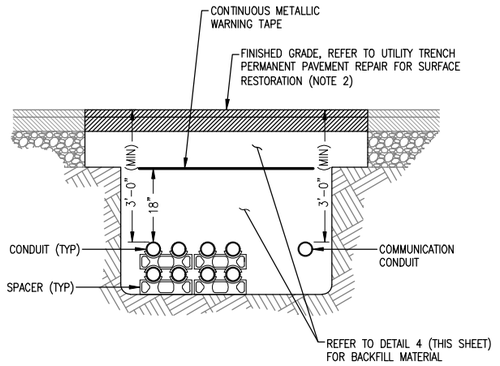
SCALE: NTS



NOTES:
1. STEEL PIPE SHALL BE GALVANIZED (2.0 OZ. ZINC/SQ. FT.) AND SHALL HAVE A MINIMUM WALL THICKNESS OF 0.322 INCHES.
2. PIPE SHALL BE PAINTED YELLOW WITH CATALYZED EPOXY PAINT.
3. INSTALL BOLLARD PER MANUFACTURER RECOMMENDATIONS.
4. SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

2 BOLLARD

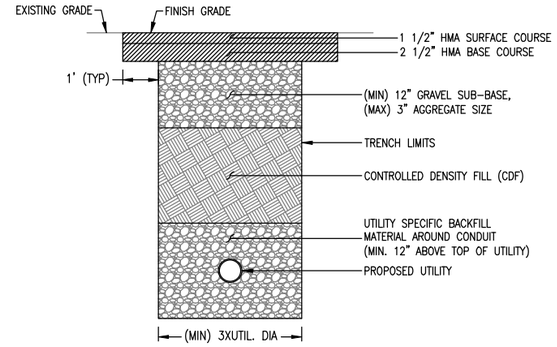
SCALE: NTS



NOTES:
1. SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. ELECTRICAL DESIGN BY OTHERS.
2. REFER TO DETAIL 8 ON C-5.0 FOR DISTURBED AREAS OUTSIDE OF PAVEMENT.

3 TYPICAL BELOW GRADE ELECTRICAL CONDUIT

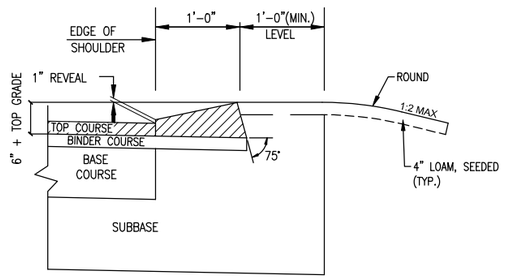
SCALE: NTS



NOTES:
1. THE EXPOSED EDGES OF ALL LONGITUDINAL AND TRANSVERSE SAW CUT JOINTS SHALL BE TREATED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALANT.
2. YELLOW METAL FOIL MARKING TAPE SHALL BE PLACED 18" OVER THE CONDUIT (METAL MARKING TAPE/WIRE SHOULD BE USED FOR NON-METALLIC CONDUIT.

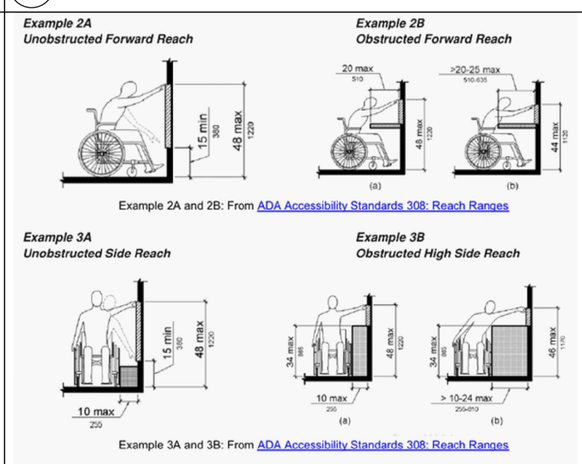
4 UTILITY TRENCH PERMANENT PAVEMENT REPAIR

SCALE: NTS



5 BITUMINOUS CURB

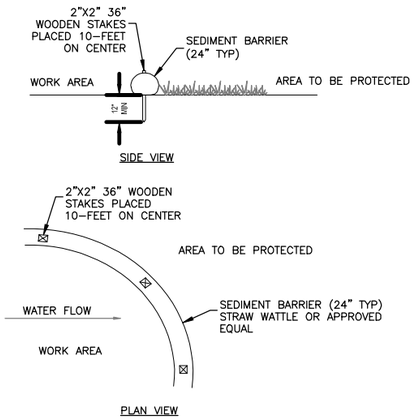
SCALE: NTS



NOTE:
1. DETAIL FROM ADA ACCESSIBILITY STANDARDS 308: REACH RANGES.

6 MINIMUM REACH RANGES

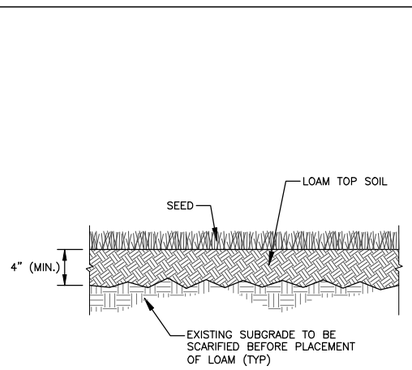
SCALE: NTS



NOTES:
1. SEDIMENT BARRIER SHALL BE PLACED AROUND THE PERIMETER OF THE LIMIT OF WORK AND SHALL BE INSTALLED PARALLEL TO EXISTING GROUND CONTOURS.
2. SEDIMENT BARRIER SHALL NOT BE PLACED UP SLOPE, OR IN A MANNER THAT WILL CREATE CHANNELIZED FLOW.
3. SEDIMENT BARRIERS SHALL BE INSPECTED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

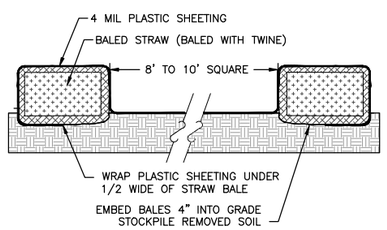
7 SEDIMENT BARRIER

SCALE: NTS



8 LOAM AND SEED DETAIL

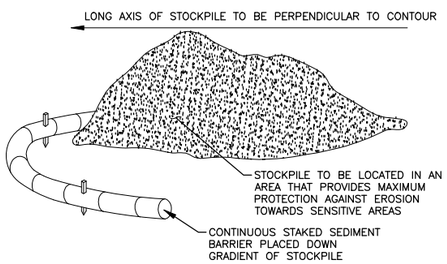
SCALE: NTS



NOTE:
1. PLASTIC SHEETING SHALL BE FREE OF TEARS OR HOLES. AFTER BASIN IS USED, WASHWATER FROM WASHOUT BASIN SHALL EVAPORATE OR BE VACUUMED OUT. REMOVE REMAINING HARDENED SOLIDS. REPLACE PLASTIC SHEETING AND STRAWBALES AS REQUIRED.

9 CONCRETE WASHOUT BASIN

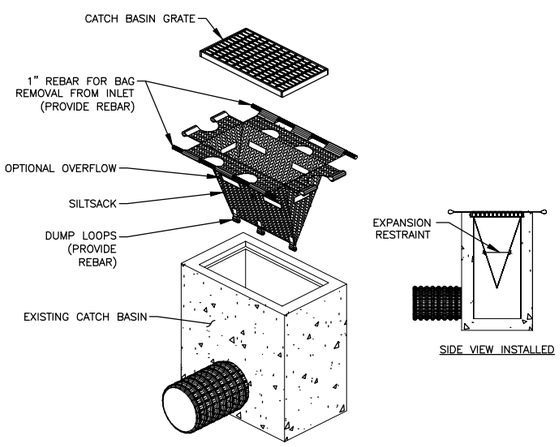
SCALE: NTS



NOTE:
1. STOCKPILE AREAS SHALL BE LOCATED OUTSIDE OF WETLANDS AND 100FT WETLAND BUFFERS AT THE SITE.

10 TEMPORARY STOCKPILE DETAIL

SCALE: NTS



11 INLET PROTECTION

SCALE: NTS

new leaf energy
55 TECHNOLOGY DRIVE, SUITE 102
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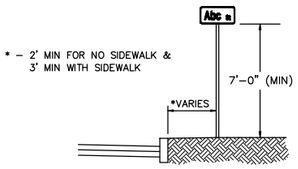
SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

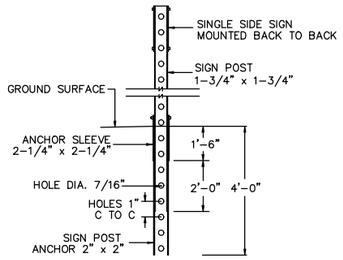
C-5.0
CIVIL DETAILS



NOTE:
1. SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

1 TYPICAL SIGN INSTALLATION

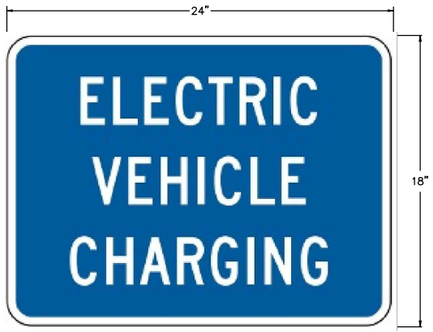
SCALE: NTS



NOTES:
1. SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
2. POST SHALL MEET NHDOT REQUIREMENTS.

2 P-5 TELESCOPIC POST

SCALE: NTS



COLORS: LEGEND, BORDER – WHITE (RETROREFLECTIVE)
SYMBOL – WHITE (RETROREFLECTIVE)
BACKGROUND – BLUE (RETROREFLECTIVE)

NOTES:
1. DETAIL FROM MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. SUBMIT SIGN SPECIFICATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

3 SIGN - SP-1 (D9-11bp)

SCALE: NTS

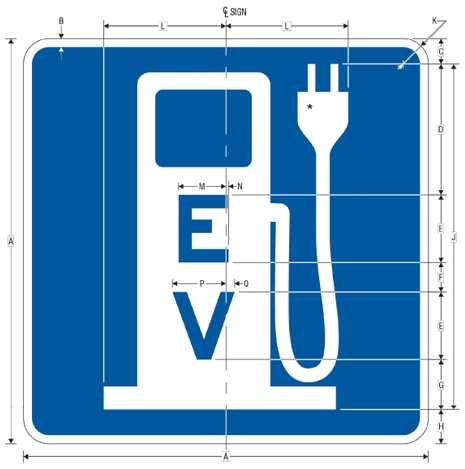
COLORS: LEGEND, BORDER – BLUE (RETROREFLECTIVE)
BACKGROUND – WHITE (RETROREFLECTIVE)

NOTES:
1. SIGN FROM U.S. ACCESS BOARD'S "DESIGN RECOMMENDATIONS FOR ACCESSIBLE ELECTRIC VEHICLE CHARGING STATIONS".
2. SUBMIT SIGN SPECIFICATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

4 SIGN - SP-2

SCALE: NTS

D9-11b (Alternate)
Issued 4/1/2011



D9-11b (Alternate)
Electric Vehicle Charging (Alternate Symbol)

c	A	B	C	D	E	F	G	H	J	K	L	M
	24	0.5	1.5	7.75	4 E(m)	1.75	3	2	20.5	1.5	7.25	2.814
	30	0.75	1.875	9.625	5 E(m)	2	4	2.5	25.625	1.875	9.063	3.518

N	P	Q
0.148	3.174	0.507
0.185	3.968	0.635

* See page IA-13-2 for symbol design

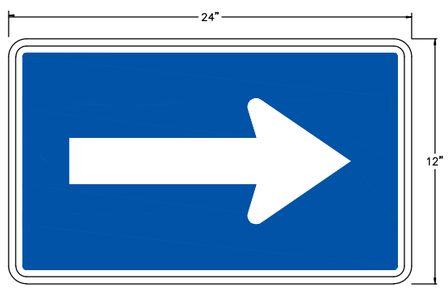
COLORS: LEGEND, BACKGROUND – BLUE (RETROREFLECTIVE)
SYMBOL, BORDER – WHITE (RETROREFLECTIVE)

IA-13-1

NOTES:
1. DETAIL FROM MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. SUBMIT SIGN SPECIFICATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

5 SIGN - D9-11b (ALTERNATE)

SCALE: NTS

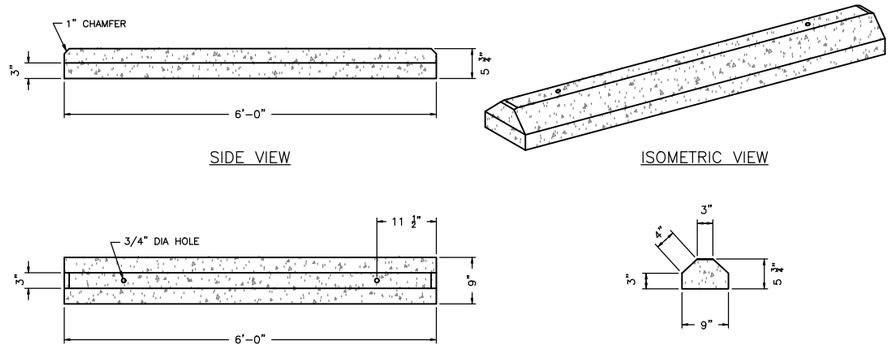


COLORS: LEGEND, BORDER – WHITE (RETROREFLECTIVE)
BACKGROUND – BLUE (RETROREFLECTIVE)

NOTES:
1. DETAIL FROM MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. SUBMIT SIGN SPECIFICATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

6 SIGN - M6-1P

SCALE: NTS



NOTES:
1. DETAIL IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
2. INSTALL WHEEL STOP PER MANUFACTURER RECOMMENDATIONS.

7 WHEEL STOP

SCALE: NTS

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STATE OF NEW HAMPSHIRE
JEFFREY W. SANTACRUCE
No. 10650
LICENSED PROFESSIONAL ENGINEER

Jeffrey W Santacruce

PORT INN AND SUITES
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER:
ENG24–1702

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
0	04/23/25	RWG	JWS	ISSUED FOR PERMITTING
1	05/09/25	RWG	JWS	REVISED FOR PERMITTING
2	05/28/25	RWG	JWS	REVISED FOR PERMITTING

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-5.1
CIVIL DETAILS

GENERAL:

1. THE ELECTRICAL CONTRACTOR SHALL INDICATE TO THE ENGINEER OF RECORD OF ANY DISCREPANCIES WITH THE DRAWING PACKAGE WITH REGARDS TO THE SITE LAYOUT, NATIONAL ELECTRICAL CODE, AND MANUFACTURER RECOMMENDATIONS. THESE DISCREPANCIES SHALL BE PRESENTED TO THE ENGINEER OF RECORD (EOR) FOR REVIEW.
2. THESE CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO CONVEY THE SCOPE OF WORK, THE GENERAL ARRANGEMENT OF EQUIPMENT, CONDUITS, PANELS, FIXTURES, ETC.
3. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL EQUIPMENT AND ACCESSORIES TO MAKE THIS A COMPLETE AND OPERABLE SYSTEM.
4. THE ELECTRICAL CONTRACTOR SHALL FOLLOW ALL EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND ADHERE TO ALL MANUFACTURER'S REQUIREMENTS FOR INSTALLATION.
5. ALL DOCUMENTATION PERTAINING TO THE MAJOR PIECES OF EQUIPMENT SHALL BE PROVIDED TO THE OWNER AND BE PART OF THE TURNOVER DOCUMENTATION.
6. THIS PROJECT SHALL BE IN ACCORDANCE WITH THE 2023 NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL OTHER LOCAL AND STATE LAWS AS WELL AS THE AUTHORITY HAVING JURISDICTION (AHJ).
7. INSPECTIONS BY THE AHJ AND EOR SHALL TAKE PLACE PRIOR TO ANY WORK THAT WILL BE PERMANENTLY COVERED.
8. THE EQUIPMENT AND ACCESSORIES THAT MAKE UP THIS SYSTEM SHALL BE UL LISTED AND BE USED FOR THEIR INTENDED PURPOSE.
9. CONTRACTOR TO CONFIRM EXISTING FIELD CONDITIONS AND VERIFY ALL DIMENSIONS.
10. ALL OUTDOOR EQUIPMENT SHALL BE RATED FOR OUTDOOR USE (NEMA 3R OR BETTER).
11. ALL MATERIALS PROVIDED BY THE INSTALLING CONTRACTOR SHALL BE NEW AND FREE OF DEFECTS AND DAMAGE. ALL ELECTRICAL MATERIALS AND INSTALLATIONS SHALL MEET THE INDUSTRY STANDARDS IDENTIFIED OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE), AND UNDERWRITER'S LABORATORIES, INC. (UL)
12. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO PROVIDE AND INSTALL THE EQUIPMENT AND ACCESSORIES THAT WILL LAST THE LIFETIME OF THE SYSTEM.
13. ALL EQUIPMENT AND ACCESSORIES SHALL BE INSTALLED IN A NEAT AND WORK LIKE MANNER. ALL ENCLOSURES SHALL BE CLEANED OF ANY DEBRIS FROM INSTALLATION AND THE SURROUNDING AREA SHALL BE CLEANED AS WELL.
14. THE ELECTRICAL CONTRACTOR SHALL OBTAIN THE PROPER PERMITS FOR THE INSTALLATION AND DISPLAY THEM AT THE JOBSITE OR AS REQUIRED BY THE AHJ.
15. THE ELECTRICAL CONTRACTOR SHALL PERFORM INSULATION RESISTANCE TESTING ON ALL WIRING TO ENSURE THE INTEGRITY OF THE INSULATION IS GOOD FOR IN SERVICE USE. DOCUMENTATION SHALL BE PROVIDED WITH THE RESULTS OF THIS TESTING.
16. ALL EQUIPMENT AND MATERIALS SHALL BE MAINTAINED AND PROTECTED FROM DAMAGE UNTIL FINAL ACCEPTANCE BY THE OWNER.
17. ENERGIZING THE SITE SHALL NOT BE DONE UNTIL ALL PARTIES HAVE REVIEWED THE INSTALLATION AND ARE SATISFIED WITH THE PRODUCT.
18. ALL EQUIPMENT OPENINGS SHALL BE SEALED TO PREVENT THE INGRESS OF WATER OR RODENTS.
19. SUBMITTALS SHALL BE PROVIDED FOR ALL ELECTRICAL EQUIPMENT AND MATERIALS THAT WILL BE USED FOR THE INSTALLATION.
20. PRIOR TO ANY EXCAVATION DIG SAFE MUST BE CONTACTED.
21. ALL EQUIPMENT SHALL BE INSTALLED TO MAINTAIN PROPER WORKING DISTANCES.

SAFETY:

1. PROPER ELECTRICAL SAFETY SHALL BE EMPLOYED BY THE ELECTRICAL CONTRACTOR.
2. THE ELECTRICAL CONTRACTOR SHALL USE THEIR OWN COMPANY SAFETY PROGRAM IN ADDITION TO ANY SPECIFIC REQUIREMENTS FROM THE OWNER.
3. DURING AND AFTER COMMISSIONING THE CONTRACTOR SHALL MAINTAIN CONTROL OF THE SITE ELECTRICAL SYSTEM UNTIL THE PROJECT HAS BEEN FORMAL TURNED OVER TO THE OWNER.
4. PROPER PROCEDURES AND SAFETY MEASURES SHALL BE TAKEN TO PREVENT ANY WORKER FROM COMING IN CONTACT WITH ANY LIVE ELECTRICAL PARTS.
5. ALL FUSES, DISCONNECTS, AND CIRCUIT BREAKERS SHALL BE LEFT IN THE OPEN POSITION DURING CONSTRUCTION OR SHALL BE IN COMPLIANCE WITH THE ELECTRICAL CONTRACTORS SAFETY PROGRAM.

LABELS:

1. ALL LABELS SHALL BE IN ACCORDANCE WITH THE 2023 NEC AND MEET ALL SAFETY CODES.
2. ALL LABELS SHALL BE MADE OF DURABLE AND WATERPROOF MATERIALS.
3. LABELS SHALL BE INSTALLED ON THE APPROPRIATE EQUIPMENT. IF SPACE IS LIMITED A NEW LOCATION SHALL BE DISCUSSED WITH THE OWNER AND ENGINEER OR RECORD.
4. LABELS SHALL BE SECURELY FASTENED TO THE EQUIPMENT.
5. ALL LABELS SHALL BE LEGIBLE, PRINTED, AND OF APPROPRIATE FONT SIZE.
6. DANGER LABELS SHALL BE RED, WARNING LABELS SHALL BE ORANGE, AND CAUTION LABELS SHALL BE YELLOW.

TESTING:

1. ALL TESTING SHALL BE IN COMPLIANCE WITH NETA 2017 ACCEPTANCE TESTING.
2. ALL TESTING SHALL BE COMPLETED PRIOR TO ENERGIZING THE SYSTEM.
3. A VISUAL INSPECTION SHALL BE PERFORMED ON ALL THE ELECTRICAL EQUIPMENT AND MUST BE DOCUMENTED.
4. ELECTRICAL CONTRACTOR TO PERFORM INSULATION RESISTANCE AND CONTINUITY TESTS FOR ALL CONDUCTORS. INSULATION RESISTANCE TEST SHALL NOT TEST LESS THAN 100 MEGOHMS FOR CABLES RATED 600V. TEST VALUES SHALL BE 1000VDC OR AS REQUIRED BY THE MANUFACTURER. TEST SHALL BE IN ACCORDANCE WITH NETA 2017.
5. ELECTRICAL CONTRACTOR SHALL VERIFY PROPER PHASE ROTATION ONCE THE SITE IS ENERGIZED.
6. CHARGING SYSTEM SHALL BE ENERGIZED BY A CERTIFIED REPRESENTATIVE UNLESS PRIOR NOTICE FROM THE MANUFACTURER HAS BEEN PROVIDED STATING THE ELECTRICAL CONTRACTOR CAN COMMISSION AND START UP THE SYSTEM.
7. ALL TEST RESULTS AND DOCUMENTATION SHALL BE PROVIDED TO THE OWNER AND ENGINEER OR RECORD FOR APPROVAL PRIOR TO THE SITE BEING ENERGIZED.

GROUNDING:

1. ALL GROUNDING SHALL BE IN COMPLIANCE WITH THE 2023 NEC ARTICLE 250.
2. ALL GROUNDING SHALL BE LISTED FOR ITS PURPOSE.
3. GROUND RODS, IF REQUIRED, SHALL HAS A MINIMUM DIAMETER OF 5/8 INCH AND HAVE A MINIMUM LENGTH OF 8 FEET. GROUND RODS SHALL BE COPPER COATED WITH A HIGH STRENGTH STEEL CORE.
4. USE IRREVERSIBLE CRIMP FOR PERMANENTLY CONCEALED AND INACCESSIBLE CONNECTIONS.
5. EQUIPMENT GROUNDING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AS WELL AS THE NEC.
6. GROUND ALL EXPOSED NON-CURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, AND EQUIPMENT STRUCTURES IN ACCORDANCE WITH THE NEC, STATE, AND OTHER APPLICABLE LAWS AND REGULATIONS.
7. ELECTRICAL CONTRACTOR SHALL TEST THE GROUNDING ELECTRODE SYSTEM TO ENSURE THAT THE GROUND RESISTANCE IS LESS THAN 25 OHMS. AN EARTH RESISTANCE TESTER SHALL BE USED FOR THIS TEST. TEST RESULTS TO BE SUBMITTED TO THE OWNER AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL.

WIRE AND CABLE

LOW VOLTAGE (AC)

1. ALL LOW VOLTAGE CABLES SHALL BE 75°C AND HAVE A MINIMUM 600V RATING.
2. CABLES SHALL BE RATED FOR THE SYSTEM VOLTAGE.
3. ALL CABLES SHALL BE LISTED FOR WET LOCATIONS.
4. ALL CABLES SHALL BE LISTED FOR THEIR INTENDED USE.
5. ALL CONDUCTORS SHALL BE INSTALLED NEATLY AND DRESSED INTO THE EQUIPMENT SO THAT THEY DO NOT OBSTRUCT OR PREVENT OPERATION OF THE EQUIPMENT. CABLE TIES SHALL BE USED TO SECURE THE CONDUCTORS.
6. ALL EXPOSED CABLES SHALL BE UV RESISTANT AND OUTDOOR RATED.
7. CONDUCTORS SHALL BE SIZED FOR THE AMPACITY OF THE CIRCUIT. THESE VALUES SHALL BE DETERMINED USING THE NEC.
8. CONDUITS SHALL BE FREE OF ANY DEBRIS PRIOR TO PULLING THE CABLES. ALL CABLES SHALL BE PULLED USING THE PROPER PULLING LUBRICANTS. LUBRICANTS SHALL NOT BE DESTRUCTIVE TO THE OUTER JACKET OF THE CABLE. THE PULLING LUBRICANT SHALL BE CONFIRMED WITH THE CABLE MANUFACTURER THAT IT IS APPROVED FOR USE.
9. IRREVERSIBLE, TWO HOLE, LONG BARREL, DOUBLE CRIMPED LUGS SHALL BE USED ON ALL LOW VOLTAGE TERMINATIONS. IF A TWO HOLE LUG CANNOT BE INSTALLED SINGLE HOLE LUGS CAN BE USED WITH THE PERMISSION OF THE ENGINEER OF RECORD.
10. TERMINATIONS THAT ARE SUPPLIED WITH THE MANUFACTURED EQUIPMENT SHALL BE USED AND PROPER TORQUE VALUES MUST BE FOLLOWED.
11. ALL ELECTRICAL CONNECTIONS SHALL BE TORQUE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IF THE MANUFACTURER DOES NOT HAVE RECOMMENDATIONS STANDARD INDUSTRY PRACTICE SHOULD BE FOLLOWED FOR TORQUE VALUES.
12. DOCUMENTATION SHALL BE PROVIDED DETAILING THE TORQUE VALUES OF THE ELECTRICAL CONNECTIONS. THESE CONNECTIONS SHALL BE MARKED WITH TORQUE MARKING PAINT OR EQUIVALENT.
13. ALL CABLES SHALL BE SUPPORTED WITHIN EQUIPMENT TO PROPERLY DISTRIBUTE THE WEIGHT OF THE CABLES AND TO PREVENT STRESS ON THE TERMINATION POINTS.
14. SPLICING OF ANY WIRES IS NOT ALLOWED UNLESS APPROVED BY THE OWNER AND ENGINEER OF RECORD.
15. ALL WIRING SHALL BE FACTORY COLOR CODED. OTHERWISE FEEDER AND BRANCH CIRCUIT CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

208V	PHASE	480V	PHASE
BLACK	A	BROWN	A
RED	B	ORANGE	B
BLUE	C	YELLOW	C
WHITE	NEUTRAL	WHITE	NEUTRAL
GREEN	GROUND	GREEN	GROUND

16. THE WIRE SIZE IS BASED ON THE ESTIMATED CONDUCTOR LENGTH AS SHOWN IN THIS DRAWINGS SET. SHOULD THE CONDUIT ROUTING CHANGE AND THE OVERALL LENGTH INCREASED, THE CONDUIT AND WIRE MAY NEED TO BE RESIZED TO MAINTAIN THE DESIGN VOLTAGE DROP. THE ELECTRICAL CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD PRIOR TO MAKING ANY FIELD CHANGES.
17. SUFFICIENT LENGTH OF CABLE SHALL BE PROVIDED TO FACILITATE REPLACEMENTS IF A REPLACEMENT IS NEEDED.

LOW VOLTAGE (DC)

1. ALL LOW VOLTAGE CABLES SHALL BE 75°C AND HAVE A MINIMUM 1000VAC/1500VDC RATING.
2. CABLES SHALL BE RATED FOR THE SYSTEM VOLTAGE.
3. ALL CABLES SHALL BE LISTED FOR WET LOCATIONS.
4. ALL CABLES SHALL BE LISTED FOR THEIR INTENDED USE.
5. ALL CONDUCTORS SHALL BE INSTALLED NEATLY AND DRESSED INTO THE EQUIPMENT SO THAT THEY DO NOT OBSTRUCT OR PREVENT OPERATION OF THE EQUIPMENT. CABLE TIES SHALL BE USED TO SECURE THE CONDUCTORS.
6. ALL EXPOSED CABLES SHALL BE UV RESISTANT AND OUTDOOR RATED.
7. CONDUCTORS SHALL BE SIZED FOR THE AMPACITY OF THE CIRCUIT. THESE VALUES SHALL BE DETERMINED USING THE NEC.
8. CONDUITS SHALL BE FREE OF ANY DEBRIS PRIOR TO PULLING THE CABLES. ALL CABLES SHALL BE PULLED USING THE PROPER PULLING LUBRICANTS. LUBRICANTS SHALL NOT BE DESTRUCTIVE TO THE OUTER JACKET OF THE CABLE. THE PULLING LUBRICANT SHALL BE CONFIRMED WITH THE CABLE MANUFACTURER THAT IT IS APPROVED FOR USE.
9. IRREVERSIBLE, TWO HOLE, LONG BARREL, DOUBLE CRIMPED LUGS SHALL BE USED ON ALL LOW VOLTAGE TERMINATIONS. IF A TWO HOLE LUG CANNOT BE INSTALLED SINGLE HOLE LUGS CAN BE USED WITH THE PERMISSION OF THE ENGINEER OF RECORD.
10. TERMINATIONS THAT ARE SUPPLIED WITH THE MANUFACTURED EQUIPMENT SHALL BE USED AND PROPER TORQUE VALUES MUST BE FOLLOWED.
11. ALL ELECTRICAL CONNECTIONS SHALL BE TORQUE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IF THE MANUFACTURER DOES NOT HAVE RECOMMENDATIONS STANDARD INDUSTRY PRACTICE SHOULD BE FOLLOWED FOR TORQUE VALUES.
12. DOCUMENTATION SHALL BE PROVIDED DETAILING THE TORQUE VALUES OF THE ELECTRICAL CONNECTIONS. THESE CONNECTIONS SHALL BE MARKED WITH TORQUE MARKING PAINT OR EQUIVALENT.
13. ALL CABLES SHALL BE SUPPORTED WITHIN EQUIPMENT TO PROPERLY DISTRIBUTE THE WEIGHT OF THE CABLES AND TO PREVENT STRESS ON THE TERMINATION POINTS.
14. SPLICING OF ANY WIRES IS NOT ALLOWED UNLESS APPROVED BY THE OWNER AND ENGINEER OF RECORD.
15. DC WIRING SHALL BE RED FOR POSITIVE, BLACK FOR NEGATIVE, AND GREEN FOR GROUND. WIRING SHALL BE MARKED SUNLIGHT RESISTANT.
16. THE WIRE SIZE IS BASED ON THE ESTIMATED CONDUCTOR LENGTH AS SHOWN IN THIS DRAWINGS SET. SHOULD THE CONDUIT ROUTING CHANGE AND THE OVERALL LENGTH INCREASED, THE CONDUIT AND WIRE MAY NEED TO BE RESIZED TO MAINTAIN THE DESIGN VOLTAGE DROP. THE ELECTRICAL CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD PRIOR TO MAKING ANY FIELD CHANGES.
17. SUFFICIENT LENGTH OF CABLE SHALL BE PROVIDED TO FACILITATE REPLACEMENTS IF A REPLACEMENT IS NEEDED.

RACEWAYS:

1. CONDUITS IN THE DRAWING SET ARE SHOWN DIAGRAMMATICAL. THE ELECTRICAL CONTRACTOR SHALL ROUTE THE CONDUITS TO AVOID ANY OBSTRUCTIONS AND MAINTAIN PROPER CLEARANCES.
2. ABOVE GROUND CONDUIT SHALL BE RIGID METAL CONDUIT (RMC), THREADED, MINIMUM 3/4 INCH IN SIZE OR AS NOTED IN THE DRAWING SET.
3. USE CONDUIT HUBS OR SEALING LOCKNUTS TO FASTEN CONDUIT TO BOXES IN DAMP AND WET LOCATIONS.
4. ALL CONDUIT AND FITTINGS SHALL BE WATER TIGHT. MYERS HUBS SHALL BE USED FOR CONDUIT ENTRY INTO METAL ENCLOSURES.
5. SUPPORT CONDUIT USING STEEL OR MALLEABLE IRON SINGLE OR DOUBLE HOLE CONDUIT STRAPS, LAY-IN ADJUSTABLE HANGERS, CLEVIS HANGERS AND SPLIT HANGERS AS REQUIRED. DISTANCE BETWEEN SUPPORTS SHALL BE IN COMPLIANCE WITH THE NEC AND MANUFACTURER'S RECOMMENDATIONS.
6. EXPANSION FITTINGS SHALL BE PROVIDED AS REQUIRED PER THE NEC OR AS NOTED IN THE DRAWING SET.
7. ALL CONDUITS SHALL BE INSTALLED AT THE DEPTHS SHOWN IN DRAWINGS. IF FIELD CONDITIONS DO NOT ALLOW DEPTHS AS SHOWN, CONTRACTOR SHALL FOLLOW NEC TABLE 300.5.
8. ALL METALLIC CONNECTORS AND FITTINGS SHALL BE NON-CORRODING (PVC, ALUMINUM, STAINLESS STEEL OR GALVANIZED STEEL).
9. CONDUIT BENDING SHALL NOT DAMAGE THE RACEWAY OR SIGNIFICANTLY CHANGE THE INTERNAL DIAMETER OF RACEWAY.
10. CONDUIT RUNS SHALL NOT EXCEED 360 DEGREES OF BENDS.
11. ALL FIELD CUT CONDUITS SHALL BE CUT SQUARE AND DEBURRED TO PREVENT DAMAGE TO THE CABLES.
12. ALL CONDUITS SHALL BE FREE OF ANY OBSTRUCTIONS BEFORE WIRE IS PULLED. ALL SPARE CONDUITS SHALL HAVE PULL STRINGS INSTALLED.
13. ALL JUNCTION BOXES, DISCONNECTS, AND EQUIPMENT SHALL BE PROVIDED WITH PAD LOCKING PROVISIONS.
14. ALL CONDUIT THAT HAS BEEN CUT AND THREADED SHALL BE CLEANED AND COATED WITH A ZINC RICH GALVANIZING COMPOUND.
15. ALL CONDUITS SHALL BE SEALED USING DUCT SEAL OR AN APPROVED SPRAY FOAM.
16. WHERE WIRE AND CABLE ROUTING IS NOT SHOWN, AND DESTINATION ONLY IS INDICATED, CONTRACTOR SHALL DETERMINE EXACT ROUTING AND LENGTHS REQUIRED. A SHOP DRAWING OF PROPOSAL INSTALLATION SHALL BE SUPPLIED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
19. CONDUIT SHALL BE FASTEN SECURELY IN PLACE. CONDUITS SHALL BE RUN AT RIGHT ANGLES AND IN PARALLEL LINES.

EQUIPMENT:

1. ALL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND SHALL MAINTAIN PROPER CLEARANCES FROM ANY OTHER EQUIPMENT.
2. ALL EQUIPMENT SHALL BE MOUNTED LEVEL AND PLUMB.
3. EQUIPMENT SHALL BE ANCHORED USING HILTI DROP IN ANCHORS OR APPROVED EQUALS OR AS DIRECTED BY THE MANUFACTURER.
4. DISCONNECTS SHALL BE MOUNTED USING UNISTRUT AND ASSOCIATED HARDWARE OR WALL ANCHORS.
5. ALL OUTDOOR EQUIPMENT SHALL BE NEMA 3R OR BETTER.

LEGEND:

(M)	KWH METER
	CURRENT TRANSFORMER
———	ABOVE GROUND CONDUCTOR
- - - -	BELOW GROUND CONDUCTOR
	CABLE TERMINATION
	FUSE
	SEPARABLE CONNECTOR
	SURGE ARRESTER
	FUSED CUTOUT
	GANG OPERATED DISCONNECT SWITCH
	POWER TRANSFORMER
	POTENTIAL TRANSFORMER
XXXXAT / XXXXAF	LOW VOLTAGE CIRCUIT BREAKER
	GROUND
	DISCONNECT SWITCH

ABBREVIATIONS:

A	AMPERES
AC	ALTERNATING CURRENT
AL	ALUMINUM
AWG	AMERICAN WIRE GUAGE
COM	COMMUNICATIONS
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
EMS	ENERGY MANAGEMENT SYSTEM
GND	GROUND
JCN	JACKETED CONCENTRIC NEUTRAL
KCMIL	THOUSANDS OF CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATT
MCOV	MAXIMUM CONTINUOUS OPERATING VOLTAGE
NEC	NATIONAL ELECTRICAL CODE
PVC	POLYVINYL CHLORIDE
R	RESISTANCE
RMC	RIGID METAL CONDUIT
SA	SURGE ARRESTER
TYP	TYPICAL
V	VOLTS
X	REACTANCE
XFMR	TRANSFORMER
Z	IMPEDANCE

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NOT FOR CONSTRUCTION

STATE OF NEW HAMPSHIRE – ANTHONY M MORREALE No.17064 – LICENSED PROFESSIONAL ENGINEER
05/13/2025

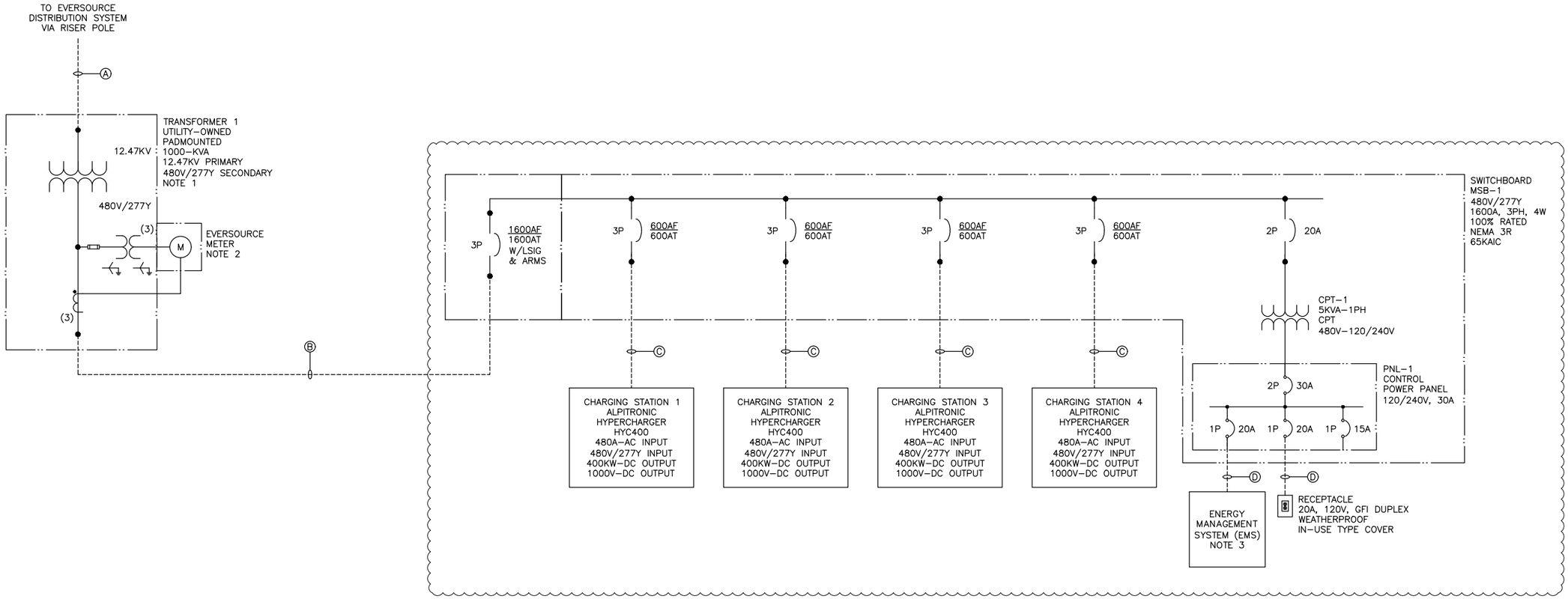
EV CHARGING STATION
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER:
XXX-XXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
A	03/04/2025	NPC	AMM	ISSUED FOR PERMIT

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

E-0.0
ELECTRICAL NOTES



CABLE AND CONDUIT SCHEDULE				
ID	VOLTAGE	SETS	CABLE	CONDUIT
A	15KV	TBD	CABLE SIZED & INSTALLED BY EVERSOURCE	(1) 4" PVC
B	600V	5	(4) 500 KCMIL CU	(5) 4" PVC
C	600V	2	(3) 500 KCMIL CU, (1) #1 AWG GND	(2) 3" PVC
D	600V	1	(1) #12 AWG CU (PH), (1) #12 AWG CU (N), (1) #10 AWG CU (G)	(1) 3/4" PVC

ONELINE DIAGRAM

SCALE: NTS

NOTES
1. CONTRACTOR TO INSTALL ALL SECONDARY CONDUIT AND CABLE. EVERSOURCE TO TERMINATE CABLES ON TRANSFORMER.
2. CONTRACTOR TO VERIFY EXACT METER LOCATION WITH UTILITY. TELECOMMUNICATION LINE OR WIRELESS SERVICE TO BE PROVIDED TO UTILITY REVENUE METERING.
3. PER NEC 625.42 (A), AN ENERGY MANAGEMENT SYSTEM (EMS) WILL BE UTILIZED (MOBILITY HOUSE LLC'S CHARGEPILOT CONTROLLER OR EQUIVALENT). EMS TO BE CONNECTED TO THE EV CHARGERS VIA ETHERNET AND COMMUNICATE WITH CHARGERS THROUGH OPEN CHARGE POINT PROTOCOL (OCPP). USING THE PROGRAMMED UTILITY AND EQUIPMENT CAPACITY LIMITS, THE EMS MANAGES AND OPTIMIZES THE POWER DISTRIBUTION TO ENSURE THAT THE CHARGERS DO NOT OVERLOAD THE SOURCE OR THE EQUIPMENT.

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NOT FOR CONSTRUCTION

STATE OF NEW HAMPSHIRE
ANTHONY M. MORREALE
No.17084
LICENSED PROFESSIONAL ENGINEER
05/13/2025

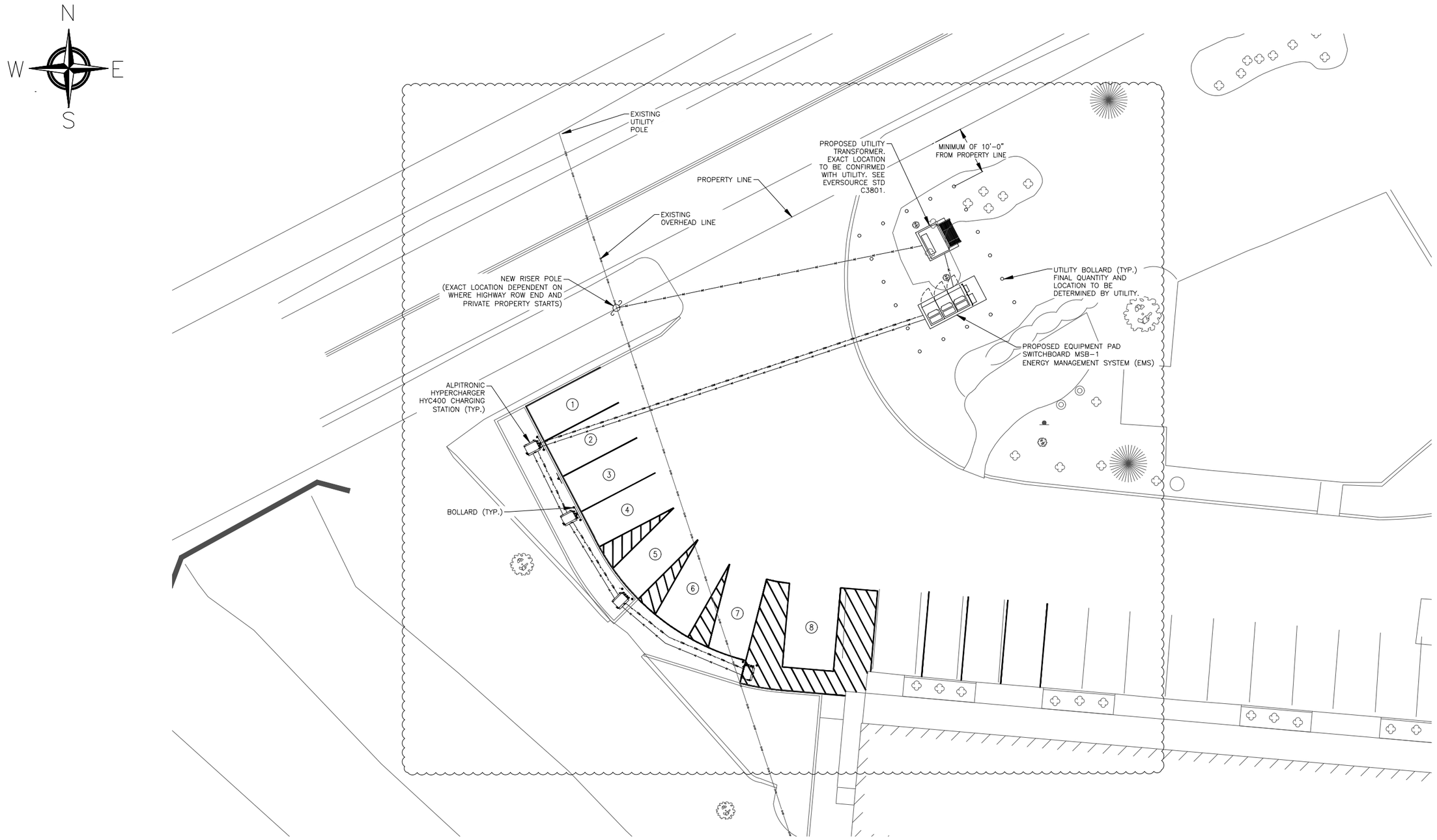
EV CHARGING STATION
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER:
XXX-XXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
A	07/16/2024	KRC	AMM	INTERCONNECTION DRAWINGS
B	01/15/2025	AMM	KRC	UPDATED TX & SERVICE SIZE, MOVED METERING
C	02/20/2025	NPC	AMM	UPDATED NUMBER OF CHARGERS
D	03/04/2025	NPC	AMM	ISSUED FOR PERMIT
E	05/12/2025	KRC	AMM	ISSUED FOR PERMIT - REV 1

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

E-1.0
AC SINGLE LINE DIAGRAM



ELECTRICAL SITE PLAN

Scale: 1"=10'

0 5' 10' 20'

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STATE OF NEW HAMPSHIRE
ANTHONY M MORREALE
No.17084
LICENSED PROFESSIONAL ENGINEER
05/13/2025

EV CHARGING STATION
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER:
XXX-XXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
A	03/04/2025	NPC	AMM	ISSUED FOR PERMIT
B	05/12/2025	KRC	AMM	ISSUED FOR PERMIT - REV 1

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

E-2.0
PLAN DETAILS

NO.	EQUIPMENT	EQUIPMENT TO	EQUIPMENT FROM	VOLTAGE (V)	EQUIPMENT KVA	CURRENT (A)	FULL LOAD CURRENT MULTIPLIED BY 1.25	OVERCURRENT PROTECTIVE DEVICE SIZE	MAXIMUM ONE WAY LENGTH (FT)	CONDUCTOR SIZE	NEUTRAL SIZE	CONDUCTOR MATERIAL	GROUND SIZE	GROUND CONDUCTOR MATERIAL	WIRE AMPACITY	DERATED CONDUCTOR AMPACITY	CONDUCTOR INSULATION TYPE	VOLTAGE DROP (%)	CONDUIT SIZE
1	1600A SWITCHBOARD	MSB-1	XFMR-1	480	1596.21	1920.0	-	1600	25	5 X #500	#500	CU	-	-	1900	1786	XHHW-2	0.10%	(5) 4"
2	POWER CABINET 1	CS-1	MSB-1	480	399.05	480	600	700	50	2 X #500	-	CU	#1	CU	760	714.4	XHHW-2	0.13%	3"
3	POWER CABINET 2	CS-2	MSB-1	480	399.05	480	600	700	50	2 X #500	-	CU	#1	CU	760	714.4	XHHW-2	0.13%	3"
4	POWER CABINET 3	CS-3	MSB-1	480	399.05	480	600	700	45	2 X #500	-	CU	#1	CU	760	714.4	XHHW-2	0.11%	3"
5	POWER CABINET 4	CS-4	MSB-1	480	399.05	480	600	700	45	2 X #500	-	CU	#1	CU	760	714.4	XHHW-2	0.11%	3"
6	ENERGY MANAGEMENT SYSTEM	EMS-1	PNL-1	120	0.25	1.2	1.5	20	15	#12	#12	CU	#12	CU	25	23.5	XHHW-2	0.05%	3/4"
7	RECEPTACLE	RECP-1	PNL-1	120	0.2	1.0	1.3	20	15	#12	#12	CU	#12	CU	25	23.5	XHHW-2	0.04%	3/4"

SWITCHBOARD MSB-1

VOLTAGE:	PHASE:	WIRE:	BUS:	MAIN:	SHORT CIRCUIT	LOCATION:
480/277 V	3P	4W	1600 A	1600A	65 KA	-

CIRCUIT	DESCRIPTION	TRIP AMPS	POLES	PHASE LOADS (VA) VA	A	B	C	VA	POLES	TRIP AMPS	DESCRIPTION	CIRCUIT
1	CHARGING STATION 1	600	3	399052.8	798105.6			399052.8	3	600	CHARGING STATION 2	2
						798105.6						
							798105.6					
3	CHARGING STATION 3	600	3	399052.8	798105.6			399052.8	3	600	CHARGING STATION 4	4
						798105.6						
							798105.6					
5	CPT/PANELBOARD	20	2	5000	2886.8			-	-	-	-	-
						2886.8		-	-	-	-	-
-	-	-	-	-			0	-	-	-	-	-
TOTAL CONNECTED PHASE LOAD (VA)					1599098.0	1599098.0	1596211.2					
TOTAL CONNECTED LOAD (VA)					1601211.2							
LIMITED MAXIMUM LOAD (VA)					1000000							

PANEL PNL-1

VOLTAGE:	PHASE:	WIRE:	BUS:	MAIN:	SHORT CIRCUIT	LOCATION:
120/240 V	1P	3W	100 A	30A	30 KA	-

CIRCUIT	DESCRIPTION	TRIP AMPS	POLES	PHASE LOADS (VA) VA	A	B	VA	POLES	TRIP AMPS	DESCRIPTION	CIRCUIT
1	ENERGY MANAGEMENT (EMS)	20	1	1000	1000		-	1	20	SPARE	2
3	RECEPTACLE	20	1	200		400	200	1	20	LIGHTING	4
5	SPARE	20	1	-	0		-	-	-	SPACE	6
7	SPARE	20	1	-		0	-	-	-	SPACE	8
9	SPARE	20	1	-	0		-	-	-	SPACE	10
TOTAL PHASE CONNECTED LOAD (VA)					1000	400					
TOTAL PANEL CONNECTED CURRENT (A)					11.67						

ELECTRICAL EQUIPMENT SCHEDULE

REF ID	QUANTITY	DESCRIPTION
MSB-1	1	SWITCHBOARD, 480V, 1600A BUS, 1600A LSIG BREAKER, SERVICE ENTRANCE RATED, WITH ARMS AND INTERNAL CPT/PANELBOARD
EMS	1	MOBILITY HOUSE LLC'S CHARGEPILOT CONTROLLER OR EQUIVALENT ENERGY MANAGEMENT SYSTEM
RECP	1	20A, 120V, GFI DUPLEX WEATHERPROOF IN-USE TYPE COVER
CS-XX	4	ALPITRONIC HYPERCHARGER HYC400 CHARGING STATION

ELECTRICAL SCHEDULES

SCALE: NTS

new leaf energy
55 TECHNOLOGY DRIVE, SUITE 102
LOWELL, MA 01851
PHONE: (888) 808-4273
FAX: (888) 843-6778
WWW.NEWLEAFENERGY.COM

LIG Consultants
510 CHAPMAN STREET, SUITE 202
CANTON, MA 02021
PHONE: (508) 381-3371
FAX: (774) 206-2155
WWW.LIGCONSULTANTS.COM

NOT FOR CONSTRUCTION

STATE OF NEW HAMPSHIRE
ANTHONY M MORREALE No.17084
LICENSED PROFESSIONAL ENGINEER
05/13/2025

EV CHARGING STATION
505 US-1
PORTSMOUTH, NH 03801

PROJECT NUMBER:
XXX-XXX

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
A	03/04/2025	NPC	AMM	ISSUED FOR PERMIT
B	05/12/2025	KRC	AMM	ISSUED FOR PERMIT - REV 1

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

E-3.0
ELECTRICAL SCHEDULES

Attachment D - Site Photos

Wetland Conditional Use Permit
Port Inn and Suites Electric Vehicle Charging Station
Portsmouth, NH
Attachment D – Site Photo Log

1. Looking north from the existing hotel parking spaces toward Coakley Road and the pool / recreation area onsite.

2. Looking southeast at the proposed project area for EV charging.

3. Looking northwest at the proposed project area for EV charging.

4. Wide view looking west at the proposed project area.

5. Looking north towards entrance/exit to Port Inn and Suites on Coakley Road.

6. Looking south at the proposed project area from the northern side of Coakley Road.

Wetland Conditional Use Permit
Port Inn and Suites Electric Vehicle Charging Station
Portsmouth, NH
Attachment D – Site Photo Log

7. Looking south at the proposed project area from the northern side of Coakley Road.

8. Looking northeast up Coakley Road towards US-1 from the general area of the proposed project.

9. Looking northeast up Coakley Road towards US-1 from the northern side of Coakley Road.

10. Looking southwest down Coakley Road away from US-1 from the northern side of Coakley Road.

Attachment E - Wetland Delineation Report

Weston & Sampson

westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Wetland Delineation Report

May 2025

Portsmouth, New Hampshire
Project # ENG24-1702

New Leaf
Coakley Road
Portsmouth, NH

Wetland Delineation Conducted By:
Devin Herrick, CWS
Wetland Delineation Report Reviewed By:
Rhianna Sommers, PWS

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APPENDICES

Appendix A....ACOE Wetland Determination Data Forms
Appendix B....Site Photographs
Appendix C....NHB Datacheck Forms

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1.0 SITE DESCRIPTION

On May 16th, 2025, a wetland delineation was conducted on Coakley Road adjacent to 65 Borthwick Avenue in Portsmouth, NH. The investigation area is located adjacent to commercial buildings and undeveloped woodlands. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland areas including, one nontidal (freshwater) wetland and one perennial stream/river were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method). Further descriptions of these wetland resource areas are presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

A Weston & Sampson NH Certified Wetland Scientist (CWS), trained in the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method), observed the following jurisdictional wetland resources at the site subject to (or potentially subject to) regulation under RSA 482-A Fill and Dredge in Wetlands:

- Nontidal (Freshwater) Wetland
- Bank – Perennial Stream/River

Field data were recorded on US Army Corps of Engineers (ACOE) Wetland Determination Data Forms. See Appendix A for completed data forms and Appendix B for site photographs.

2.2 Wetland Delineation Methodology

A wetland delineation was conducted in accordance with New Hampshire Administrative Code Env-Wt 406 Delineation and Classification of Jurisdictional Areas utilizing the Federal Delineation Method. Per Env-Wt 103.02 "Federal Delineation Method" is defined as "the method in "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012", and the City of Portsmouth Zoning Ordinance.

The Federal Delineation Method identifies wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology. Pink flags with distinct flag numbers are left in the field to show wetland limits. Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations, the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceeds

50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference and Env-Wt 301(c) as described above.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, and water-stained leaves.

2.3 Nontidal (Freshwater) Wetlands

Per Env-Wt 103.47 “Non-tidal wetland” means a wetland that is not subject to periodic inundation by tidal waters. The limit of the nontidal wetland was determined utilizing the Federal Delineation Method by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions. Wetland flags left in the field included:

- WET-A1 through WET-A12 (WET “A” Series)

Dominant vegetation within the wetland resource area included white meadowsweet (*Spiraea latifolia)* and broad-leaved cattail (*Typha latifolia)*. species that generally thrive in wet conditions. Soils within the BVW’s were composed of a thick organic layer underlain by sandy loam with redoximorphic features. Other indicators of wetland hydrology included surface water and saturation.

Dominant vegetation in the adjacent upland area included white meadowsweet (*Spiraea latifolia),* Canada goldenrod *(Solidago canadensis),* field horsetail *(Equisetum arvense),* Asiatic bittersweet

(Celastrus orbiculatus). Soils within the upland were composed of fine sandy loam with no evidence of mottling or hydrology within the top 8 inches. A restrictive layer was present at 8 inches of gravel and fill.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as PEM1E, P – Palustrine, EM - Emergent, 1 Persistent, E Seasonally Flooded/Saturated.

At the state level in NH, nontidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. The City of Portsmouth has a 100-foot buffer on non-tidal wetlands.

2.4 Banks – Perennial Stream/River

Per Env-Wt 103.53 "Perennial stream" means a watercourse that is in the groundwater table for most of the year and so has groundwater as its primary source of water for stream flow, with runoff from rainfall and snowmelt as a supplemental source of water, so that it contains flowing water year-round during a typical year. Perennial streams are delineated by identifying the limit of the bank and the ordinary high-water mark on each side of the watercourse (Env-Wt 406.04(a)). Per Env-Wt 102.15 "Bank" means the transitional slope adjacent to the edge of a surface water body, the upper limit of which is usually defined by a break in slope, or for a wetland, where a line delineated in accordance with Env-Wt 400 indicates a change from wetland to upland. Per RSA 483-B:4, XI-e. "Ordinary high water mark" means the line on the shore, running parallel to the main stem of the river, established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the immediate bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. Where the ordinary high-water mark is not easily discernable, the ordinary high-water mark may be determined by the department of environmental services.

A single perennial stream/river was identified on site. Based on the current mapping available from the United States Geological Survey (USGS) this stream is called Hodgson Brook. The perennial stream bank was flagged. Wetland flags left in the field included:

- TOB-A1 through TOB-A12 (TOB "A" Series) – Hodgson Brook

The perennial stream ordinary high water mark was flagged. Wetland flags left in the field included:

- OHW-A1 through OHW-A12 (OHW "A" Series) – Hodgson Brook

Utilizing the New Hampshire hydrography dataset archived by the Geographically Referenced Analysis and Information Transfer System (GRANIT) Hodgson Brook is not a fourth order stream or higher. Since Hodgson Brook is not a fourth order stream or higher is it not considered a "public water"per RSA 483-B:4, XVI and not subject to the Shoreland Water Quality Protection Act (RSA 483-B).

Perennial streams/rivers are considered to be "Surface Waters of the State" (RSA 485-A:2, XIV) and as such at the state level they are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. The City of Portsmouth has a 100-foot buffer on perennial streams.

2.5 Other Protected Areas

Weston & Sampson created Environmental Resources Maps (see Figures 3 – 4.4) of the site to determine the presence of other protected areas. These areas included:

- Designated River Segment/Corridor
- Prime Wetlands
- FEMA 100 Year Floodplain
- Wildlife Action Plan
- Endangered and Rare Species/Habitat

Designated River Segment/Corridor

The New Hampshire Rivers Management and Protection Program (RMPP) was established in 1988 with the passage of RSA 483 to protect certain rivers, called Designated Rivers, for their outstanding natural and cultural resources. The New Hampshire Department of Environmental Services RMPP maintains a NH Designated River Corridor Web Map viewer showing all of the jurisdictional designated river segments. The Designated River corridor is defined as the river and the land area located within a distance of 1,320 feet (1/4 mile) of the normal high water mark or to the landward extent of the 100 year floodplain of a designated river as designated by the Federal Emergency Management Agency, whichever distance is larger.

A map of the investigation area utilizing the NH Designated River Corridor Web Map viewer is shown in Figure 4.1. There are no designated river segments or corridors located within the investigation area.

Prime Wetlands

Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. The conservation commission, planning board, or governing body shall give written notice to the owner of the affected land and all abutters 30 days prior to the public hearing, before designating any property as prime wetlands.

The City of Portsmouth NH has chosen to designate prime wetlands. A map of Priority Resource Areas is shown in Figure 4.4. There are no prime wetlands located within the investigation area.

FEMA 100 Year Floodplain

The Federal Emergency Management Agency (FEMA) has designated a series of zones which are defined according to varying levels of flood risk. Per FEMA a flood is any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. The 100-year floodplain is the zone with a 1% annual chance of flooding. FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site.

See Figure 3 for FIRM map. Based on FEMA flood maps the investigation area is not located within the 100-year floodplain.

Wildlife Action Plan

In 2020 an update was completed of the New Hampshire Fish and Game Wildlife Action Plan. According to the NH Fish and Game the aim of the Wildlife Action Plan seeks to “identify species in greatest need of conservation, habitats that are at the greatest risk, as well as land uses and activities that present the greatest threats to wildlife and habitat.” The NH Wildlife Action Plan includes mapping data available for use by stakeholders:

1. Habitat Land Cover Map: which shows where the different types of wildlife habitat are located throughout the state.
2. Highest Ranked Habitat by Ecological Condition Map: which shows where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.

After learning what habitat may be present within a proposed project area the Wildlife Action Plan informs stakeholders about strategies for managing and protecting wildlife. The data from these maps is available on the Geographically Referenced Analysis and Information Transfer System (GRANIT) viewer.

Two maps have been created to illustrate the New Hampshire Fish and Game Wildlife Action Plan data available, and they are shown in Figure 4.2-4.3. According to the Highest Ranked Habitat Map (Figure 4.2) the investigation area is not located within wildlife habitat. According to the Habitat Land Cover Map (Figure 4.3) the investigation area is composed of developed or barren land and developed impervious cover types.

Endangered and Rare Species/Habitat

The New Hampshire Natural Heritage Bureau (NHB) keeps records of known locations of rare species and natural communities. The NHB Datacheck Tool allows the user to outline the limits of the proposed project area in order to determine if there are any records of rare species and natural communities within the proposed project limits.

The approximate proposed project limits were mapped using the NHB Datacheck Tool. The NHB records indicate the investigation area has potential impacts for any rare species and natural communities (see Appendix C). This mapping is regularly updated and subject to change.

If any portion of the project involves a federal nexus (i.e. federal permitting, federal funding etc..), additional information may be required from the U.S. Fish and Wildlife Service.

3.0 SUMMARY

On May 16th, 2025, a wetland delineation was conducted on Coakley Road adjacent to 65 Borthwick Avenue in Portsmouth, NH. One nontidal (freshwater) wetland and one perennial stream/river were identified and flagged at the site.

Additional environmental mapping was conducted using GRANIT data layers and FEMA FIRM mapping. This additional mapping indicates the investigation area may have potential impacts to rare species and natural communities per the NHB data check.

4.0 REFERENCES

Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page. http://www.npwrc.usgs.gov/resource/1998/classwet/classwet.htm (Version 04DEC98).

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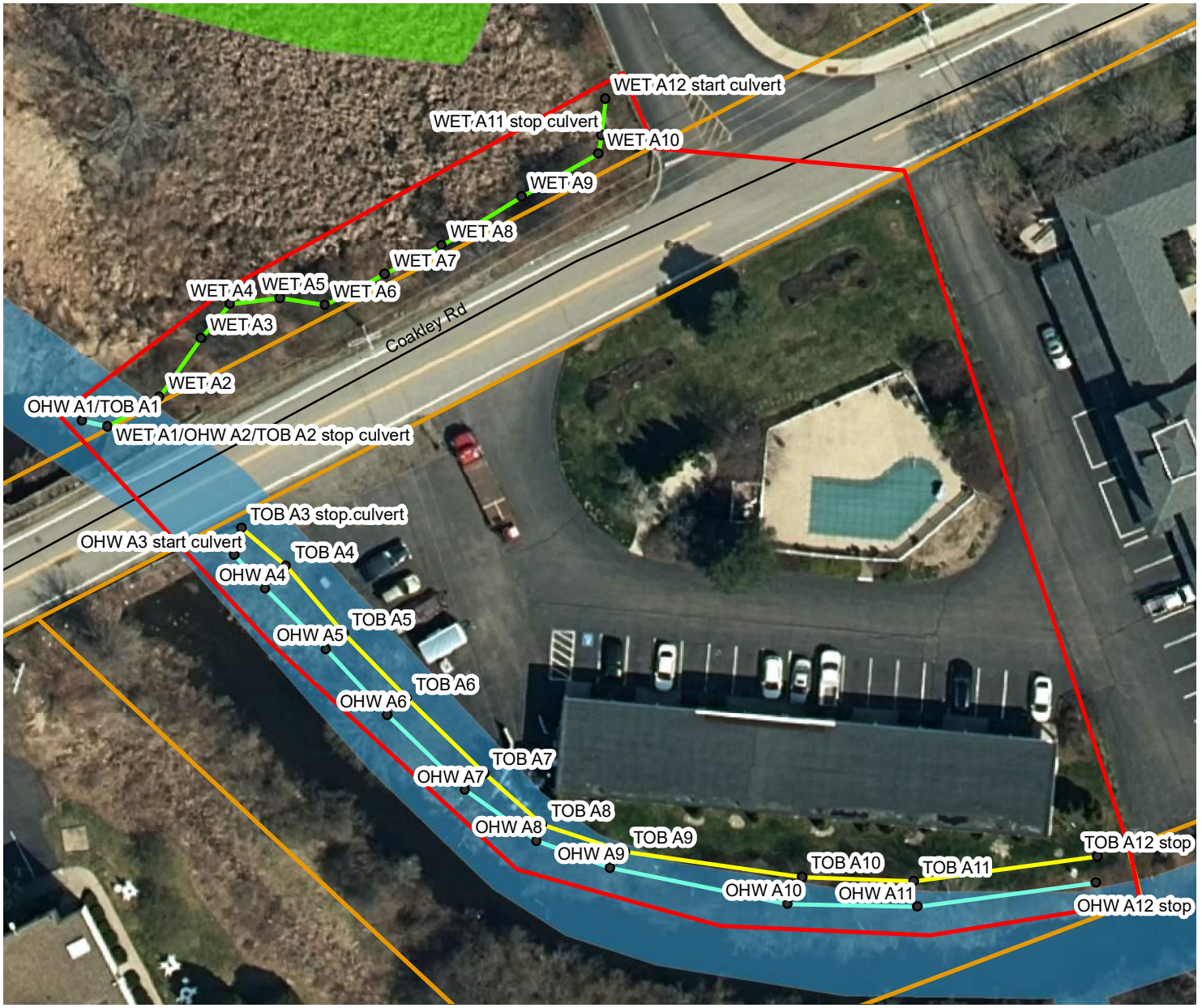
New England Hydric Soils Technical Committee, 2019, Version 4, *Field Indicator of Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

Tiner, Jr., Ralph W., 2005, Field Guide to Nontidal Wetland Identification

United States Department of Agriculture, Natural Resources Conservation Service. *2018. Field Indicators of Hydric Soils in the United States, Version 8.2.* L. M. Vasilas, G. W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USACOE, January 1987, Corps of Engineers Wetlands Delineation Manuel, Wetlands Research Program Technical Report Y-87-1.



Legend

- Wetland Flags
- Ordinary High Water
- Top of Bank
- Wetland
- Investigation Area
- NH DOT Roads
- Parcels
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

USGS NH 2021\2022 6-inch Orthophotos (RGB)

RGB

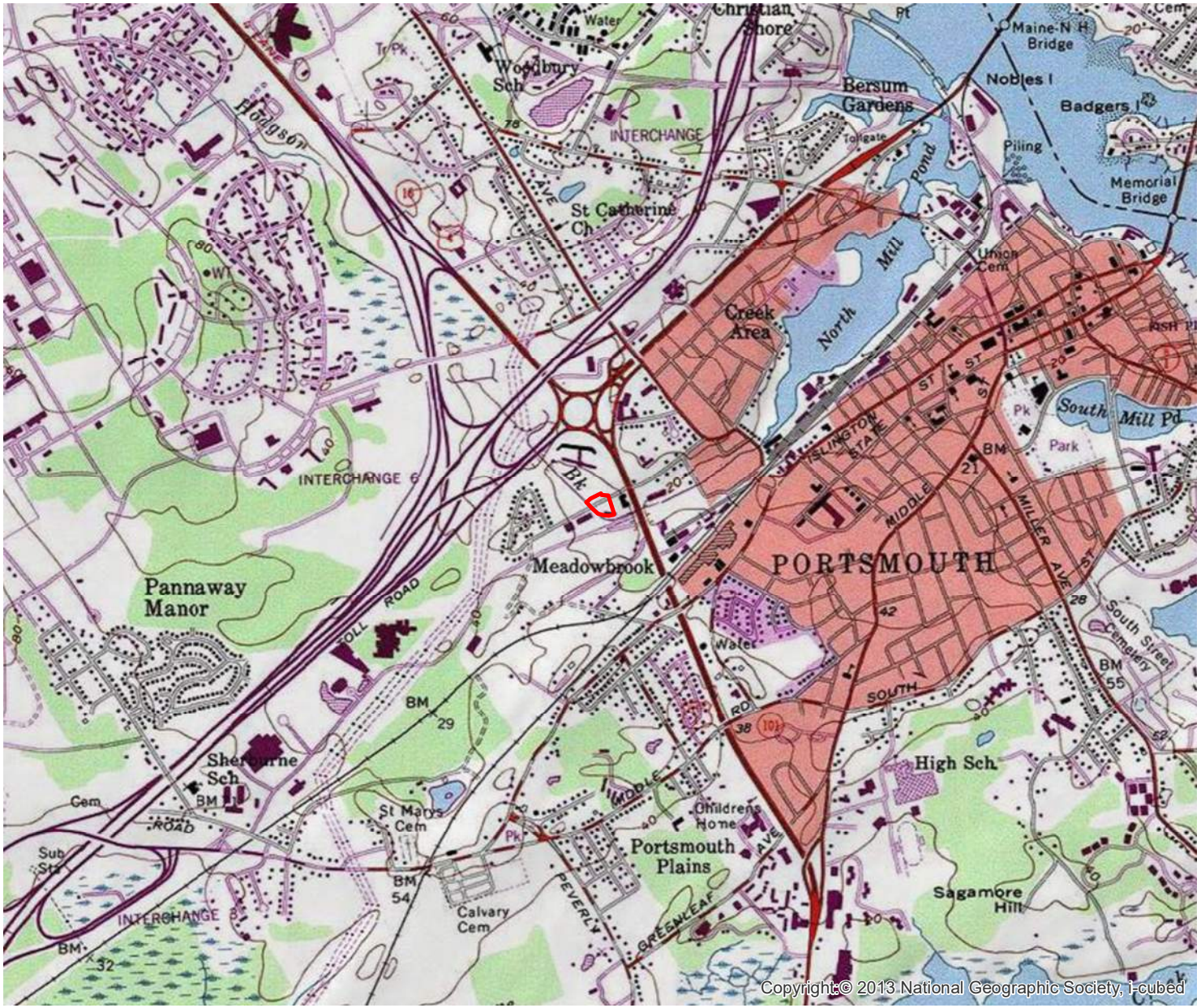
- Red: Band_1
- Green: Band_2
- Blue: Band_3

FIGURE 1

New Leaf
Portsmouth NH

Wetlands Field Map

Weston & Sampson



N
W E
S

1,000 500 0 1,000
Feet

Legend

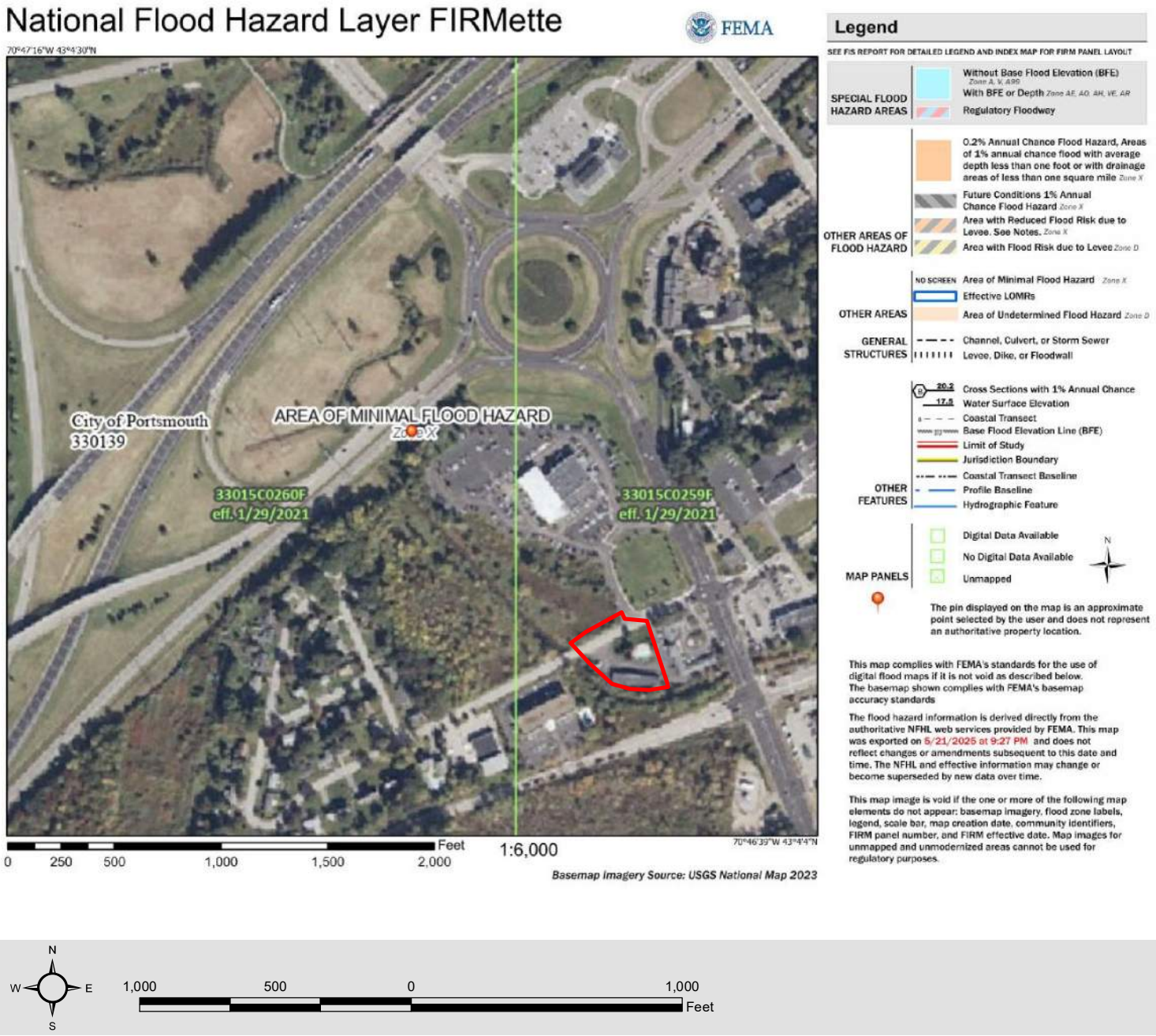
Investigation Area

FIGURE 2

New Leaf
Portsmouth NH

USGS Topographic Map

Weston & Sampson



Legend

Investigation Area

FIGURE 3

New Leaf
Portsmouth NH

FEMA Map

Weston & Sampson

Path: \\wse03.local\WSE\Projects\Private\New Leaf Energy\EV Charging Designs\Portsmouth, NH\Permitting\Wetland Delineation Report\GIS\4 Designated River.mxd **User:** Herrick.Devin **Saved:** 5/23/2025 1:58:46 PM **Opened:** 5/23/2025 1:59:06 PM

Legend

- Wetland Flags
- Ordinary High Water
- Top of Bank
- Wetland
- Investigation Area
- NH DOT Roads
- Parcels
- Designated_Rivers
- Approx Designated River Corridor

USGS NH 2021\2022 6-inch Orthophotos (RGB)

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

FIGURE 4.1

New Leaf
Portsmouth NH

Designated River Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH New Leaf\NH Report Template\GIS\5 WAP 1.mxd **User:** Herrick.Devin **Saved:** 5/21/2025 5:34:49 PM **Opened:** 5/21/2025 5:35:30 PM

N
W E
S

100 50 0 100
Feet

Legend

- Investigation Area
- NH DOT Roads
- Parcels
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes

USGS NH 2021\2022 6-inch Orthophotos (RGB)

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

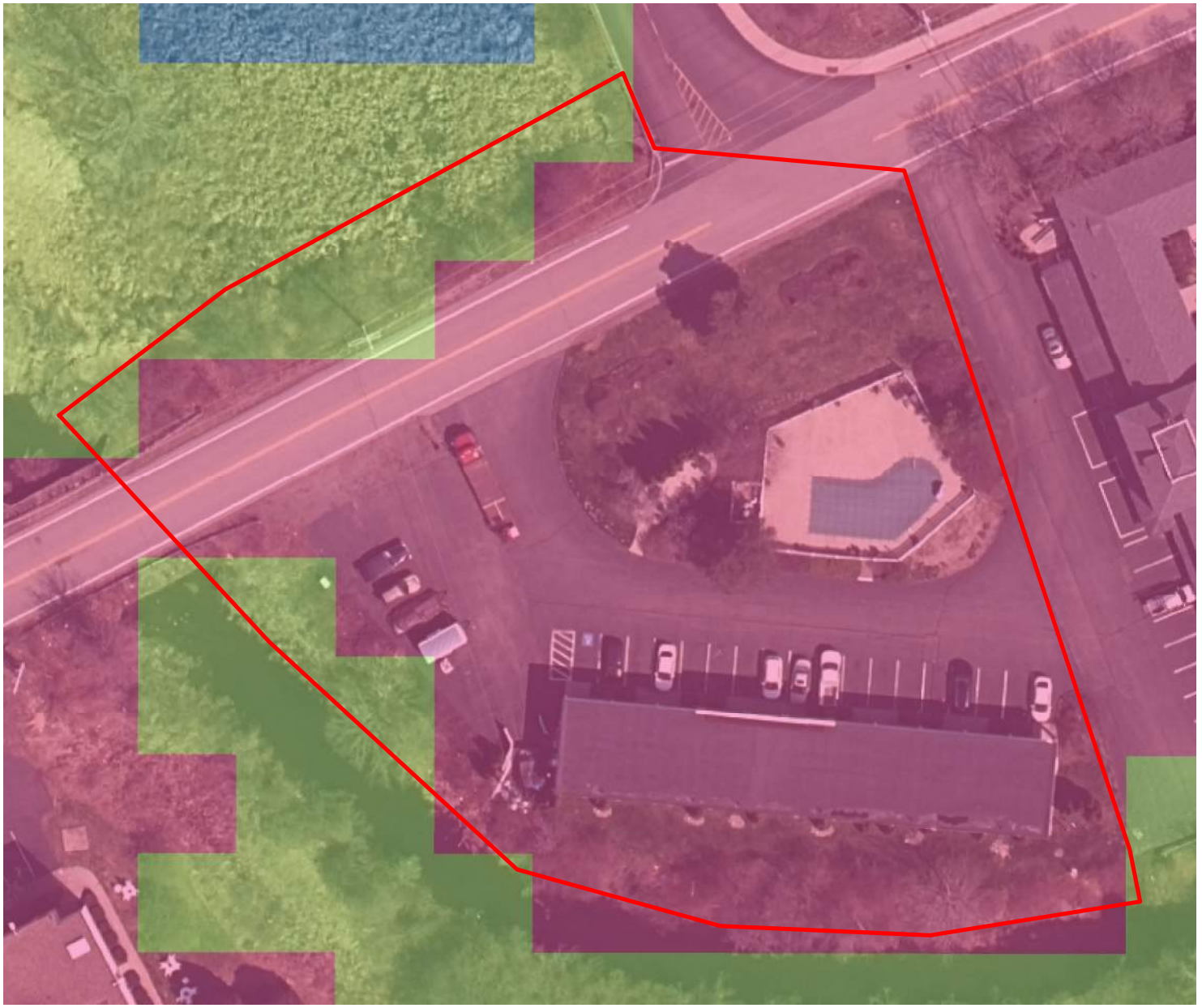
FIGURE 4.2

New Leaf
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH New Leaf\NH Report Template\GIS\6 WAP 2.mxd **User:** Herrick.Devin **Saved:** 5/21/2025 5:38:54 PM **Opened:** 5/21/2025 5:39:54 PM



N
W E
S

100 50 0 100
Feet

Legend

- Investigation Area
- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland

USGS NH 2021\2022 6-inch Orthophotos (RGB)

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

FIGURE 4.3

New Leaf
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH New Leaf\NH Report Template\GIS\7 Priority Resource Areas_WPPT.mxd **User:** Herrick.Devin **Saved:** 5/21/2025 6:00:54 PM **Opened:** 5/21/2025 6:00:59 PM

N
W E
S

1,000 500 0 1,000
Feet

Legend

- Investigation Area
- Wetlands
- 100ft Wetlands Buffer
- Prime Wetlands- Portsmouth
- Prime Wetlands Eligible- Pease
- Parcels

FIGURE 4.4

New Leaf
Portsmouth NH

Prime Wetland Map

Weston & Sampson

APPENDIX A

ACOE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Coakley Road City/County: Portsmouth Sampling Date: 5/16/2025

Applicant/Owner: New Leaf State: NH Sampling Point: WET A WET

Investigator(s): Devin Herrick, CWS Section, Township, Range:

Landform (hillside, terrace, etc.): roadside Local relief (concave, convex, none): concave Slope (%): 0-3

Subregion (LRR or MLRA): LRR R Lat: 43.069731 Long: -70.780383 Datum: WGS84

Soil Map Unit Name: Scitico NWI classification: PEM1

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 1
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET A WET

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Spiraea latifolia*	5	No	FACW
2. *Typha latifolia*	100	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		110 (B)

Prevalence Index = B/A = 1.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET A WET

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Muck	organic
6-18	2.5Y 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Coakley Road City/County: Portsmouth Sampling Date: 5/16/2025

Applicant/Owner: New Leaf State: NH Sampling Point: WET A UP

Investigator(s): Devin Herrick, CWS Section, Township, Range:

Landform (hillside, terrace, etc.): roadside Local relief (concave, convex, none): concave Slope (%): 0-3

Subregion (LRR or MLRA): LRR R Lat: 43.069731 Long: -70.780383 Datum: WGS84

Soil Map Unit Name: Scitico NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**		
Hydric Soil Present?	Yes	No X	**within a Wetland?**	**Yes**	**No** X
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:		

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No X	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET A UP

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Frangula alnus*	1	No	FAC
2. *Spiraea latifolia*	10	Yes	FACW
3. *Cornus sericea*	1	No	FACW
4.			
5.			
6.			
7.			
	12	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Solidago canadensis*	15	Yes	FACU
2. *Equisetum arvense*	25	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
Woody Vine Stratum (Plot size:)			
1. *Celastrus orbiculatus*	5	Yes	UPL
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	11	x 2 =	22
FAC species	26	x 3 =	78
FACU species	15	x 4 =	60
UPL species	5	x 5 =	25
Column Totals:	57 (A)		185 (B)

Prevalence Index = B/A = 3.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET A UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/3	100					Loamy/Clayey	fine sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: gravel/fill

Depth (inches): 8

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) gravel fill and disturbance

APPENDIX B

Site Photographs

Photo 1: TOB-A Series

Photo 2: WET-A Series

APPENDIX C

NHB Datacheck Forms

NH DIVISION OF FORESTS AND LANDS

DataCheck Tool Help

Community | Landowners | Natural Resource Professionals | Conservation | Exploring Our Forests

NHB DataCheck Tool: Project Mapping

Click Here to Show Instructions

Base Map: Aerial Imagery

Map mode: Navigation / Drawing (polygons)

Map one or more polygons that outline the entire area that could be disturbed by your project, including temporary disturbances such as construction-vehicle staging areas.

Add Shapefile

ID	AREA
1	1.8 acres
Total: 1.8 acres	

Once you have accurately mapped your project boundaries you may submit them for a DataCheck.

DataCheck

Results: Potential Impacts

There are NHB records in the vicinity of the area(s) you mapped.

Back | Next | Cancel

Attachment F - Owner Authorization Form

OWNER AUTHORIZATION FOR INDIVIDUAL

I, ASHISH SANGANI,

by my signature below, hereby authorize Coakley Road EV Charging 1, LLC to
(name of applicant)

submit Planning Board/Zoning Board of Adjustment/Planning Division applications and applicable materials for presentation to City of Portsmouth Planning Department/Portsmouth Zoning Board of Adjustment/ Portsmouth Planning Board for the proposed development at:

505 US-1 Portsmouth, NH
(address of site)

(Signature)

4/9/25
(Date)