

26 July 2023

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

Re: City of Portsmouth Wetland Conditional Use Permit Request
Tax Map 207, Lot 59
67 Ridges Court
Portsmouth, New Hampshire

Dear Samantha:

This letter transmits a City of Portsmouth Wetland Conditional Use Permit Amendment request for 3,066 square feet of disturbance within the 100' City of Portsmouth Wetland Buffer for residential site improvements including construction of a proposed addition, re-configuration of the existing driveway utilizing pervious pavers, installation of three rain gardens, and construction of stone steps and a stone patio. (see attached plan set).

The property currently contains a single-family residential structure, a paved driveway, retaining walls, steps and associated landscaping (see attached photo log)

The proposed pervious technologies being used for the construction of the driveway combined with the proposed rain gardens will allow for collection, treatment and infiltration of the stormwater from the proposed building addition, providing a stormwater treatment component that does not exist under existing conditions. Attached to this application is a Rain Garden Subcatchment Exhibit, rain garden sizing & design calculations form, and an Inspection & Maintenance Plan for the proposed stormwater structures.

Per the City of Portsmouth Zoning Ordinance, *Article 10.1017.22 (3)*, wetland buffer occupies approximately 68% (11,170 sq. ft.) of the subject lot (16,500 sq. ft.) of which a majority of the buffer area would be characterized as maintained lawn. Approximately 16% or 1,788 sq. ft. of the wetland buffer area that occurs on the lot consists of structure, driveway, retaining walls and steps (developed area). The remaining wetland buffer area on the lot would be characterized as mostly maintained lawn, which would total approximately 84% or 9,382 sq. ft.

Also, per the City of Portsmouth Zoning Ordinance, Article 10.1017.24 the application shall include removal of **impervious surfaces** at least equal in area to the area of **impervious surface** impact. The project proposes a decrease (253 sq. ft.) of impervious surface within the City wetland buffer.





Under the City of Portsmouth Zoning Ordinance, Article 10.1017.25 (1) the wetland buffer enhancement plan shall include a combination of new plantings, invasive species removal, habitat creation areas, improved site hydrology, or protected easements provided offsite. The attached Landscape Plan prepared by LM Land Design, LLC (attached) provides for the installation of 92 plantings along the tidal wetland resource within the 25' vegetated buffer strip, in addition to 55 plants being installed outside of the vegetative buffer strip which will also serve to improve stormwater quality on the subject lot. Since the project proposes a decrease of impervious surface within the City wetland buffer, wetland buffer enhancements are not required under Article 10.1017.24, however the plantings will also serve to enhance the visual quality and aesthetics on the lot, provide micro habitats for urban wildlife species, promote pollinators and other valuable insect life and provide a landscape improvement from what currently exists.

Per the City of Portsmouth Zoning Ordinance, Article 10.1017.25 (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 attached Planting Plan proposes 92 plantings (as described above) in an area that is currently maintained lawn, directly adjacent to the tidal wetland resource.

According to the City of Portsmouth Zoning Ordinance, *Article 10.1017.50 Criteria for Approval*, the proposal shall comply with the following criteria:

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

The proposal is to construct a building addition onto the existing single-family residential structure, reconfiguration of the existing driveway utilizing pervious pavers, installation of three rain gardens, and construction of stone steps and a stone patio. Given that the proposed project includes expansion of an existing footprint on a previously developed lot utilizing an area that is currently paved driveway, removal and re-configuration of driveway and the proposed disturbance is not located in the Flood Hazard Zone, the land is reasonably suited to the use, activity, or alteration.

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

Due to the configuration of the lot, the location of nearby wetlands, there does not exist an area to propose the building addition and achieve a reasonable use while avoiding the 100' City of Portsmouth Wetland Buffer. The project utilizes an area that currently exists as paved driveway for the building addition and converts remaining driveway to a pervious surface resulting in a net reduction of impervious surface in the 100' City of Portsmouth Wetland Buffer.

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

The proposal will not significantly impact the existing wetland resource located adjacent to the site and its current functions and values. The proposed project reduces the amount of impervious surface within the 100' City of Portsmouth Wetland Buffer, provides for the installation of three rain gardens and 147 plantings on the lot which will serve to improve stormwater quality, treatment, and infiltration on the subject parcel. With the above measures being taken, it is my belief that the above project will improve water quality entering the nearby wetland resource, and therefore have no adverse impact on the wetland functional values and the surrounding properties.



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

The proposed project does not alter any naturally vegetated areas to construct the project.

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

The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable use of the property. The proposal avoids the wetland buffer to the greatest extent practicable while providing a reasonable use for the property owner. The project also provides the use of pervious technology, installation of rain gardens and a robust planting plan which will serve to improve stormwater quality, treatment, and infiltration on the subject parcel.

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

There are no areas within the vegetated buffer strip that will be impacted or altered by this project. The project does however enhance the vegetated buffer strip with the installation of 92 plantings as described above.

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,

Sincerely,

Steve Riker, CWS

Project Scientist/Project Manager

sriker@haleyward.com

Cc: Jeffrey M. & Melissa Foy-Owners/Applicant

To Whom It May Concern

RE: New Hampshire Department of Environmental Services Application and City of Portsmouth Applications for residential site improvements for Jeffrey M. & Melissa Foy, 67 Ridges Court, Portsmouth, NH.

This letter is to inform the New Hampshire Department of Environmental Services and the City of Portsmouth, in accordance with State Law that Ambit Engineering is authorized to obtain approvals in regards to the above referenced property.

Please feel free to call me if there is any question regarding this authorization. Sincerely,

Jeffrey M. & Melissa Foy

4 Fox Hollow Court

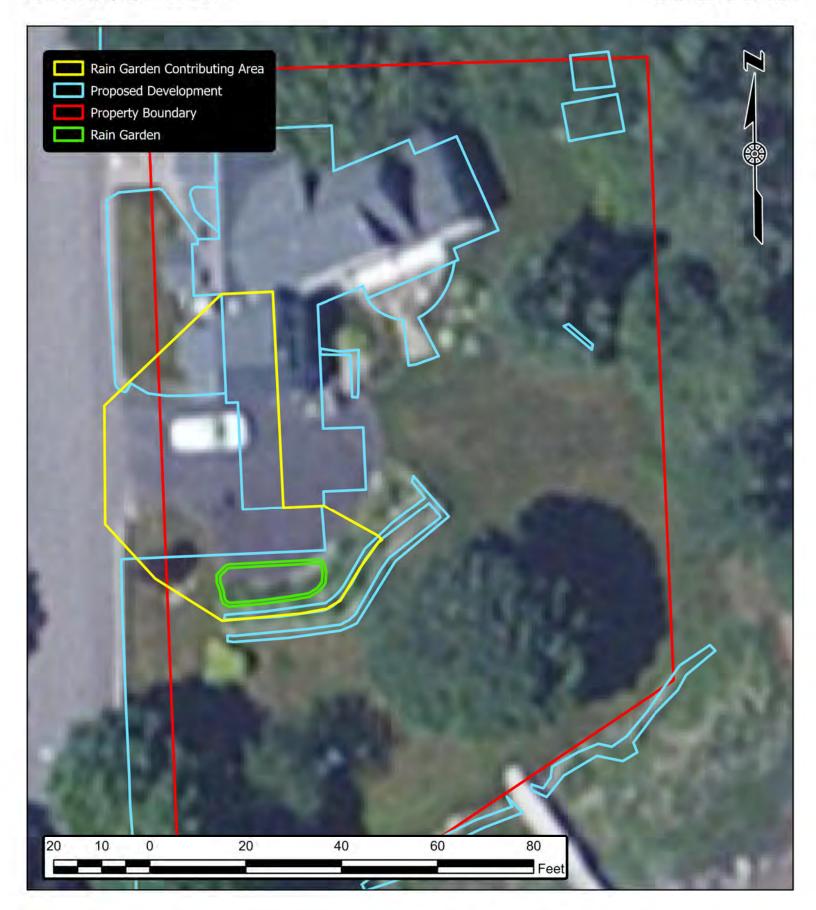
East Kingston, NH 03827



Rain Garden Subcatchment

PROPOSED ADDITIONS 67 RIDGES COURT PORTSMOUTH, NEW HAMPSHIRE JOB NUMBER: 5010130.1153.02 SCALE: 1" = 20'

SUBMITTED: 07-25-2023



Rain Garden Design Calculations

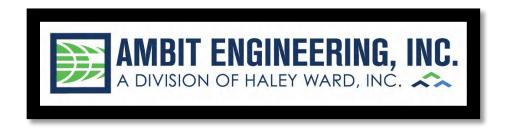
Foy Residence, JN 5010130.1153.02

Contributing area (sf)		
Impervious	1602	
Landscaped	754	
WQV = P*Rv*A		
Rv=0.05 + 0.9*	' I	
I	0.68	
Rv	0.662	
P (in)	1	
A (sf)	2356	
WQV (cf)	130.0	

Rain garden volume		
Filter area (sf)	137	
Filter depth (ft)	3	
Filter porosity	0.2	
Filter volume (cf)	82.2	
Ponding area (sf)	178	
Ponding depth (ft)	0.5	
Pond volume (cf)	78.8	
Total volume (cf)	161.0	

Rain Garden Volume > WQV 161 cf > 130 cf

Design is in compiance with BMPs



INSPECTION & LONG-TERM MAINTENANCE PLAN FOR BUILDING ADDITION

67 RIDGES COURT PORTSMOUTH, NH

Introduction

The intent of this plan is to provide Jeffrey M. & Melissa Foy (herein referred to as "owner") with a list of procedures that document the inspection and maintenance requirements of the stormwater management system for this development. Specifically, the Rain Garden other and Best Management Practices (collectively referred to as the "Stormwater Management System"). The contact information for the owner shall be kept current, and if there is a change of ownership of the property this plan must be transferred to the new owner.

The following inspection and maintenance program is necessary to keep the stormwater management system functioning properly and will help in maintaining a high quality of stormwater runoff to minimize potential environmental impacts. By following the enclosed procedures, the owner will be able to maintain the functional design of the stormwater management system and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

Annual Report

The owner shall prepare an annual Inspection & Maintenance Report. The report shall include a summary of the system's maintenance and repair by transmission of the Inspection & Maintenance Log and other information as required. A copy of the report shall be delivered annually to the Portsmouth DPW, if required.

Inspection & Maintenance Checklist/Log

The following pages contain the Stormwater Management System Inspection & Maintenance Requirements and a blank copy of the Stormwater Management System Inspection & Maintenance Log. These forms are provided to the owner as a guideline for performing the inspection and maintenance of the Stormwater Management System. This is a guideline and should be periodically reviewed for conformance with current practice and standards.

Stormwater Management System Components

The Stormwater Management System is designed to mitigate the quality of site-generated stormwater runoff. As a result, the design includes the following elements:

Non-Structural BMPs

Non-Structural best management practices (BMP's) include temporary and permanent measures that typically require less labor and capital inputs and are intended to provide protection against erosion of soils. Examples of non-structural BMP's on this project include but are not limited to:

- Temporary and Permanent mulching
- Temporary and Permanent grass cover
- Trees
- Shrubs and ground covers
- Miscellaneous landscape plantings
- Dust control
- Tree protection
- Topsoiling
- Sediment barriers
- Stabilized construction entrance

Inspection and Maintenance Requirements

The following summarizes the inspection and maintenance requirements for the various BMP's that may be found on this project.

- 1. Grassed areas and swales (until established): After each rain event of 0.5" or more during a 24-hour period, inspect grassed areas for signs of disturbance, such as erosion. If damaged areas are discovered, immediately repair the damage. Repairs may include adding new topsoil, lime, seed, fertilizer and mulch.
- 2. Plantings: Planting and landscaping (trees, shrubs) shall be monitored bi-monthly during the first year to insure viability and vigorous growth. Replace dead or dying vegetation with new stock and make adjustments to the conditions that caused the dead or dying vegetation. During dryer times of the year, provide weekly watering or irrigation during the establishment period of the first year. Make the necessary adjustments to ensure long-term health of the vegetated covers, i.e. provide more permanent mulch or compost or other means of protection.
- **3. Rain Garden:** After installation of the infiltration detention pond, perform the following inspections weekly until vegetation is established after construction, then on a bi-annual basis and after heavy rains thereafter:
 - **a.** Monitor for excessive or concentrated accumulations of debris, or erosion in excess of 2 inches below the various pipe inlets. Remove debris as required and replace or augment inlet fabric strips.
 - **b.** Monitor the outfall structure for problems with uneven flow or clogged pipes. Repair or

- remove clogs as required.
- **c.** Monitor vegetation on pond and replace dead or dying vegetation as required.
- **d.** Monitor side slopes of ponds for damage or erosion in excess of 2 inches—repair, as necessary.
- **e.** If surface ponds for longer than 24 hours following a storm, remove and replace the top 6 inches of soil.
- **4. Permeable Pavers:** Ensure that sediments do not enter and plug pavement. Remove sediments, trash, and debris, as necessary. Repair porous installations as necessary to maintain functionality. Vacuum at least twice annually.

Pollution Prevention

The following pollution prevention activities shall be undertaken to minimize potential impacts on stormwater runoff quality. The Contractor is responsible for all activities during construction. The Owner is responsible thereafter.

Spill Procedures

Any discharge of waste oil or other pollutant shall be reported immediately to the New Hampshire Department of Environmental Services (NHDES). The Contractor/Owner will be responsible for any incident of groundwater contamination resulting from the improper discharge of pollutants to the stormwater system and may be required by NHDES to remediate incidents that may impact groundwater quality. If the property ownership is transferred, the new owner will be informed of the legal responsibilities associated with operation of the stormwater system, as indicated above.

Sanitary Facilities

Sanitary facilities shall be provided during all phases of construction.

Material Storage

No on-site trash facility is provided until site is constructed. The contractors are required to remove trash from the site. Hazardous material storage is prohibited.

Material Disposal

All waste material, trash, sediment, and debris shall be removed from the site and disposed of in accordance with applicable local, state, and federal guidelines and regulations. Removed sediments shall be if necessary dewatered prior to disposal.

Invasive Species

Monitor the Stormwater Management System for signs of invasive species growth. If caught early, their eradication is much easier. The most likely places where invasions start is in wetter, disturbed soils or detention ponds. Species such as phragmites and purple loose-strife are common invaders in these wetter areas. If they are found, the owner shall refer to the fact-sheet created by the University of New Hampshire Cooperative Extension or contact a wetlands scientist with experience in invasive species control to implement a plan of action for eradication. Measures that do not require the application of chemical herbicides should be the first line of defense.



Figure 1: Lythrum salicaria, Purple Loosestrife. Photo by Liz West. Figure 2: Phragmites australis. Photo by Le Loup Gris

STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION MAINTENANCE SHEET

INSPECTION REQUIREMENTS				
ACTION TAKEN FREQUENCY MAINTENANCE REQUIREMENTS				
ENTRANCE SURFACE	After heavy rains,	-Top dress pad with new stone.		
-Check for sediment	as necessary	-Replace stone completely if completely		
accumulation/clogging of stone	clogged.			
-Check Vegetative filter strips	eck Vegetative filter strips -Maintain vigorous stand of vegetation.			
WASHING FACILITIES (if	As often as	-Remove Sediments from traps.		
pplicable) necessary				
-Monitor Sediment Accumulation				

MAINTENANCE LOG			
PROJECT NAME			
INSPECTOR NAME	INSPECTOR CONTACT INFO		
DATE OF INSPECTION	REASON FOR INSPECTION		
	☐LARGE STORM EVENT ☐PERIODIC CHECK-IN		
IS CORRECTIVE ACTION NEEDED?	DESCRIBE ANY PROBLEMS, NEEDED MAINTENANCE		
□YES □NO			
DATE OF MAINTENANCE	PERFORMED BY		
NOTES			

RAIN GARDEN LONG-TERM MAINTENANCE SHEET

INSPECTION REQUIREMENTS			
ACTION TAKEN	FREQUENCY	MAINTENANCE REQUIREMENTS	
POND SURFACE -Check for sediment accumulation/clogging of filterCheck for ponding water > 24 hours over the filter.	Weekly until vegetation is established, then bi-annually and after heavy rains	-Replace dead or dying vegetation -Remove sediments when required -Mow grasses at least twice yearly -If system ponds longer than 24 hours, then a qualified professional should assess the condition of the facility to determine measures required to restore infiltration function.	
FOREBAY -Monitor Sediment Accumulation	Bi-annually	-Replace dead or dying vegetation -Remove Sediments When Required	

MAINTENANCE LOG			
PROJECT NAME			
INSPECTOR NAME	INSPECTOR CONTACT INFO		
DATE OF INSPECTION	REASON FOR INSPECTION		
	□LARGE STORM EVENT □PERIODIC CHECK-IN		
IS CORRECTIVE ACTION NEEDED?	DESCRIBE ANY PROBLEMS, NEEDED MAINTENANCE		
□YES □NO			
DATE OF MAINTENANCE	PERFORMED BY		
NOTES			

PERMEABLE PAVER LONG-TERM MAINTENANCE SHEET

INSPECTION REQUIREMENTS			
ACTION TAKEN	FREQUENCY	MAINTENANCE REQUIREMENTS	
-Inspect pavement surface for the occurrence of sediment, trash, debris, or structural damageCheck pavement for surface ponding	Frequently in first few months following construction, Biannually after	-Ensure that sediments do not enter and plug pavement. Remove sediments, trash, and debris, as necessaryRepair outlet structures and appurtenances, as necessaryVacuum pavement at least twice annuallyPrevent vehicles with muddy wheels from accessing permeable pavement.	
-No winter sanding permitted -Minimize application of salt	Continuous practice		

MAINTENANCE LOG				
PROJECT NAME				
INSPECTOR NAME	INSPECTOR CONTACT INFO			
DATE OF INSPECTION	REASON FOR INSPECTION			
	□LARGE STORM EVENT □PERIODIC CHECK-IN			
IS CORRECTIVE ACTION NEEDED?	DESCRIBE ANY PROBLEMS, NEEDED MAINTENANCE			
□YES □NO				
DATE OF MAINTENANCE	PERFORMED BY			
NOTES				



Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle

Lonicera tatarica

USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these nonnative invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine

the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts nonviable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.

Bagging (solarization): Use this technique with softertissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database /
Britton, N.L., and A. Brown. 1913. An
illustrated flora of the northern United
States, Canada and the British
Possessions Vol. 1: 676

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

Woody Plants	Method of Reproducing	Methods of Disposal
Norway maple (Acer platanoides) European barberry (Berberis vulgaris) Japanese barberry (Berberis thunbergii) autumn olive (Elaeagnus umbellata) burning bush (Euonymus alatus) Morrow's honeysuckle (Lonicera morrowii) Tatarian honeysuckle (Lonicera tatarica) showy bush honeysuckle (Lonicera x bella) common buckthorn (Rhamnus cathartica) glossy buckthorn (Frangula alnus)	Fruit and Seeds	Prior to fruit/seed ripening Seedlings and small plants Pull or cut and leave on site with roots exposed. No special care needed. Larger plants Use as firewood. Make a brush pile. Chip. Burn. After fruit/seed is ripe Don't remove from site. Burn. Make a covered brush pile. Chip once all fruit has dropped from branches. Leave resulting chips on site and monitor.
oriental bittersweet (Celastrus orbiculatus) multiflora rose (Rosa multiflora)	Fruits, Seeds, Plant Fragments	Prior to fruit/seed ripening Seedlings and small plants Pull or cut and leave on site with roots exposed. No special care needed. Larger plants Make a brush pile. Burn. After fruit/seed is ripe Don't remove from site. Burn. Make a covered brush pile. Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.

Non-Woody Plants	Method of Reproducing	Methods of Disposal
garlic mustard (Alliaria petiolata) spotted knapweed (Centaurea maculosa) Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling. black swallow-wort (Cynanchum nigrum) May cause skin rash. Wear gloves and long sleeves when handling. pale swallow-wort (Cynanchum rossicum) giant hogweed (Heracleum mantegazzianum) Can cause major skin rash. Wear gloves and long sleeves when handling. dame's rocket (Hesperis matronalis) perennial pepperweed (Lepidium latifolium) purple loosestrife (Lythrum salicaria) Japanese stilt grass (Microstegium vimineum) mile-a-minute weed (Polygonum perfoliatum)	Fruits and Seeds	Prior to flowering Depends on scale of infestation Small infestation Pull or cut plant and leave on site with roots exposed. Large infestation Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting). Monitor. Remove any re-sprouting material. During and following flowering Do nothing until the following year or remove flowering heads and bag and let rot. Small infestation Pull or cut plant and leave on site with roots exposed. Large infestation Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting). Monitor. Remove any re-sprouting material.
common reed (Phragmites australis) Japanese knotweed (Polygonum cuspidatum) Bohemian knotweed (Polygonum x bohemicum)	Fruits, Seeds, Plant Fragments Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn't materially influence disposal activities.	 Small infestation Bag all plant material and let rot. Never pile and use resulting material as compost. Burn. Large infestation Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile. Monitor and remove any sprouting material. Pile, let dry, and burn.

23110 FOY L1 PLAN



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BEARBERRY Arctostaphylos uva-ursi

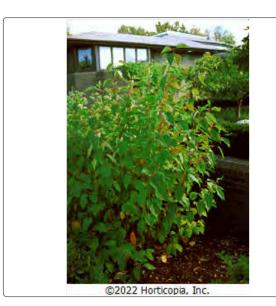
BUTTERFLY WEED Asclepias tuberosa

PURPLE DOME NE ASTER Aster novae-angliae 'Purple Dome'





SUMMER SWEET Clethra alnifolia



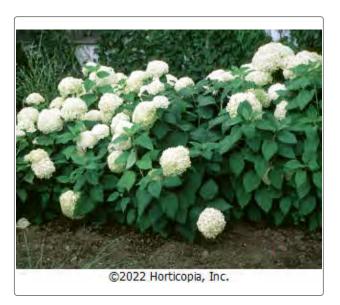
RED OSIER DOGWOOD Cornus stolonifera



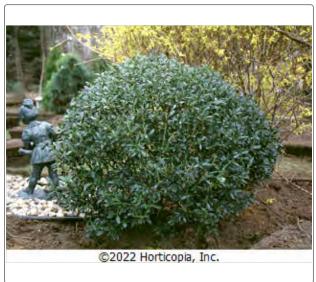
JOE PYE WEED Eupatorium purpureum



CRANESBILL
Geranium maculatum



ANNABELLE HYDRANGEA
Hydrangea arborescens 'Annabelle'



GALLBERRY HOLLY
Ilex glabra



BLUE FLAG IRIS
Iris versicolor



EASTERN RED CEDAR Juniperus virginiana



SWITCH GRASS Panicum virgatum



TINY WINE NINEBARK
Physocarpus opulifolius 'SMNPOTW'



THE BLUES BLUE STEM GRASS
Schizachyrium scoparium 'The Blues'



SALTMEADOW CORDGRASS
Spartina patens



LOWBUSH BLUEBERRY Vaccinium angustifolium

OWNER & APPLICANT:

JEFFREY M. & MELISSA FOY 4 FOX HOLLOW COURT EAST KINGSTON, NH 03827 (603)-778-5036

CIVIL ENGINEER & LAND SURVEYOR:

AMBIT ENGINEERING, INC. A DIVISION OF HALEY WARD 200 GRIFFIN ROAD, UNIT 3 PORTSMOUTH, N.H. 03801

ATTORNEY:

TEL. (603) 430-9282

HOEFLE, PHOENIX, GORMLEY &

ROBERTS, PLLC 127 PARROTT AVENUE PORTSMOUTH, NH 03801 TEL. (603) 436-0666

LANDSCAPE ARCHITECT:

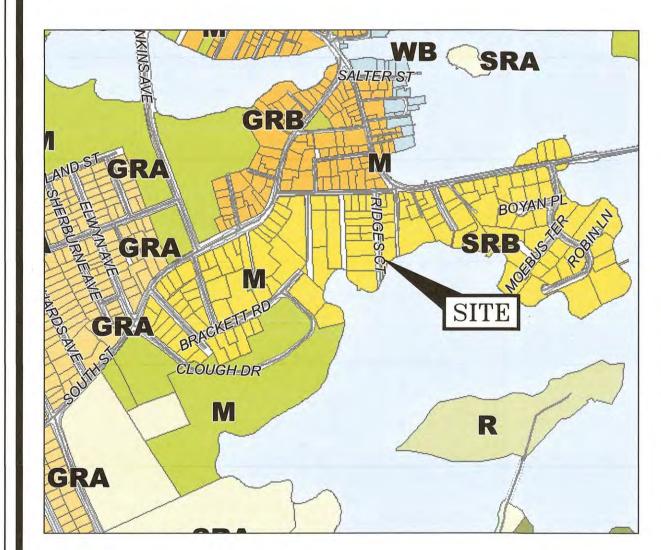
LAND DESIGN, LLC

11 SOUTH ROAD BRENTWOOD, NH 03833 TEL. (603) 770-7728

ARCHITECT:

MAUGEL DESTEFANO ARCHITECTS

22 LADD STREET PORTSMOUTH NH 03801 TEL. (603) 431-8701



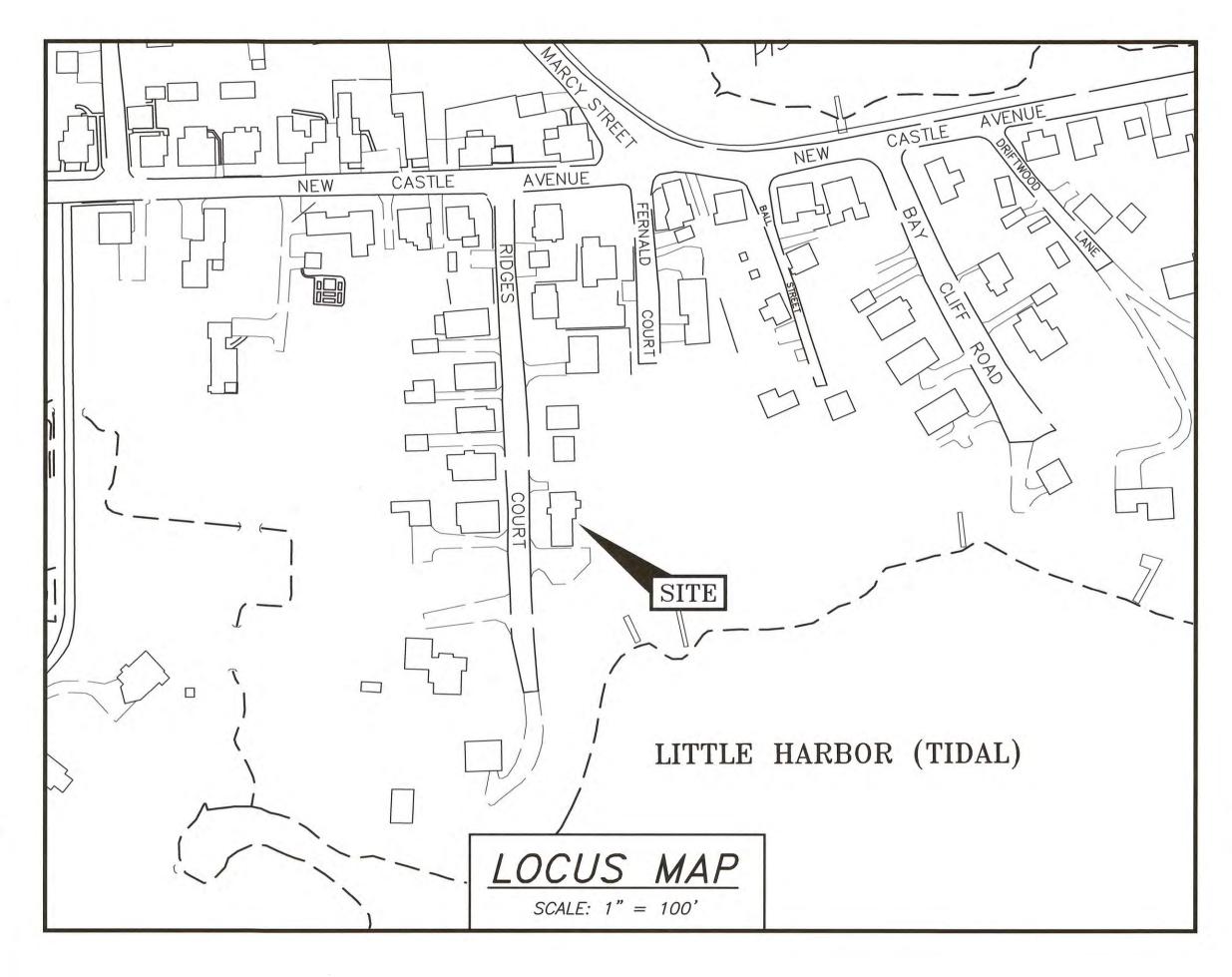
Legend **Character Districts** Character-Based Zoning Area (Refer to Zoning Map Sheet 2 of 2 Character Districts Regulating Plan) **Residential Districts** SRA Single Residence A SRB Single Residence B GRA General Residence A

GRB General Residence B GRC General Residence C

STRUCTURE ADDITION FOY RESIDENCE

67 RIDGES COURT, PORTSMOUTH, NEW HAMPSHIRE

PERMIT PLANS





PERMIT LIST: PORTSMOUTH ZONING BOARD: APPROVED PORTSMOUTH CUP WETLANDS: PENDING NHDES SHORELAND: PENDING

LEGEND:

EXISTING	PROPOSED	
		PROPERTY LINE SETBACK
s	s	SEWER PIPE
SL	SL	SEWER LATERAL
G	G	GAS LINE
D		STORM DRAIN WATER LINE
ws	w	WATER SERVICE
—— UGE ——	UGE —	UNDERGROUND ELECTRIC
—— OHW ——	—— онw ——	OVERHEAD ELECTRIC/WIRES
7	UD	FOUNDATION DRAIN
111 111		EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97×3	98×0	SPOT ELEVATION
\rightarrow	-	UTILITY POLE
->- ''''		WALL MOUNTED EXTERIOR LIGHTS
		TRANSFORMER ON CONCRETE PAD
		ELECTRIC HANDHOLD
420 G20	450 G50	SHUT OFFS (WATER/GAS)
\bowtie	GV	GATE VALVE
	+++HYD	HYDRANT
CB CB	CB	CATCH BASIN
	SMH	SEWER MANHOLE
	DMH	DRAIN MANHOLE
	TMH	TELEPHONE MANHOLE
(14)	(14)	PARKING SPACE COUNT
PM		PARKING METER
LSA	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	LANDSCAPED AREA
TBD	TBD	TO BE DETERMINED
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
DI PVC	DI PVC	DUCTILE IRON PIPE POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
AC	_	ASBESTOS CEMENT PIPE
VC	VC	VITRIFIED CLAY PIPE
EP	EP	EDGE OF PAVEMENT
EL.	EL.	ELEVATION
FF	FF	FINISHED FLOOR
INV S =	INV S =	INVERT SLOPE FT/FT
TBM	S = TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL
		745 July 23 - 1

INDEX OF SHEETS

DWG No.

C1

EXISTING CONDTIONS PLAN

GA/MH Garden Apartment/Mobile Home Park

SITE PLAN

LANDSCAPE PLAN

NHDES PERMIT PLAN

GRADING & EROSION CONTROL PLAN EROSION CONTROL NOTES & DETAILS

DETAILS

UTILITY CONTACTS **ELECTRIC:**

EVERSOURCE 1700 LAFAYETTE ROAD PORTSMOUTH, N.H. 03801 Tel. (603) 436-7708, Ext. 555.5678 ATTN: MICHAEL BUSBY, P.E. (MANAGER)

SEWER & WATER: PORTSMOUTH DEPARTMENT OF PUBLIC WORKS 680 PEVERLY HILL ROAD PORTSMOUTH, N.H. 03801 Tel. (603) 427-1530 ATTN: JIM TOW

NATURAL GAS: UNITIL 325 WEST ROAD PORTSMOUTH, N.H. 03801 Tel. (603) 294-5144 ATTN: DAVE BEAULIEU

COMMUNICATIONS: FAIRPOINT COMMUNICATIONS JOE CONSIDINE 1575 GREENLAND ROAD GREENLAND, N.H. 03840 Tel. (603) 427-5525

CABLE: COMCAST 155 COMMERCE WAY PORTSMOUTH, N.H. 03801 Tel. (603) 679-5695 (X1037) ATTN: MIKE COLLINS

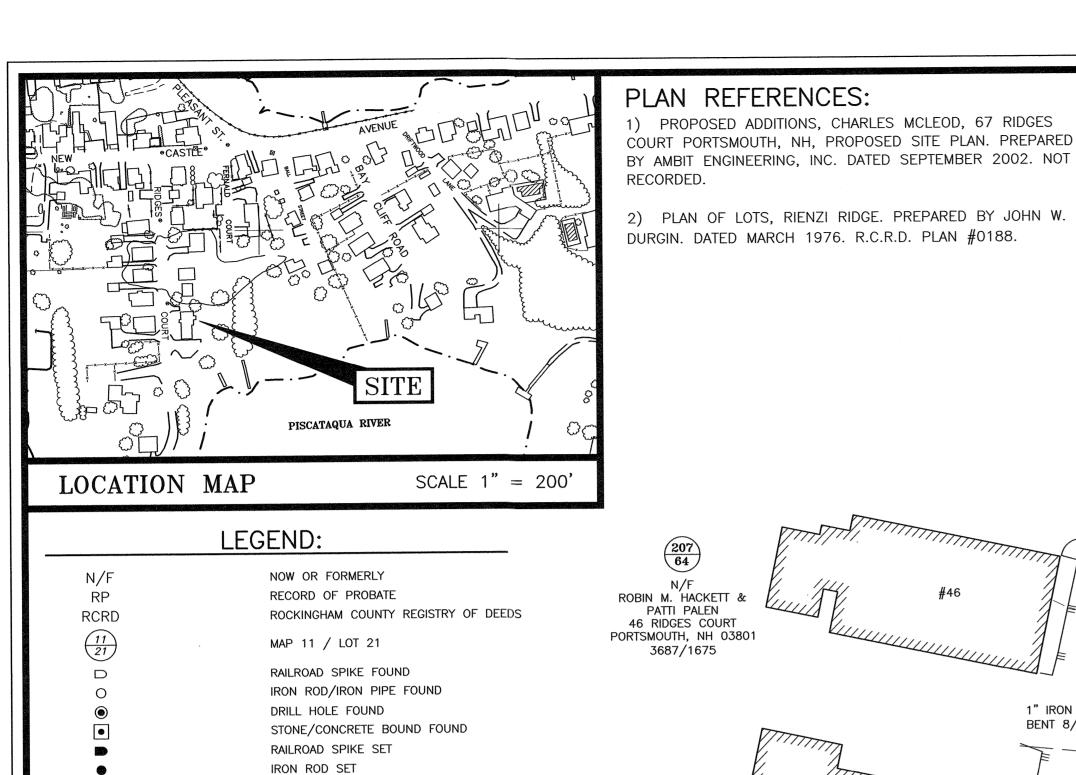
STRUCTURE ADDITION FOY RESIDENCE **67 RIDGES COURT** PORTSMOUTH, N.H.



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200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

PLAN SET SUBMITTAL DATE: 19 JULY 2023



DRILL HOLE SET

GRANITE BOUND SET

MEAN HIGH WATER LINE

NHDES HIGHEST OBSERVABLE TIDE LINE

NHDES 100' TIDAL BUFFER ZONE

OVERHEAD ELECTRIC/WIRES

EDGE OF PAVEMENT (EP)

WOODS / TREE LINE

UTILITY POLE (w/ GUY)

METER (GAS, WATER, ELECTRIC)

EDGE OF WETLAND FLAGGING

CONTOUR

SPOT ELEVATION

SWAMP / MARSH

EDGE OF PAVEMENT

LANDSCAPED AREA

TEMPORARY BENCHMARK

FINISHED FLOOR

ELEVATION

INVERT

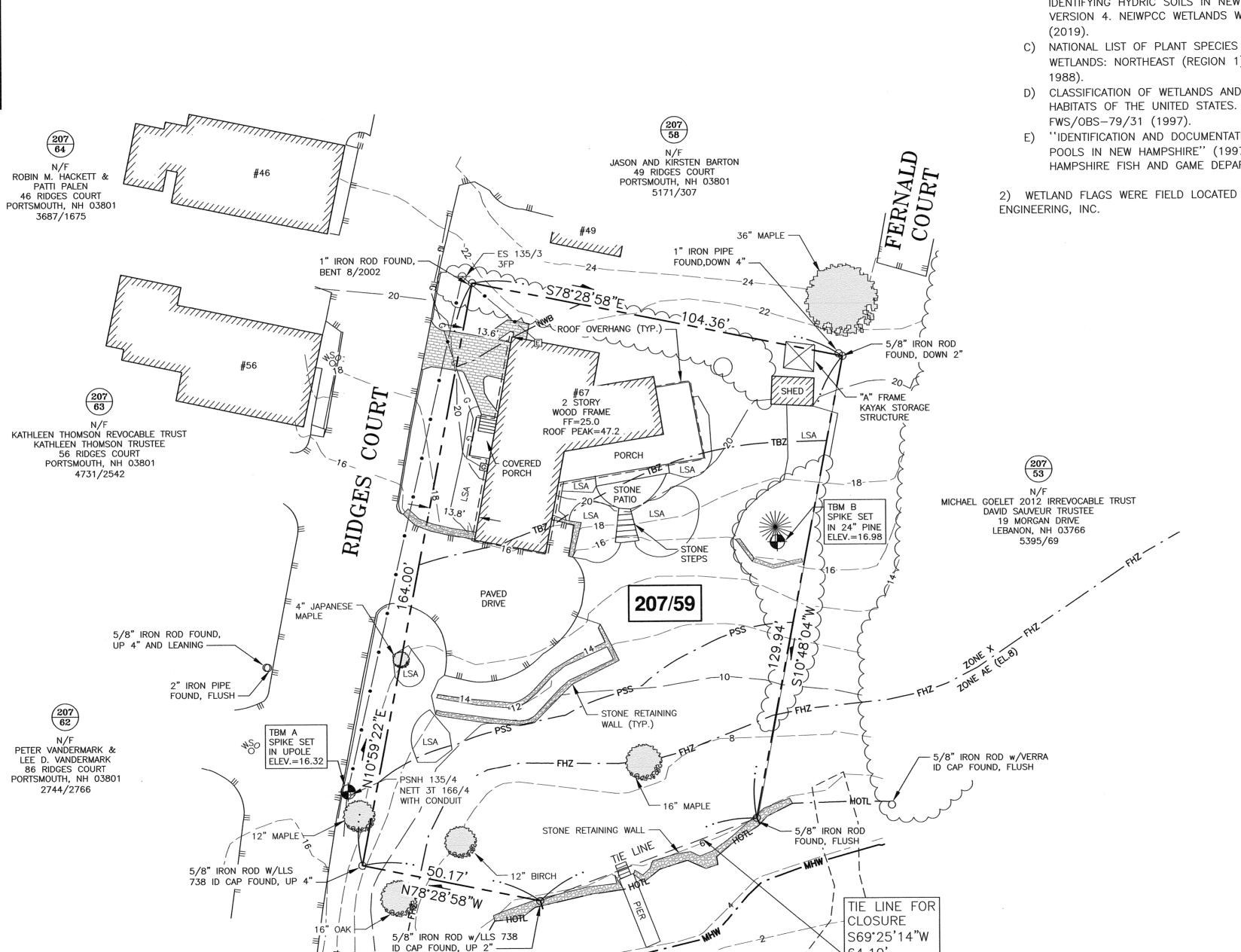
TYPICAL

NHDES 250' PROTECTED SHORELAND

NHDES 50' PRIMARY STRUCTURE SETBACK

NHDES 150' NATURAL WOODLAND BUFFER

FEMA SPECIAL FLOOD HAZARD AREA LINE



64.10

(TIDAL)

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF

1:15,000." JOHN R. CHAGNON, LLS

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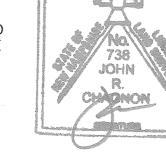
FF

INV.

TBM

TYP.

LSA



7-19-23

DATE

GRAPHIC SCALE

PETER VANDERMARK & LEE D. VANDERMARK 86 RIDGES COURT PORTSMOUTH, NH 03801 2744/2766

WETLAND NOTES:

1) HIGHEST OBSERVABLE TIDE LINE DELINEATED BY STEVEN D. RIKER, CWS ON 7/1/20 IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

A) U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. TECHNICAL REPORT Y-87-1 (JAN. 1987). AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012.

B) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.2, USDA-NRCS, 2018 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEIWPCC WETLANDS WORK GROUP

- C) NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). USFWS (MAY
- D) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL
- E) "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE" (1997). NEW HAMPSHIRE FISH AND GAME DEPARTMENT.

2) WETLAND FLAGS WERE FIELD LOCATED BY AMBIT

AMBIT ENGINEERING, INC. A DIVISION OF HALEY WARD, INC.

200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

WWW.HALEYWARD.COM

NOTES:

1) PARCEL IS SHOWN ON THE PORTSMOUTH ASSESSOR'S MAP 207 AS LOT 59.

2) OWNERS OF RECORD: JEFFREY M. & MELISSA FOY 4 FOX HOLLOW COURT EAST KINGSTON, N.H. 03827 6325/1066

3) PORTIONS OF THE PARCEL ARE IN A SPECIAL FLOOD HAZARD AREA AE (EL.8) AS SHOWN ON FIRM PANEL 33015C0278F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA: 16,500± S.F. (PLAN REF. 1) 0.3788± ACRES (PLAN REF. 1)

5) PARCEL IS LOCATED IN THE SINGLE RESIDENCE B (SRB) ZONING DISTRICT.

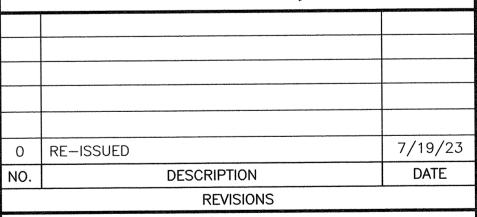
6) DIMENSIONAL REQUIREMENTS: 15,000 S.F. MIN. LOT AREA: 100 FEET FRONTAGE: 30 FEET FRONT SETBACKS: 10 FEET REAR 30 FEET MAXIMUM STRUCTURE HEIGHT: 35 FEET MAXIMUM STRUCTURE COVERAGE: 20% MINIMUM OPEN SPACE:

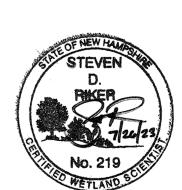
7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON ASSESSOR'S MAP .207 LOT 59 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS $(\pm 0.2')$.

9) OFF SITE STRUCTURE LOCATIONS BASED ON CITY DATABASE LOCATIONS.

PROPOSED ADDITION FOY RESIDENCE RIDGES COURT PORTSMOUTH, N.H.





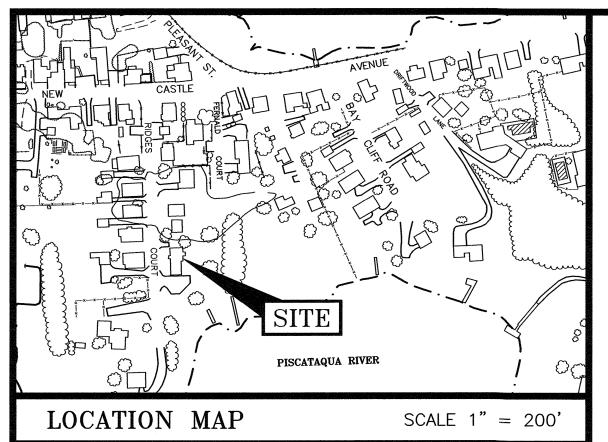
SCALE 1"=20'

MAY 2023

EXISTING CONDITIONS PLAN

FB 222 PG 66

-*5010130* | 1153.02



IN ACCORDANCE WITH THE PORTSMOUTH ZONING ORDINANCE, ARTICLE 5, SECTION 10.516.10 FRONT YARD EXCEPTION FOR EXISTING ALIGNMENTS: THE AVERAGE FRONT SETBACK FOR LOT 207/59 IS 19'.

MAP/LOT	SETBACK (FT)	AVG
207/58	13	
207/57	25	
2	38	19

GRANTED VARIANCES:

ARTICLE 5 SECTION 10.520 TABLE 10.521 FRONT YARD SETBACK OF 14.0 FEET WHERE 8.2 FEET EXISTS AND 19 FEET (SECTION 10.516.10 REDUCTION) IS REQUIRED.

ARTICLE 3 SECTION 10.321 TO ALLOW A NONCONFORMING BUILDING TO BE ENLARGED.

GRANTED APRIL 18, 2023

IMPERVIOUS SURFACE AREAS (TO PROPERTY LINE)					
STRUCTURE PRE-CONSTRUCTION POST-CONST					
MAIN STRUCTURE	1,591	2,117			
SHED	91	91			
PORCHES	513	513			
STAIRS	123	297			
WALKWAYS	89	89			
PAVEMENT & PAVER DRIVE	1,594	470			
RETAINING WALL	212	212			
PATIO	109	54			
CONCRETE	17	17			
EXTERIOR STORAGE	50	50			
TOTAL	4,389	3,910			
LOT SIZE	16,500	16,500			
% LOT COVERAGE	26.6%	23.7%			

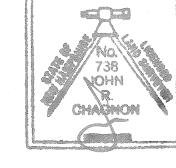
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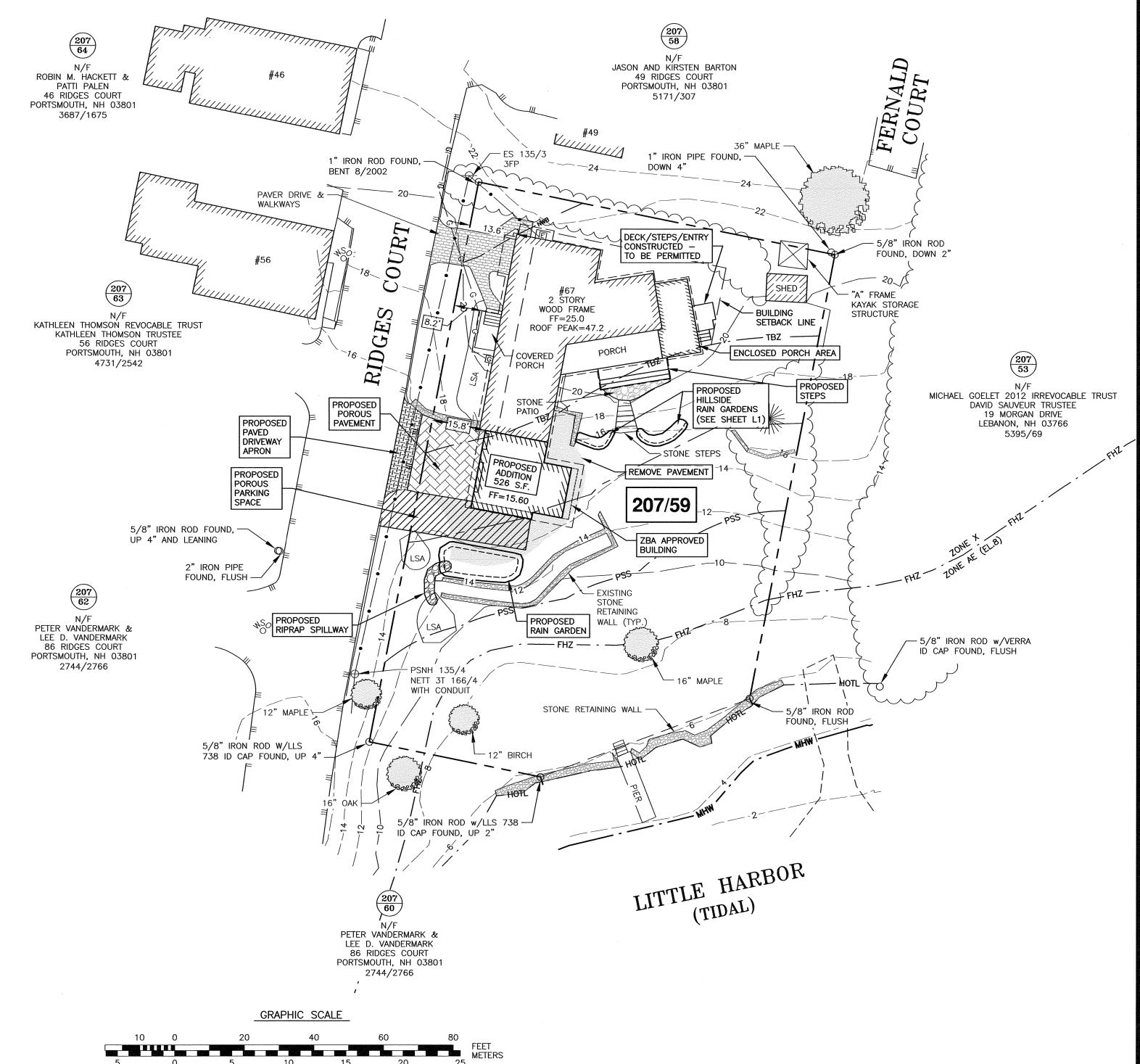
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DATE

7.19.23

JOHN R. CHAGNON, LLS







WWW.HALEYWARD.COM

200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

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1) PARCEL IS SHOWN ON THE PORTSMOUTH ASSESSOR'S MAP 207 AS LOT 59.

- 2) OWNERS OF RECORD: JEFFREY M. & MELISSA FOY 4 FOX HOLLOW COURT EAST KINGSTON, N.H. 03827 6325/1066
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- 4) EXISTING LOT AREA: 16,500± S.F. 0.3788± ACRES
- 5) PARCEL IS LOCATED IN THE SINGLE RESIDENCE B (SRB) ZONING DISTRICT.
- 6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA: FRONTAGE: SETBACKS: FRONT

30 FEET SIDE 10 FEET REAR 30 FEET 35 FEET

15,000 S.F.

100 FEET

MAXIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE COVERAGE: 20% MINIMUM OPEN SPACE:

7) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED

- ADDITION & SITE IMPROVEMENTS ON ASSESSOR'S MAP 207 LOT 59 IN THE CITY OF PORTSMOUTH.
- 8) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS (± 0.2) .
- 9) PROPOSED GARAGE FROM PLAN BY DESTEFANO MAGUEL ARCHITECTS DATED JUNE 22, 2023.
- 10) OFF SITE STRUCTURE LOCATIONS BASED ON CITY DATABASE LOCATIONS.

PROPOSED ADDITION FOY RESIDENCE 67 RIDGES COURT PORTSMOUTH, N.H.

0 ISSUED FOR COMMENT 7/19/23 **DESCRIPTION** DATE

REVISIONS



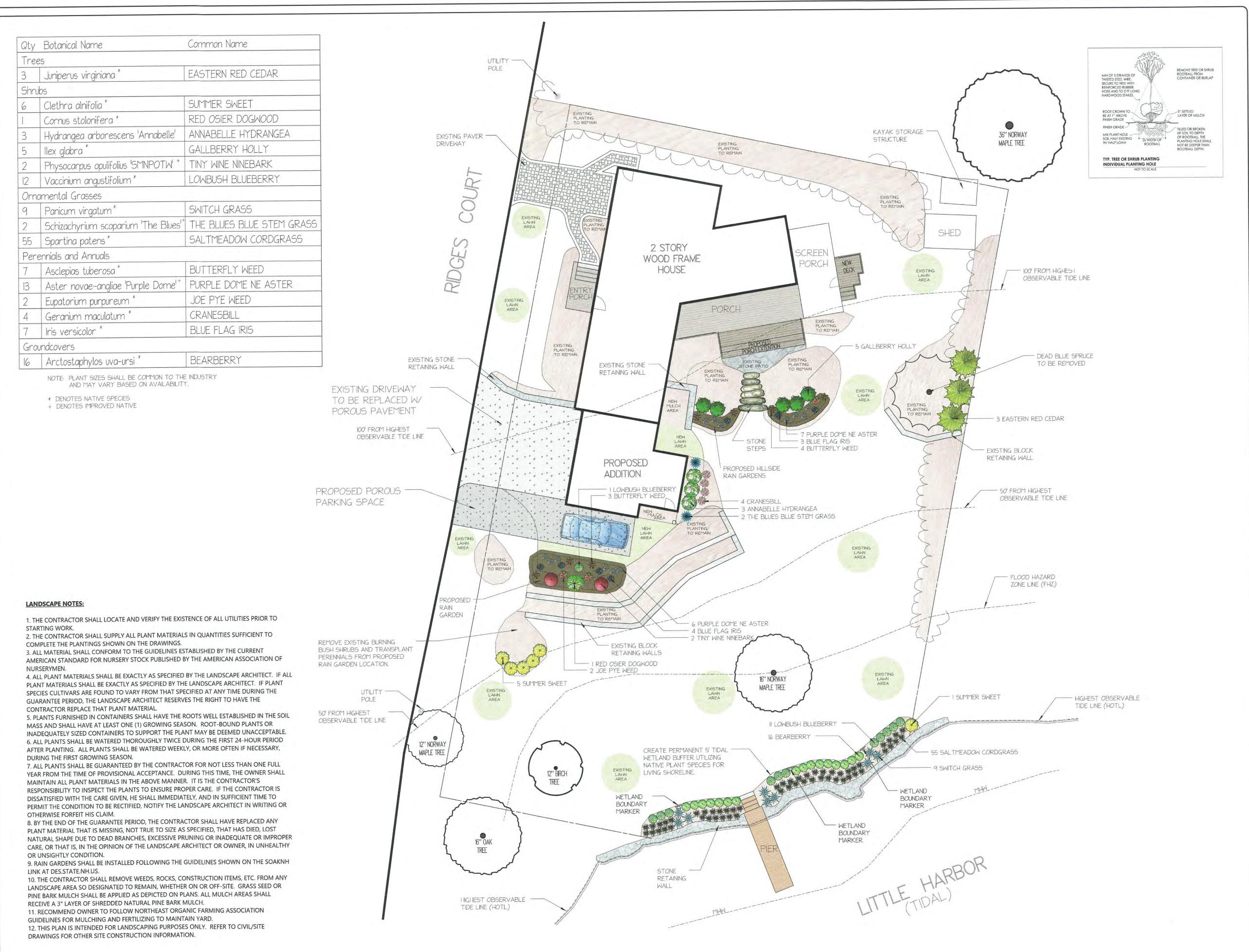


SCALE 1"=20'

JULY 2023

SITE PLAN

FB 222 PG 66



NOTES 11 South Road Brentwood, NH 03833 and Design, LLC LMLandDesign.com AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS SHEET SIZE: 24"x 36" LANDSCAPE PLAN 67 RIDGES COURT PORTSMOUTH, NH PROJECT NO SCALE | '' = 10' - 0''23110

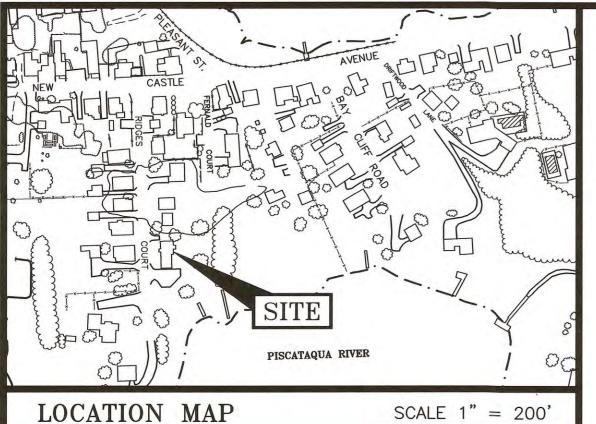
lawered by DynoSCAPE

SHEET NO

DRAWN BY L. MCNAUGHTON

DATE 7/6/2023

DATE OF PRINT



NOTES

IN ACCORDANCE WITH THE PORTSMOUTH ZONING ORDINANCE, ARTICLE 5, SECTION 10.516.10 FRONT YARD EXCEPTION FOR EXISTING ALIGNMENTS: THE AVERAGE FRONT SETBACK FOR LOT 207/59 IS 19'.

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GRANTED APRIL 18, 2023

IMPER	VIOUS SURFACE (TO PROPERTY LINE)	AREAS
STRUCTURE	PRE-CONSTRUCTION IMPERVIOUS (s.f.)	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	1,591	2,117
SHED	91	91
PORCHES	513	513
STAIRS	123	297
WALKWAYS	89	89
PAVEMENT & PAVER DRIVE	1,594	470
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TOTAL	4,389	3,910
LOT SIZE	16,500	16,500
% LOT COVERAGE	26.6%	23.7%

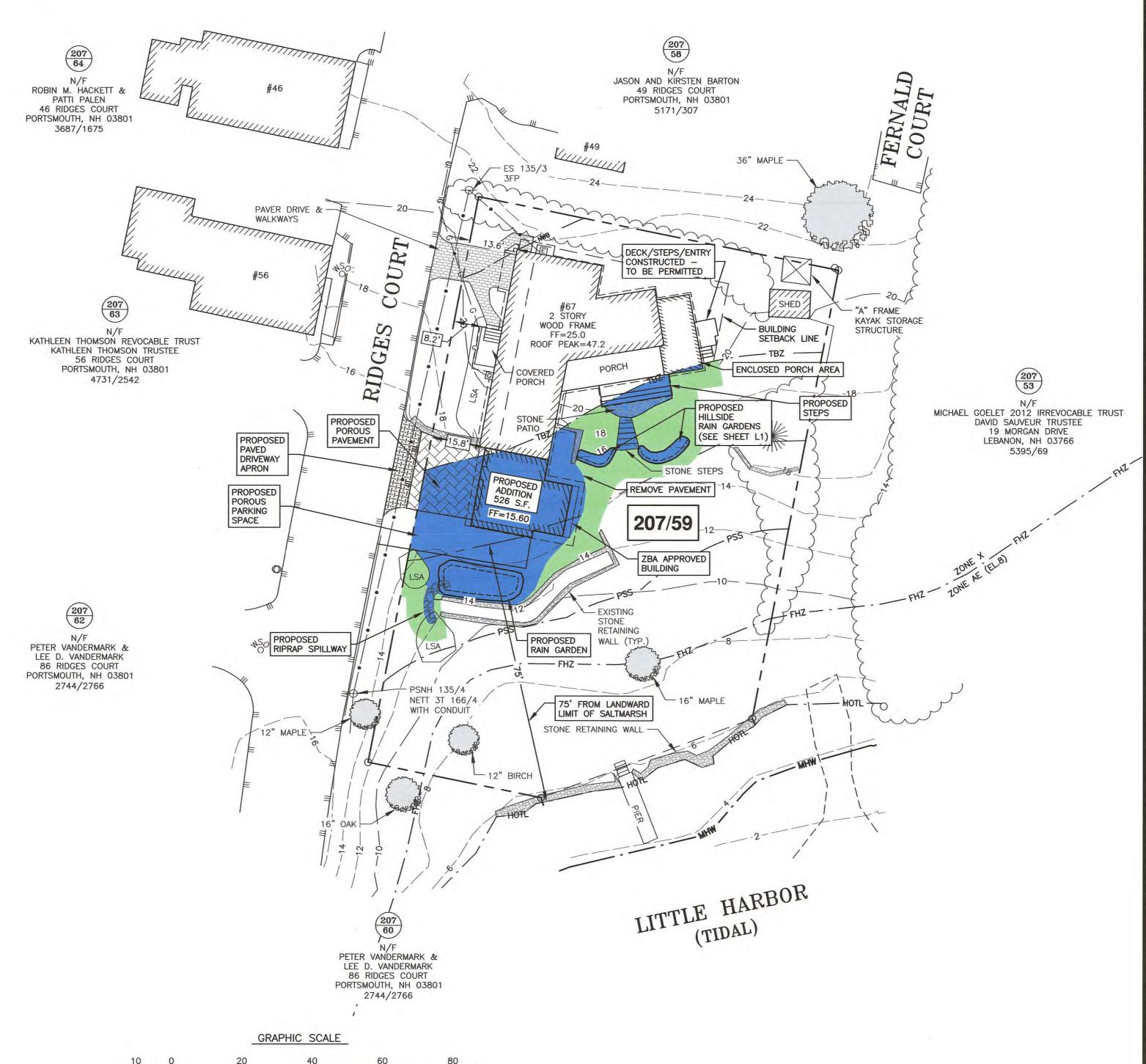
NHDES IMPACT AREAS IN S.F.				
	PERMANENT IMPACT AREAS	TEMPORARY IMPACT AREAS		
100' TIDAL BUFFER ZONE	2010	1056		
TOTAL:	2,010	1,056		

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF

JOHN R. CHAGNON, LLS DATE

1:15,000."







WWW.HALEYWARD.COM

200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

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5) PARCEL IS LOCATED IN THE SINGLE RESIDENCE B (SRB) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA: 15,000 S.F.
FRONTAGE: 100 FEET
SETBACKS: FRONT 30 FEET
SIDE 10 FEET
REAR 30 FEET
MAXIMUM STRUCTURE HEIGHT: 35 FEET
MAXIMUM STRUCTURE COVERAGE: 20%
MINIMUM OPEN SPACE: 40%

7) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED ADDITION & SITE IMPROVEMENTS ON ASSESSOR'S MAP 207 LOT 59 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS $(\pm 0.2^{\circ})$.

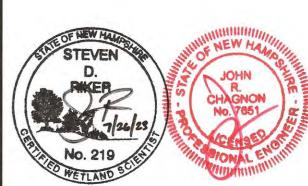
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PROPOSED ADDITION FOY RESIDENCE 67 RIDGES COURT PORTSMOUTH, N.H.

O ISSUED FOR COMMENT 7/19/23
NO. DESCRIPTION DATE

REVISIONS



SCALE 1"=20'

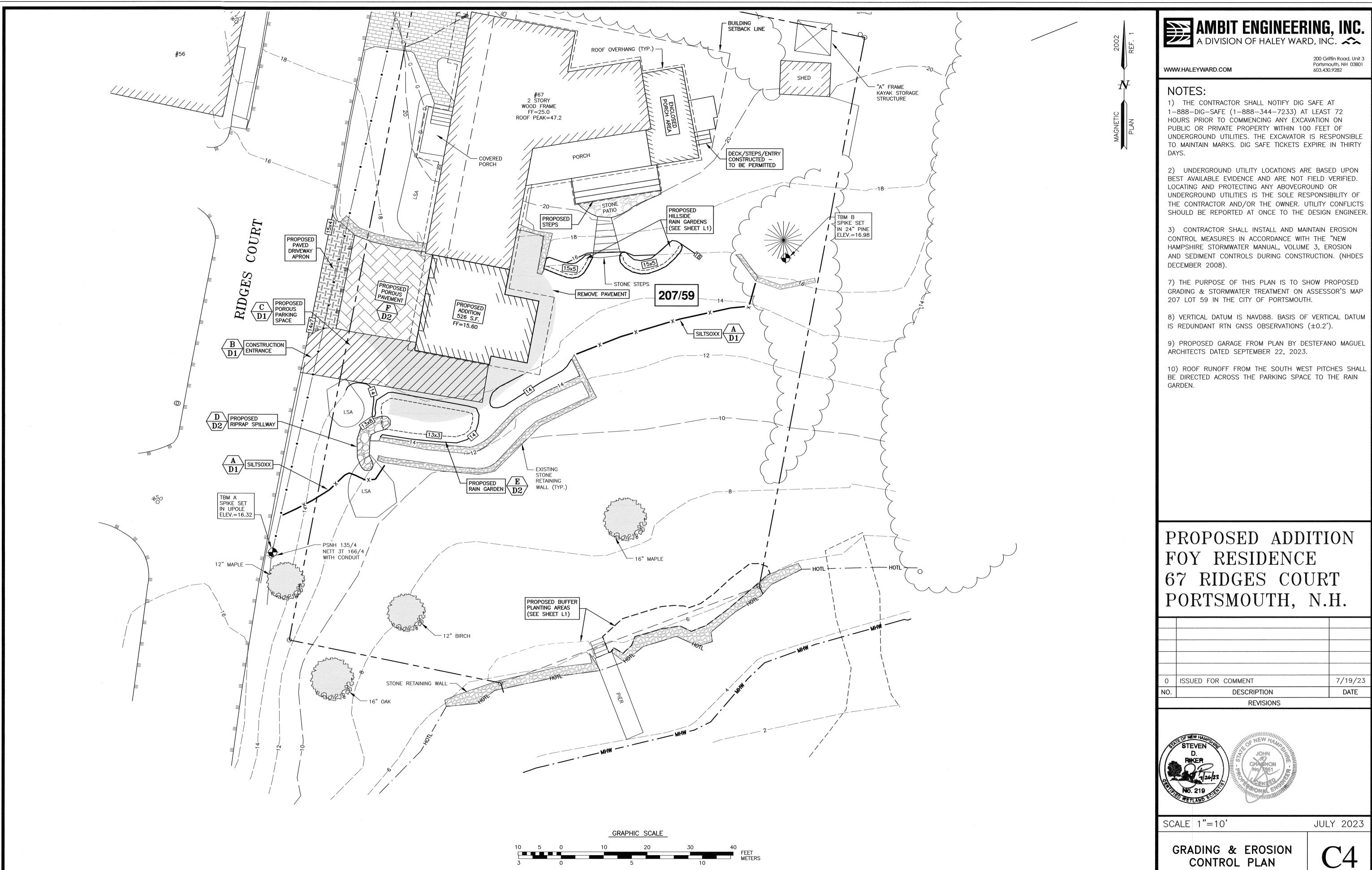
JULY 2023

NHDES PERMIT PLAN

C:

FB 222 PG 66

5010130 1153.02



Portsmouth, NH 03801 603.430.9282

- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES
- GRADING & STORMWATER TREATMENT ON ASSESSOR'S MAP
- IS REDUNDANT RTN GNSS OBSERVATIONS (± 0.2) .
- 9) PROPOSED GARAGE FROM PLAN BY DESTEFANO MAGUEL
- 10) ROOF RUNOFF FROM THE SOUTH WEST PITCHES SHALL BE DIRECTED ACROSS THE PARKING SPACE TO THE RAIN

PROPOSED ADDITION FOY RESIDENCE 67 RIDGES COURT PORTSMOUTH, N.H.

7/19/23 DATE

JULY 2023

FB 222 PG 66

5010130 1153.02

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

INSTALL PERIMETER CONTROLS, i.e., SILTSOXX AROUND THE LIMITS OF DISTURBANCE AND DRAINAGE CONSTRUCTION FENCE BEFORE ANY EARTH MOVING OPERATIONS. THE USE OF HAYBALES IS NOT ALLOWED.

CUT BRUSH AND TREES AS REQUIRED. STUMP SITE AND CLEAR TOPSOIL.

REMOVE EXISTING PAVEMENT.

INSTALL FOUNDATION AND BACKFILL; ROUGH GRADE DRIVEWAY

ROUGH GRADE RAIN GARDEN.

CONSTRUCT BUILDING.

PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. PREPARE AND STABILIZE FINAL SITE GRADING BY ADDING TOPSOIL, SEED, MULCH AND FERTILIZER. PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.

CONSTRUCT DRIVEWAY.

FINISH ALL REMAINING LANDSCAPE WORK.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION. APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

SILT FENCES AND SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES AND SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.

ADDITIONAL TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS——CONSTRUCT SILT FENCE OR SILTSOXX AROUND TOPSOIL

AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED OF IN AN APPROVED FACILITY.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.

ROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.

THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.

ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- * BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED * A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
- * A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR
- RIPRAP HAS BEEN INSTALLED * EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.

NOFA STANDARDS FOR ORGANIC LAND CARE

NEW LAWN INSTALLATION

CARE PRACTICES AT THIS SITE.

-ORDER OF PROCESSES: SOIL TESTING. SOIL TYPE PREFERRED IS CLOSE TO NEUTRAL PH AND HAS A BALANCED FUNGAL TO BACTERIAL RATIO. 2. PLANTING BED PREPARATION WITH SOIL AMENDMENTS AS SPECIFIED BY SOIL . SEEDING WITH AN APPROPRIATE MIX OF SEEDS BY HAND, USING A SPREADER OR SEED DRILLER, OR BY ORGANIC HYDROSEEDING. 4. WATERING FREQUENTLY BUT SHALLOWLY, MAINTAINING A "UNIFORMLY MOIST" SEEDBED DURING GERMINATION AND ESTABLISHMENT.

LAWN MAINTENANCE

-GRASS SHOULD BE ALLOWED TO GROW 3" OR TALLER IN HEIGHT PRIOR TO FIRST MOWING. GRASS CLIPPINGS SHOULD BE LEFT IN PLACE. -REMOVE NO MORE THAN 1/3 OF GRASS LENGTH PER MOWING.

-ORGANIC FERTILIZERS ONLY. OMRI CERTIFIED PRODUCTS (ORGANIC MATERIALS REVIEW INSTITUTE) ARE PREFERRED.

EROSION CONTROL NOTES

VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS: LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

ORGANIC FERTILIZERS ONLY. OMRI CERTIFIED PRODUCTS (ORGANIC MATERIALS REVIEW INSTITUTE) ARE PREFERRED.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO

THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED. WITHOUT WASHING AWAY THE SOIL. UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL

GENERAL COVER PROPORTION SEEDING RATE

CREEPING RED FESCUE

KENTUCKY BLUEGRASS

1.5 TONS/ACRE

50% 100 LBS/ACRE 50%

SLOPE SEED (USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1)

CREEPING RED FESCUE TALL FESCUE

BIRDSFOOT TREFOIL

42% 42% 48 LBS/ACRE 16%

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

FOR TEMPORARY PROTECTION OF DISTURBED AREAS: MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES: PERENNIAL RYE: 0.7 LBS/1,000 S.F.

MAINTENANCE AND PROTECTION

THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED. LIMED AND FERTILIZED. AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE. PER CITY OF PORTSMOUTH ZONING ORDINANCE. ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER.

THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.

TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT. PER CITY OF PORTSMOUTH ZONING ORDINANCE, ARTICLE 10.1018.24 FERTILIZERS: THE USE OF ANY FERTILIZER IS PROHIBITED IN A WETLAND, VEGETATED BUFFER STRIP OR LIMITED CUT AREA; AND THE USE OF FERTILIZERS OTHER THAN LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZERS IS PROHIBITED IN ANY PART OF A WETLAND BUFFER. ORGANIC FERTILIZERS ONLY. OMRI CERTIFIED PRODUCTS (ORGANIC MATERIALS REVIEW INSTITUTE) ARE PREFERRED.

THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL

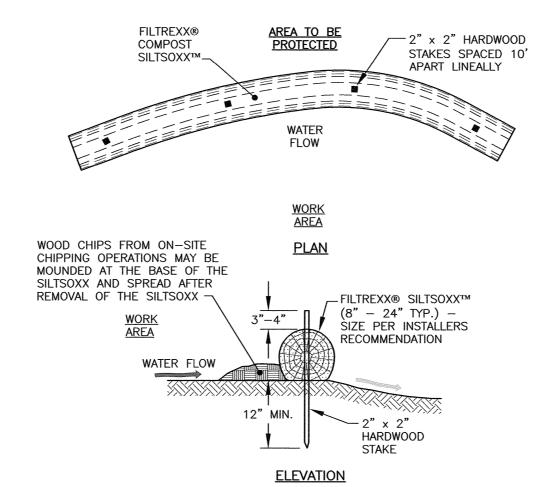
SILT FENCING AND SILTSOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE AND SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.

WINTER NOTES

ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH. SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

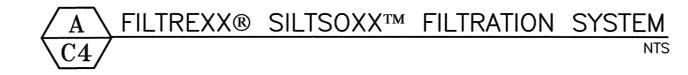
ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED

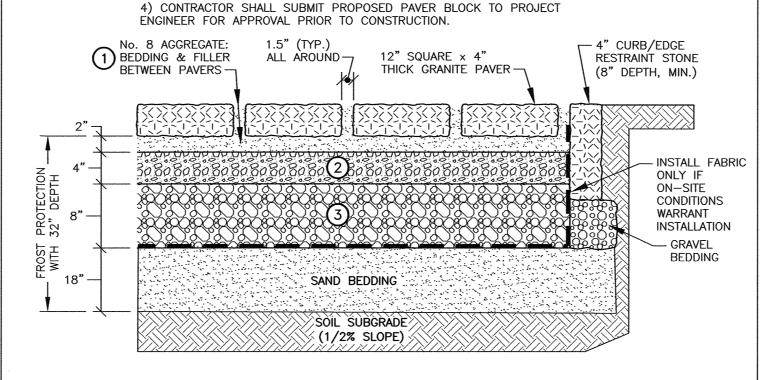
- FILTREXX INSTALLER.
- THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED
- SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
- THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.



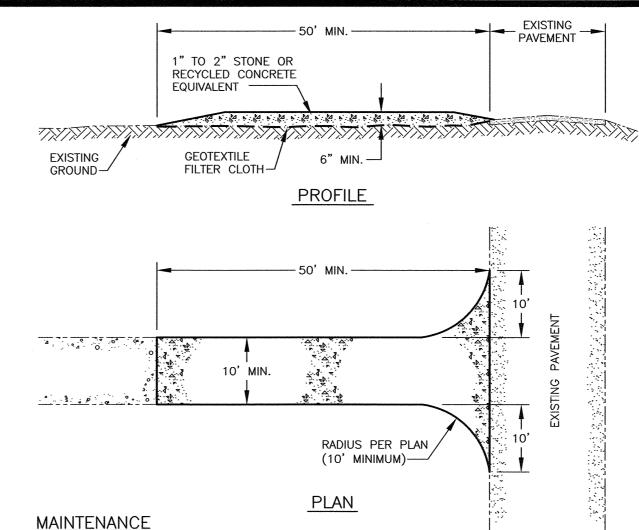
ASTM D 448 GRADATION TABLE

1		2		ASTM No. 2 STONE SUBBASE	
ASTM No. 8 BEDD FILLER		ASTM No. 57 STONE OPEN GRADED BASE			
SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)
1/2" (12.5mm)	100	1.5" (37.5mm)	100	3" (75mm)	100
3/8" (9.5mm)	85-100	1" (25mm)	95-100	2.5" (63mm)	90-100
No. 4 (4.75mm)	10-30	1/2" (12.5mm)	25-60	2" (50mm)	35-70
No. 8 (2.36mm)	0-10	No. 4 (4.75mm)	0-10	1.5" 37.5mm)	0-15
No. 16 (1.16mm)	0-5	No. 8 (2.36mm)	0-5	3/4" (19mm)	0-5

1) PAVING SYSTEM BASE DESIGN IS SIMILAR TO BASE REQUIRED FOR THE UNI ECO-STONE PAVER. INSTALLATION SHALL FOLLOW MANUFACTURER'S INSTRUCTIONS FOR PLACEMENT OF BASE MATERIALS. 2) ALL STONE SHALL BE ANGULAR, WITH 90% FRACTURED FACES. STONE SHALL BE WASHED WITH LESS THAN 1% PASSING THE 200 SIEVE. 3) CONTRACTOR SHALL SUBMIT SIEVE ANALYSIS FOR EACH COURSE MATERIAL TO PROJECT ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.







- MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOP DRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
- IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

CONSTRUCTION SPECIFICATIONS

- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- 7) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.



B\ STABILIZED CONSTRUCTION ENTRANCE

SUBSTITUTE FODS IF DESIRED

AMBIT ENGINEERING, INC.

A DIVISION OF HALFY WARD, INC. A DIVISION OF HALEY WARD, INC.

> 200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

WWW.HALEYWARD.COM

- 1) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 2) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 4) PURSUANT TO RSA 483-B:9 11 (D), NO FERTILIZER SHALL BE APPLIED TO VEGETATION OR SOILS LOCATED WITHIN 25 FEET OF THE REFERENCE LINE OF ANY PUBLIC WATER. BEYOND 25 FEET, SLOW OR CONTROLLED RELEASE FERTILIZER MAY BE USED. SLOW RELEASE NITROGEN MUST CONTAIN NO MORE THAN 2% PHOSPHORUS, AND A NITROGEN COMPONENT WHICH IS AT LEAST 50% SLOW RELEASE NITROGEN COMPONENTS.
- 5) NO CHEMICALS INCLUDING PESTICIDES OR HERBICIDES OF ANY KIND, SHALL BE APPLIED TO GROUND, TURF, OR ESTABLISHED VEGETATION WITHIN THE WETLAND BUFFER, EXCEPT IF APPLIED BY HORTICULTURE PROFESSIONAL WHO HAVE AN APPLICATION LICENSE. NO CALCIUM CHLORIDE SHALL BE APPLIED WITHIN THE WETLAND BUFFER.

PROPOSED ADDITION FOY RESIDENCE 67 RIDGES COURT PORTSMOUTH, NH

7/19/23 ISSUED FOR COMMENT DESCRIPTION DATE **REVISIONS**



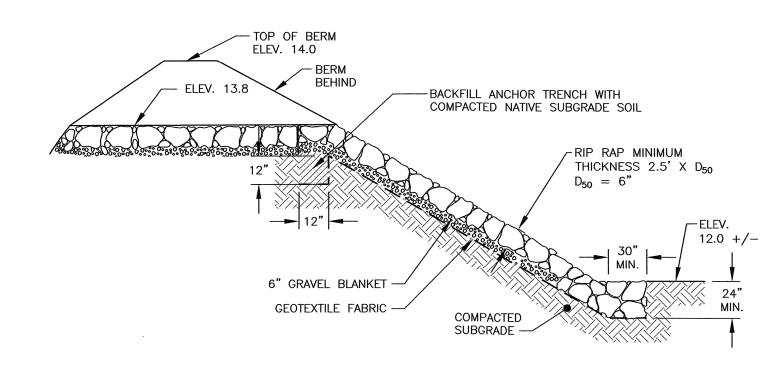
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JULY 2023

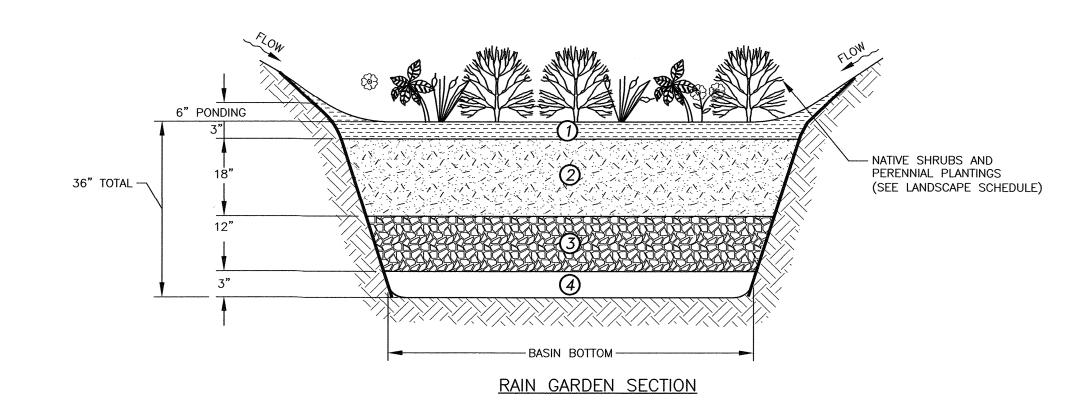
EROSION NOTES & DETAILS

FB 222 PG 66

5010130.1153.02



EMERGENCY SPILLWAY SECTION NTS



TOP OF PROPOSED BERM ELEV. 14.0	RAIN GARDEN—	OVERFLOW ELEV.
		13.8
	RAIN GARDEN ELEV. 13.3'	
	NON	-WOVEN C (TYP.)

RAIN GARDEN PROFILE



RAIN GARDEN MEDIA MULCH/GROWING MEDIUM: GRASS SEED MIX A WITH LOAM

SOIL FILTER LAYER: USE UNHSC BIORETENTION SOIL SPECIFICATIONS DATED FEBRUARY, 2017.20% - 30% MULCH BY VOLUME, MIXED THOROUGHLY WITH LOAMY, COARSE SAND (70% - 80% BY VOLUME) MEETING THE FOLLOWING GRADATION;

3 0.75"ø - 1.5"ø CRUSHED STONE, WASHED.

(4) ¾" PEA GRAVEL

BIORETENTION MAINTENANCE

SOILS: VISUALLY INSPECT AND REPAIR EROSION MONTHLY. USE SMALL STONES TO STABILIZE EROSION ALONG DRAINAGE PATHS. CHECK THE pH ONCE OR TWICE A YEAR. APPLY AN ALKALINE PRODUCT, SUCH AS LIMESTONE, IF NEEDED. MULCH: REMULCH ANY VOID AREAS BY HAND AS NEEDED. EVERY 6 MONTHS, IN THE SPRING AND FALL, ADD A FRESH MULCH LAYER. ONCE EVERY 2 TO 3 YEARS, IN THE SPRING, REMOVE OLD MULCH LATER BEFORE APPLYING NEW ONE. PLANTS: IMMEDIATELY AFTER THE COMPLETION OF CELL CONSTRUCTION, WATER PLANT MATERIAL FOR 14 CONSECUTIVE DAYS

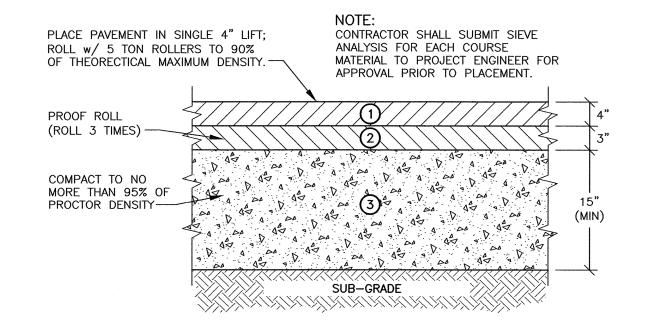
UNLESS THERE IS SUFFICIENT NATURAL RAINFALL. WHEN TREES HAVE TAKEN ROOT, OR AT LEAST BY 6 MONTHS, REMOVE STAKES AND WIRES. ONCE A MONTH (MORE FREQUENTLY IN SUMMER), VISUALLY INSPECT VEGETATION FOR DISEASE OR PEST PROBLEMS. IF TREATMENT IS WARRANTED, USE THE LEAST TOXIC APPROACH. TWICE A YEAR, FROM MARCH 15TH TO APRIL 30TH AND OCTOBER 1ST TO NOVEMBER 30TH, REMOVE AND REPLACE ALL DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. DURING TIMES OF EXTENDED DROUGHT, LOOK FOR PHYSICAL FEATURES OF STRESS (UNREVIVED WILTING, YELLOW, SPOTTED OR BROWN LEAVES, LOSS OF LEAVES, ETC.). WATER IN THE EARLY MORNING AS NEEDED. WEED REGULARLY,

POROUS PAVEMENT SPECIFICAITONS

	OROUS PAVEMENT W/ THE FOLLOWING GRADATIONS* CHOKER/RESERVOIR COURSE W/ THE FOLLOWING GRADATIONS** TOUCHOKER/RESERVOIR COURSE W/ THE FOLLOWING GRADATIONS**		COURSE w/ THE		3)
THE FO					•
SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE PASSING BY WEIGHT (%)		SIEVE SIZE	PASSING BY WEIGHT (%)
3/4" (19mm)	100	1" (25mm)	100	3" (75mm)	100
1/2" (12.5mm)	85–100	3/4" (19mm)	45–55	2.0" (63mm)	95–100
3/8" (9.5mm)	55–75	1/2" (12.5mm)	40-50	1" (25mm)	55-85
No. 4 (4.75mm)	10-25	3/8" (9.5mm)	35-45	No. 4 (4.75mm)	27-52
No. 8 (2.36mm)	5–10	No. 4 (4.75mm)			
No. 200 (0.075mm)	2-4	No. 8 (2.36mm)	0-5	No, 200 (0.075 mm)	0-12 (in sand portion)

* WITH 6% PERFORMANCE GRADED ASPHALT BINDER CONTENT BY VOLUME.

** CRUSHED QUARRY STONE SHALL CONTAIN AT LEAST 2 FRACTURED FACES, & SHALL BE WASHED WITH LESS THAN 1% BY WEIGHT PASSING No. 200 SIEVE.



PAVEMENT SECTION

POROUS PAVEMENT SECTION



WWW.HALEYWARD.COM

200 Griffin Road, Unit 3 Portsmouth, NH 03801 603.430.9282

NOTES:

- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN
- 3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
- 4) PURSUANT TO RSA 483-B:9 11 (D), NO FERTILIZER SHALL BE APPLIED TO VEGETATION OR SOILS LOCATED WITHIN 25 FEET OF THE REFERENCE LINE OF ANY PUBLIC WATER. BEYOND 25 FEET, SLOW OR CONTROLLED RELEASE FERTILIZER MAY BE USED. SLOW RELEASE NITROGEN MUST CONTAIN NO MORE THAN 2% PHOSPHORUS, AND A NITROGEN COMPONENT WHICH IS AT LEAST 50% SLOW RELEASE NITROGEN COMPONENTS.
- 5) PURSUANT TO RSA 483-B:9, V (A) (2) (A), NO CHEMICALS INCLUDING PESTICIDES OR HERBICIDES OF ANY KIND, SHALL BE APPLIED TO GROUND, TURF, OR ESTABLISHED VEGETATION WITHIN THE WATERFRONT BUFFER, EXCEPT IF APPLIED BY HORTICULTURE PROFESSIONAL WHO HAVE AN APPLICATION LICENSE OR AS ALLOWED BY SPECIAL PERMIT ISSUED UNDER RSA 541-A. NO CALCIUM CHLORIDE SHALL BE APPLIED WITHIN THE WATERFRONT BUFFER.

PROPOSED ADDITION FOY RESIDENCE 67 RIDGES COURT PORTSMOUTH, NH

	:	•	
		·	
0	ISSUED FOR COMMENT	7/19/	23
NO.	DESCRIPTION	DATE	-
	REVISIONS		



SCALE: AS SHOWN

JULY 2023

DETAILS

5010130.1153.02



25 July 2022

Wetland Inspector New Hampshire Department of Environmental Services Wetlands Bureau 29 Hazen Drive / P.O. Box 95 Concord, New Hampshire 03302

Re: NHDES Minor Impact Wetland Permit Application
Tax Map 207 Lot 59
67 Ridges Court
Portsmouth, New Hampshire

Dear Wetland Inspector:

This letter transmits a New Hampshire Department of Environmental Services (NHDES) Minor Impact Expedited Wetland Permit Application request to permit 2,010 sq. ft. of permanent impact and 1,056 sq. ft. of temporary construction impact to the previously developed 100' Tidal Buffer Zone for residential site improvements including construction of a proposed addition, re-configuration of the existing driveway utilizing pervious pavers, installation of three rain gardens, and construction of stone steps and a stone patio.

Attached to this application you will find a "NH DES Dock Permit Plan-C3" which depicts the existing lot, jurisdictional areas, abutting parcels, existing structures, proposed work, temporary and permanent impact areas.

Per Env-Wt 306.05, Certified Wetland Scientist Steve Riker from Ambit Engineering, Inc. classified all jurisdictional areas and identified the predominant functions of all relevant resources. The Highest Observable Tide Line marks the reference line for the 100' TBZ, as well as the beginning of Tidal Wetland on the attached plan set. Attached to this application is a Coastal Functional Assessment as this project is subject to the requirements of Env-Wt 603.05.

The construction sequence for the proposed project is as follows:

- Mobilization of equipment and materials to the site via Ridges Court.
- Installation of erosion and sediment control devices.
- Remove relevant portion of existing paved riveway.
- Excavate for and pour new concrete foundation.



Jeffrey M. & Melissa Foy-NH DES Wetland Application | 07.26.2023 | Page 1



- Construct superstructure of proposed addition and pervious paver driveway.
- Construct stone steps and stone patio.
- Install rain gardens.
- Install and connect any utilities.
- Backfill, finish grade and landscape disturbed area surrounding foundation.
- Remove sediment and erosion controls once disturbed area is stabilized.

The project does not propose any removal of vegetation within the 50' Waterfront Buffer to achieve construction goals.

The project represents the alternative with the least adverse impacts to areas and environments while allowing reasonable use of the property.

Per Env-Wt 603.02(b), attached to this application you will find a plan set which depicts the existing lot, jurisdictional areas, all natural resources in the area, abutting parcels, existing structures, proposed structures, and temporary impact areas. Also included in this application are maps created in accordance with Env-Wt 603.03 and Env-Wt 603.05.

In order to complete the application package for this project, the DES Wetlands Bureau rules in Chapter Env-Wt 306.05 (a)(2) has been evaluated and addressed below.

(2) a. Contains any documented occurrences of protected species or habitat for such species, using the NHB DataCheck tool;

Attached to this application are the results of the NHB review and it was determined that although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, NHB does not expect that it will be impacted by the proposed project.

- (2) b. Is a bog;
 - Utilizing the NH DES WPPT, the subject property is not a bog, nor does it contain any portion of a bog.
- (2) c. Is a floodplain wetland contiguous to a tier 3 or higher watercourse;

 Utilizing the NH DES WPPT, the subject property does contain a floodplain wetland contiguous to a tier 3 or higher watercourse.
- (2) d. Does the property contain a designated prime wetlands or a duly established 100-foot buffer; or **The property does not contain a prime wetland or duly established 100 foot buffer.**
- (2) e. Does the property contain a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; The property does not contain a sand dune or undeveloped tidal buffer zone. The property does contain a tidal wetland and tidal waters.



The DES Wetlands Bureau rules in Chapter Env-Wt 306.05 (a)(4) and (a)(7) has been evaluated and addressed below.

(4) a. Is the subject property within LAC jurisdiction;

The property does not fall within an area of LAC jurisdiction.

(4) b. Does the subject property fall within or contain any areas that are subject to time of year restrictions under Env-Wt 307;

The property does not fall within or contain any areas that are subject to time of year restrictions.

(7) Does the project have potential to impact impaired waters, class A waters, or outstanding resource waters:

I do not believe the nature of the proposed project has the potential to impact an impaired water. The project reduces the amount of impervious surface on the lot and also provides rain gardens to collect and treat stormwater, which will serve to improve stormwater quality that leaves the site.

The DES Wetlands Bureau rules in Chapter Env-Wt 603.02 (e) & (f) have been evaluated and addressed below.

(e)(1) The project meets the standard conditions in Env-Wt 307;

The project meets the standard conditions in Env-Wt 307 as the proposed project meets the standards of Env-Wq 1000, RSA 483-B and Env-Wq 1400. Sediment and erosion controls will also be used and maintained during the proposed construction ensuring protection of water quality on the site. Under Env-Wt 306.05 (a)(2)a. a NHB review has been performed to ensure there are no impacts to protected species or habitats of such species. The protection of Prime Wetlands or Duly-Established 100 foot buffers does not apply as none exist on or adjacent to the subject lot.

(e)(2) The project meets the approval criteria in Env-Wt 313.01;

The project meets the approval criteria in Env-Wt 313.01 as the project requires a functional assessment (attached), meets the avoidance and minimization requirements specified in Env-Wt 313.03, does not require compensatory mitigation, meets applicable conditions specified in Env-Wt 307 (above), meets project specific criteria listed in Env-Wt 600 (above), and the project is located entirely within the boundary of the applicants property.

(f)(1) The project design narrative as described in Env-Wt 603.06;

The project design narrative is provided above.

(f)(2) Design plans that meet the requirements of Env-Wt 603.07;

The design plans meet the above standard.

(f)(3) The water depth supporting information required by Env-Wt 603.08;

The design plans do not provide water depth information as it is non-applicable to the proposed project.

(f)(4) A statement regarding impact on navigation and passage required by Env-Wt 603.09.

Navigation and passage is not applicable to the proposed project.



Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,

Steve Riker, CWS

Project Scientist/Project Manager

sriker@haleyward.com

To Whom It May Concern

RE: New Hampshire Department of Environmental Services Application and City of Portsmouth Applications for residential site improvements for Jeffrey M. & Melissa Foy, 67 Ridges Court, Portsmouth, NH.

This letter is to inform the New Hampshire Department of Environmental Services and the City of Portsmouth, in accordance with State Law that Ambit Engineering is authorized to obtain approvals in regards to the above referenced property.

Please feel free to call me if there is any question regarding this authorization. Sincerely,

Jeffrey M. & Melissa Foy

4 Fox Hollow Court

East Kingston, NH 03827



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION



Water Division/Land Resources Management Wetlands Bureau

Check the Status of your Application

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

APPLICANT'S NAME: Jeffrey M. & Melissa Foy

			File No.:

TOWN NAME: Portsmouth

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

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

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))				
Please use the <u>Wetland Permit Planning Tool (WPPT)</u> , the Natural Heritage Bureau (NHB) <u>DataCheck Tool</u> , the <u>Aquatic Restoration Mapper</u> , or other sources to assist in identifying key features such as: <u>priority resource areas (PRAs)</u> , <u>protected species or habitats</u> , coastal areas, designated rivers, or designated prime wetlands.				
Has	the required planning been completed?	Yes No		
Doe	es the property contain a PRA? If yes, provide the following information:	⊠ Yes ☐ No		
•	Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	Yes No		
•	Protected species or habitat? o If yes, species or habitat name(s): Unknown o NHB Project ID #: 23-2110	⊠ Yes □ No		
•	Bog?	☐ Yes ⊠ No		
•	Floodplain wetland contiguous to a tier 3 or higher watercourse?	Xes No		
•	Designated prime wetland or duly-established 100-foot buffer?	Yes No		
•	Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	Xes No		
Is the property within a Designated River corridor? If yes, provide the following information:				
•	Name of Local River Management Advisory Committee (LAC):			
•	A copy of the application was sent to the LAC on Month: Day: Year:			

For dredging projects, is the subject property contaminated? • If yes, list contaminant:	Yes No				
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	☐ Yes ⊠ No				
For stream crossing projects, provide watershed size (see WPPT or Stream Stats): N/A					
SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))					
Provide a brief description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.					
The project proposes 2,010 sq. ft. of permanent impact and 1,056 sq. ft. of temporary construction previously developed 100' Tidal Buffer Zone for residential site improvements including construction addition, re-configuration of the existing driveway utilizing pervious pavers, installation of three ra construction of stone steps and a stone patio.	on of a proposed				
SECTION 3 - PROJECT LOCATION					
Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.					
ADDRESS: 67 Ridges Court					
TOWN/CITY: Portsmouth					
TAX MAP/BLOCK/LOT/UNIT: Map 207, Lot 59					
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Little Harbor N/A					
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): X:1,229,351.701					
Y:208,755.5882	' West				

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SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INF If the applicant is a trust or a company, then complete v	•	` ''				
NAME: Jeffrey M. & Melissa Foy						
MAILING ADDRESS: 4 Fox Hollow Court						
TOWN/CITY: East Kingston		STATE: NH	ZIP CODE: 03827			
EMAIL ADDRESS: jeff.foy@foyinsurance.com						
FAX:	PHONE: 603-778-5036					
ELECTRONIC COMMUNICATION: By initialing here: , I hereby authorize NHDES to communicate all matters relative to this application electronically.						
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c)) N/A						
LAST NAME, FIRST NAME, M.I.: Riker, Steven, D.						
COMPANY NAME: Ambit Engineering, Inc.						
MAILING ADDRESS: 200 Griffin Road, Unit 3						
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801			
EMAIL ADDRESS: sdr@ambitengineering.com						
FAX:	PHONE: 603-430-9282					
ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.						
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b)) If the owner is a trust or a company, then complete with the trust or company information. Same as applicant						
NAME:						
MAILING ADDRESS:						
TOWN/CITY:		STATE:	ZIP CODE:			
EMAIL ADDRESS:						
FAX:	PHONE:					
ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.						

Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))
Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters): Please see attached narrative
SECTION 8 - AVOIDANCE AND MINIMIZATION
Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization and the Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet . For minor or major projects, a functional assessment of all wetlands on the project site is
required (Env-Wt 311.03(b)(10)).*
Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the <u>Avoidance and Minimization Checklist</u> , the <u>Avoidance and Minimization Narrative</u> , or your own avoidance and minimization narrative.
*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.
SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)
If unavoidable jurisdictional impacts require mitigation, a mitigation <u>pre-application meeting</u> must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.
Mitigation Pre-Application Meeting Date: Month: Day: Year:
(N/A - Mitigation is not required)
SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)
Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: I confirm submittal.
(N/A – Compensatory mitigation is not required)

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

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

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

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

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

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

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

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

JURISDICTIONAL AREA		PERMANENT				TEMPORARY		
JUKI	SDICTIONAL AREA	SF	LF		ATF	SF	LF	ATF
	Forested Wetland							
	Scrub-shrub Wetland							
spu	Emergent Wetland							
Wetlands	Wet Meadow							
We	Vernal Pool							
	Designated Prime Wetland							
	Duly-established 100-foot Prime Wetland Buffer							
er	Intermittent / Ephemeral Stream							
Surface Water	Perennial Stream or River							
Ce V	Lake / Pond							
ırfa	Docking - Lake / Pond							
Su	Docking - River							
	Bank - Intermittent Stream							
Banks	Bank - Perennial Stream / River							
Be	Bank / Shoreline - Lake / Pond							
	Tidal Waters							
	Tidal Marsh							
Tidal	Sand Dune							
ĭ	Undeveloped Tidal Buffer Zone (TBZ)							
	Previously-developed TBZ	2,010				1,056		
	Docking - Tidal Water							
	TOTAL	2,010				1,056		
SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)								
	MINIMUM IMPACT FEE: Flat fee of \$400.							
	NON-ENFORCEMENT RELATED, PUBLICLY-FUN	DED AND S	UPERVI	SED RE	STORA	TION PROJEC	CTS, REGARDL	ESS OF
	IMPACT CLASSIFICATION: Flat fee of \$400 (refe	er to RSA 4	82-A:3 <i>,</i> 1	L(c) for	restrict	tions).		
\boxtimes I	MINOR OR MAJOR IMPACT FEE: Calculate usin	g the table	below:					
	Permanent and temporar	y (non-doc	king):	3,066 S	SF.		× \$0.40 =	\$ 1,226.40
Seasonal doc		ocking stru	cture:		SF		× \$2.00 =	\$
	Permanent do	ocking stru	cture:		SF		× \$4.00 =	\$
	Projects pr	oposing sh	oreline s	structu	res (inc	luding docks	add \$400 =	\$
Total = \$1,			\$1,226.40					
The	application fee for minor or major impact is t	he above o	calculate	d total	or \$40	0, whicheve	r is greater =	\$

SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05) Indicate the project classification.						
	m Impact Project Minor	Project		Major Project		
SECTION 14	- REQUIRED CERTIFICATIONS (Env-Wt 3	311.11)				
Initial each	Initial each box below to certify:					
Initials:	To the best of the signer's knowledge and	l belief, all require	d notifications	s have been provided.		
Initials:	The information submitted on or with the application is true, complete, and not misleading to the best of the				best of the	
Initials:	 The signer understands that: The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: Deny the application. Revoke any approval that is granted based on the information. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II. 					
Initials: If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.						
SECTION 15	- REQUIRED SIGNATURES (Env-Wt 311.	04(d); Env-Wt 31	1.11)			
SIGNATURE (OWNER):		PRINT NAME LEGI	E LEGIBLY:		DATE:	
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGI	NT NAME LEGIBLY:			
	AGENT, IF APPLICABLE): D. Riker	PRINT NAME LEGIBLY: Steven D. Riker			DATE: 7/26/2023	
SECTION 1	6 - TOWN / CITY CLERK SIGNATURE (Env	-Wt 311.04(f))				
-	As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.					
•	Y CLERK SIGNATURE:		PRINT NAME LEGIBLY:			
TOWN/CITY:			DATE:			

DIRECTIONS FOR TOWN/CITY CLERK:

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

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

DIRECTIONS FOR APPLICANT:

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



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION ATTACHMENT A: MINOR AND MAJOR PROJECTS



Water Division/Land Resources Management Wetlands Bureau

Check the Status of your Application

RSA/ Rule: RSA 482-A/ Env-Wt 311.10; Env-Wt 313.01(a)(1); Env-Wt 313.03

APPLICANT'S NAME: Jeffrey M. & Melissa Foy TOWN NAME: Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the <u>Avoidance and Minimization Narrative</u> or <u>Checklist</u> that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

PART I: AVOIDANCE AND MINIMIZATION

In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization.

SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1))

Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.

THE PROJECT PROPOSES RESIDENTIAL SITE IMPROVEMENTS ON AN EXISTING RESIDENTIAL LOT. THE OWNER/APPLICANT DOES NOT HAVE ACCESS TO OTHER PROPERTIES THAT WOULD SERVE AS AN ALTERNATIVE AND ACHIEVE THE SAME PURPOSE. THE PROPOSED IMPROVEMENTS HAVE BEEN DESIGNED AND LOCATED ON THE LOT TO AVOID IMPACTS TO THE PREVIOUSLY DEVEOPED 100' TIDAL BUFFER ZONE TO THE GREATEST EXTENT PRACTICABLE, SPECIFICALLY PLACING A PROPOSED ADDITION ONTO THE EXISTING HOME IN AN AREA THAT CURRENTLY EXISTS AS IMPERVIOUS SURFACE. DUE TO THE CONFIGURATION OF THE LOT, THE LOCATION OF TIDAL WETLANDS ASSOCIATED WITH THE SITE, AND LOCAL ZONING AND DIMENSIONAL REQUIREMENTS, THE BUILDING ENVELOPE IN WHICH AN ADDITION COULD BE BUILT IS LIMITED.

SECTION I.II - MARSHES (Env-Wt 313.03(b)(2)) Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.				
The project does not propose any impacts to tidal marshes or non-tidal marshes.				
SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3)) Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.				
Since the proposed project proposes impacts to the previously developed 100' Tidal Buffer Zone and proposes no impacts to adjacent wetland and/or streams, this is not applicable.				

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Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.
The project does not propose any impacts to wetlands (tidal or freshwater), exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of special concern.
CECTION IV. PUBLIC COMMEDICE MANUCATION OF PEOPLETION (F. 144) 242 02/L/CN
SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5)) Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.
Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce,
Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation. The proposed project is located on private property and proposes no impacts or interference to public commerce,
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SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6)) Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.
The proposed structures will not impact floodplains or floodplain wetlands that provide flood storage.
SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES
(Env-Wt 313.03(b)(7)) Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.
marsh complexes of high ecological integrity. The project does not propose impacts to riverine forested wetland systems and scrub shrub marsh complexes.

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SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8)) Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.
The wetland resources associated with the project site are not hydrologically connected to a groundwater aquifer or drinking water supply.
SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9)) Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.
The project does not propose any impacts to stream channels.

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SECTION I.XII - SHORELINE STRUCTURES – ABUTTING PROPERTIES (Env-Wt 313.03(c)(3)) Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.
N/A
SECTION I.XIII - SHORELINE STRUCTURES – COMMERCE AND RECREATION (Env-Wt 313.03(c)(4))
Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.
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Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.
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SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5))
Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.
N/A
SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-
Wt 313.03(c)(6)) Describe how the structures have been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.
N/A

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PART II: FUNCTIONAL ASSESSMENT

REQUIREMENTS

Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).

FUNCTIONAL ASSESSMENT METHOD USED:

Wetland functions and values were assessed using the Highway Methodology Workbook, Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers. 1999. The Highway Methodology Workbook Supplement, Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers. New England Division. 32pp. NAEEP-360-1-30a.

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: STEVEN D. RIKER, NH CWS 219

DATE OF ASSESSMENT: JULY 18, 2023

Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT:



For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable:



Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.



AVOIDANCE AND MINIMIZATION WRITTEN NARRATIVE



Water Division/Land Resources Management Wetlands Bureau

Check the Status of your Application

RSA/ Rule: RSA 482-A/ Env-Wt 311.04(j); Env-Wt 311.07; Env-Wt 313.01(a)(1)b; Env-Wt 313.01(c)

APPLICANT'S NAME: Jeffrey M. & Melissa Foy **TOWN NAME: Portsmouth**

An applicant for a standard permit shall submit with the permit application a written parrative that explains how all

impacts to functions and values of all jurisdictional areas have been avoided and minimized to the maximum extent practicable. This attachment can be used to guide the narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed <u>Avoidance and Minimization Checklist (NHDES-W-06-050)</u> to the permit application
SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1)) Is the primary purpose of the proposed project to construct a water access structure?
No

SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))

Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?

No.

SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))*

For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs?

*Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.

The project proposes site improvements on an existing lot of record. The owner/applicant does not have access to other properties that would serve as an alternative and achieve the same purpose.

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SECTION 4 - ALTERNATIVES (Env-Wt 311.07(b)(3))

Could alternative designs or techniques, such as different layouts, different construction sequencing, or alternative technologies be used to avoid impacts to jurisdictional areas or their functions and values as described in the Wetlands
Wetlands
Wetlands

The proposed residential site improvements have been designed and located on the lot to avoid impacts to the previously developed 100' Tidal Buffer Zone to the greatest extent practicable. Due to the configuration of the lot, the location of tidal wetlands associated with the site, and local zoning and dimensional requirements, the building envelope in which a structure could be built is limited. The proposed structure has been placed within and area that exists as impervious surface. The proposed project results in a decrease of impervious surface on the lot from 26.6% to 24%.

SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))**

How does the project conform to Env-Wt 311.10(c)?

**Except for projects solely limited to construction or modification of non-tidal shoreline structures only need to complete relevant sections of Attachment A.

The project proposes a total of 3,066 sq. ft. of impact to the previously developed 100' TBZ and qualifies as a minor impact project under Env-Wt 605.03(b)(5) and therefore a Coastal Functional Assessment is required and a Coastal Vulnerability Assessment is required and attached to this application.



COASTAL RESOURCE WORKSHEET

Water Division/Land Resources Management Wetlands Bureau



Check the Status of your Application

RSA/Rule: RSA 482-A/ Env-Wt 600

APPLICANT LAST NAME, FIRST NAME, M.I.: Jeffrey M. & Melissa Foy

This worksheet may be used to present the information required for projects in coastal areas, in addition to the information required for Lower-Scrutiny Approvals, Expedited Permits, and Standard Permits under Env-Wt 603.01.

Please refer to Env-Wt 605.03 for impacts requiring compensatory mitigation.

SECTION 1 - REQUIRED INFORMATION (Env-Wt 603.02; Env-Wt 603.06; Env-Wt 603.09)

The following information is required for projects in coastal areas.

Describe the purpose of the proposed project, including the overall goal of the project, the core project purpose consisting of a concise description of the facilities and work that could impact jurisdictional areas, and the intended project outcome. Specifically identify all natural resource assets in the area proposed to be impacted and include maps created through a data screening in accordance with Env-Wt 603.03 (refer to Section 2) and Env-Wt 603.04 (refer to Section 3) as attachments.

The project proposes 2,010 sq. ft. of permanent impact and 1,056 sq. ft. of temporary construction impact to the previously developed 100' Tidal Buffer Zone for residential site improvementrs including including construction of a proposed addition, re-configuration of the existing driveway utilizing pervious pavers, installation of three rain gardens, and construction of stone steps and a stone patio. .

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095
www.des.nh.gov

For standard permit projects, provide: A Coastal Functional Assessment (CFA) report in accordance with Env-Wt 603.04 (refer to Section 3). A vulnerability assessment in accordance with Env-Wt 603.05 (refer to Section 4).
Explain all recommended methods and other considerations to protect the natural resource assets during and as a result of project construction in accordance with Env-Wt 311.07, Env-Wt 313, and Env-Wt 603.04.
The proposed residential development has been designed and located on the lot to avoid impacts to the previously deveoped 100' Tidal Buffer Zone to the greatest extent practicable. Due to the configuration of the lot, the location of tidal wetlands associated with the site, and local zoning and dimensional requirements, the building envelope in which a structure could be built is limited. The proposed structure has been placed within an area of existing impervious suface. The project does not require any removal of vegetation in the 50' Waterfront Buffer. See attached Coastal Vulnerability Assessment for project avoidance related to projected sea level rise
Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.
The attached narrative and the project plan set, specifically the Details Sheet includes all notes demonstrating compliance with Env-Wt 307 and Env-Wt 313.01.

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Provide a project design narrative that includes the following:
A discussion of how the proposed project:
 Uses best management practices and standard conditions in Env-Wt 307; Meets all avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03; Meets approval criteria in Env-Wt 313.01; Meets evaluation criteria in Env-Wt 313.01(c); Meets CFA requirements in Env-Wt 603.04; and Considers sea-level rise and potential flooding evaluated pursuant to Env-Wt 603.05;
A construction sequence, erosion/siltation control methods to be used, and a dewatering plan; and
A discussion of how the completed project will be maintained and managed.
Provide design plans that meet the requirements of Env-Wt 603.07 (refer to Section 5);
Provide water depth supporting information required by Env-Wt 603.08 (refer to Section 6); and
For any major project that proposes to construct a structure in tidal waters/wetlands or to extend an existing structure seaward, provide a statement from the Pease Development Authority Division of Ports and Harbors (DP&H) chief harbormaster, or designee, for the subject location relative to the proposed structure's impact on navigation. If the proposed structure might impede existing public passage along the subject shoreline on foot or by non-motorized watercraft, the applicant shall explain how the impediments have been minimized to the greatest extent practicable.

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095
www.des.nh.gov

2020-05 Page 3 of 10

SECTION 2 - DATA SCREENING (Env-Wt 603.03, in addition to Env-Wt 306.05)
Please use the Wetland Permit Planning Tool, or any other database or source, to indicate the presence of:
Existing salt marsh and salt marsh migration pathways;
Eelgrass beds;
Documented shellfish sites;
Projected sea-level rise; and
100-year floodplain.
Conduct data screening as described to identify documented essential fish habitat, and tides and currents that may be impacted by the proposed project, by using the following links:
National Oceanic and Atmospheric Administration (NOAA) Tides & Currents; and
NOAA Essential Fish Habitat Mapper.
Verify or correct the information collected from the data screenings by conducting an on-site assessment of the subject property in accordance with Env-Wt 406 and Env-Wt 603.04.
SECTION 3 - COASTAL FUNCTIONAL ASSESSMENT/ AVOIDANCE AND MINIMIZATION (Env-Wt 603.04; Env-Wt 605.01; Env-Wt 605.02; Env-Wt 605.03)
Projects in coastal areas shall:
Not impair the navigation, recreation, or commerce of the general public; and
Minimize alterations in prevailing currents.
An applicant for a permit for work in or adjacent to tidal waters/wetlands or the tidal buffer zone shall demonstrate that the following have been avoided or minimized as required by Env-Wt 313.04:
Adverse impacts to beach or tidal flat sediment replenishment;
Adverse impacts to the movement of sediments along a shore;
Adverse impacts on a tidal wetland's ability to dissipate wave energy and storm surge; and
Adverse impacts of project runoff on salinity levels in tidal environments.
For standard permit applications submitted for minor or major projects:
Attach a CFA based on the data screening information and on-site evaluation required by Env-Wt 603.03. The CFA for tidal wetlands or tidal waters shall be:
Performed by a qualified coastal professional; and
Completed using one of the following methods:
a. The US Army Corps of Engineers (USACE) Highway Methodology Workbook, dated 1993, together with the USACE New England District <i>Highway Methodology Workbook Supplement</i> , dated 1999; or
b. An alternative scientifically-supported method with cited reference and the reasons for the alternative method substantiated

For any project that would impact tidal wetlands, tidal waters, or associated sand dunes, the applicant shall:
Use the results of the CFA to select the location of the proposed project having the least impact to tidal wetlands, tidal waters, or associated sand dunes;
Design the proposed project to have the least impact to tidal wetlands, tidal waters, or associated sand dunes;
Where impact to wetland and other coastal resource functions is unavoidable, limit the project impacts to the least valuable functions, avoiding and minimizing impact to the highest and most valuable functions; and
Include on-site minimization measures and construction management practices to protect coastal resource areas.
Projects in coastal areas shall use results of this CFA to:
Minimize adverse impacts to finfish, shellfish, crustacean, and wildlife;
Minimize disturbances to groundwater and surface water flow;
Avoid impacts that could adversely affect fish habitat, wildlife habitat, or both; and
Avoid impacts that might cause erosion to shoreline properties.
SECTION 4 - VULNERABILITY ASSESSMENT (Env-Wt 603.05) Refer to the New Hampshire Coastal Flood Risk Summary Part 1: Science and New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections or other best available science to:
Determine the time period over which the project is designed to serve.
See attached CVA
Identify the project's relative risk tolerance to flooding and potential damage or loss likely to result from flooding to buildings, infrastructure, salt marshes, sand dunes and other valuable coastal resource areas.
See attached CVA

2020-05 Page 5 of 10

Reference the projected sea-level rise (SLR) scenario that most closely matches the end of the project design life and the project's tolerance to risk or loss.
See attached CVA
Identify areas of the proposed project site subject to flooding from SLR.
See attached CVA
Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.
See attached CVA
Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans.
See attached CVA
Where there are conflicts between the project's purpose and the vulnerability assessment results, schedule a pre-
application meeting with the department to evaluate design alternatives, engineering approaches, and use of the best available science.
Pre-application meeting date held: N/A

2020-05 Page 6 of 10

SECTION 5 - DESIGN PLANS (Env-Wt 603.07, in addition to Env-Wt 311)					
Submit design plans for the project in both plan and elevation views that clearly depict and elements.	identify all required				
The plan view shall depict the following:					
The engineering scale used, which shall be no larger than one inch equals 50 feet;					
_					
An imaginary extension of property boundary lines into the waterbody and a 20-foot se line extensions;	tback from those property				
The location of all special aquatic sites at or within 100 feet of the subject property;					
Existing bank contours;					
The name and license number, if applicable, of each individual responsible for the plan,	including:				
a. The agent for tidal docking structures who determined elevations represented of	on plans; and				
 The qualified coastal professional who completed the CFA report and located th the plan; 	e identified resources on				
The location and dimensions of all existing and proposed structures and landscape features	ures on the property;				
Tidal datum(s) with associated elevations noted, based on NAVD 88; and					
Location of all special aquatic sites within 100-feet of the property.					
The elevation view shall depict the following:					
The nature and slope of the shoreline;					
The location and dimensions of all proposed structures, including permanent piers, pilir ramps, floats, and dolphins; and	gs, float stop structures,				
_					
See specific design and plan requirements for certain types of coastal projects:					
Overwater structures (Env-Wt 606). Tidal shoreline stabilizat	prict the following: ale used, which shall be no larger than one inch equals 50 feet; al datum lines depicted as lines with the associated elevation noted, based on North American 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum_options.html , as on 6. asion of property boundary lines into the waterbody and a 20-foot setback from those property special aquatic sites at or within 100 feet of the subject property; ours; as enumber, if applicable, of each individual responsible for the plan, including: for tidal docking structures who determined elevations represented on plans; and ed coastal professional who completed the CFA report and located the identified resources on imensions of all existing and proposed structures and landscape features on the property; associated elevations noted, based on NAVD 88; and cital aquatic sites within 100-feet of the property. all depict the following: upe of the shoreline; imensions of all proposed structures, including permanent piers, pilings, float stop structures, dolphins; and icted as a line with associated elevation at highest observable tide, mean high tide, and mean date and tide height when the depths were measured. Refer to Section 6 for more instructions epth supporting information. d plan requirements for certain types of coastal projects: ructures (Env-Wt 606). • Tidal shoreline stabilization (Env-Wt 609). wittes (Env-Wt 607). • Protected tidal zone (Env-Wt 610).				
Dredging activities (Env-Wt 607). Protected tidal zone (Env-Wt 607).	ans for the project in both plan and elevation views that clearly depict and identify all required all depict the following: ing scale used, which shall be no larger than one inch equals 50 feet; of tidal datum lines depicted as lines with the associated elevation noted, based on North American m of 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum_options.html , as Section 6. extension of property boundary lines into the waterbody and a 20-foot setback from those property nois; of all special aquatic sites at or within 100 feet of the subject property; contours; d license number, if applicable, of each individual responsible for the plan, including: gent for tidal docking structures who determined elevations represented on plans; and ualified coastal professional who completed the CFA report and located the identified resources on an; and dimensions of all existing and proposed structures and landscape features on the property; and dimensions of all existing and proposed structures and landscape features on the property; which associated elevations noted, based on NAVD 88; and I special aquatic sites within 100-feet of the property. which shall depict the following: and slope of the shoreline; and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, and dimensions of all proposed structures. The date and tide height when the depths were measured. Refer to Section 6 for more instructions ther depth supporting information. The date and tide height when the depths were measured. Refer to Section 6 for more instructions ther depth supporting information. The date and tide height when the depths were measured. Refer to Section 6 for more instructions ther depth supporting information. The date and tide height when the depths were measured. Refer to Section 6 for more instructions th				
• Tidal beach maintenance (Env-Wt 608). • Sand Dunes (Env-Wt 611	L) .				

SECTION 6 - WATER DEPTH SUPPORTING INFORMATION REQUIRED (Env-Wt 603.08)
Using current predicted NOAA tidal datum for the location, and tying field measurements to NAVD 88, field observations of at least three tide events, including at least one minus tide event, shall be located to document the range of the tide in the proposed location showing the following levels:
Mean lower low water;
Mean low water;
Mean high water;
Mean tide level;
Mean higher high water;
Highest observable tide line; and
Predicted sea-level rise as identified in the vulnerability assessment in Env-Wt 603.05.
The following data shall be presented in the application project narrative to support how water depths were determined:
The date, time of day, and weather conditions when water depths were recorded; and
The name and license number of the licensed land surveyor who conducted the field measurements.
For tidal stream crossing projects, provide:
Water depth information to show how the tier 4 stream crossing is designed to meet Env-Wt 904.07(c) and (d).
For repair, rehabilitation or replacement of tier 4 stream crossings:
Demonstrate how the requirements of Env-Wt 904.09 are met.
SECTION 7 - GENERAL CRITERIA FOR TIDAL BEACHES, TIDAL SHORELINE, AND SAND DUNES (Env-Wt 604.01)
Any person proposing a project in or on a tidal beach, tidal shoreline, or sand dune, or any combination thereof, shall evaluate the proposed project based on:
The standard conditions in Env-Wt 307;
The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
The approval criteria in Env-Wt 313.01;
The evaluation criteria in Env-Wt 313.05;
The project specific criteria in Env-Wt 600;
The CFA required by Env-Wt 603.04; and
The vulnerability assessment required by Env-Wt 603.05.
New permanent impacts to sand dunes that provide coastal storm surge protection for protected species or habitat shall not be allowed except:
To protect public safety; and
Only if constructed by a state agency, coastal resiliency project, or for a federal homeland security project.
Projects in or on a tidal beach, tidal shoreline, or sand dune shall support integrated shoreline management that:
Optimizes the natural function of the shoreline, including protection or restoration of habitat, water quality, and self-sustaining stability to flooding and storm surge; and
Protects upland infrastructure from coastal hazards with a preference for living shorelines over hardened shoreline practices.

2020-05 Page 8 of 10

SECTION 8 - GENERAL CRITERIA FOR TIDAL BUFFER ZONES (Env-Wt 604.02)
The 100-foot statutory limit on the extent of the tidal buffer zone shall be measured horizontally. Any person proposing a project in or on an undeveloped tidal buffer zone shall evaluate the proposed project based on:
The standard conditions in Env-Wt 307;
The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
The approval criteria in Env-Wt 313.01;
The evaluation criteria in Env-Wt 313.05;
The project specific criteria in Env-Wt 600;
☐ The CFA required by Env-Wt 603.04; and
The vulnerability assessment required by Env-Wt 603.05.
Projects in or on a tidal buffer zone shall preserve the self-sustaining ability of the buffer area to:
Provide habitat values;
Protect tidal environments from potential sources of pollution;
Provide stability of the coastal shoreline; and
Maintain existing buffers intact where the lot has disturbed area defined under RSA 483-B:4, IV.
SECTION 9 - GENERAL CRITERIA FOR TIDAL WATERS/WETLANDS (Env-Wt 604.03)
Except as allowed under Env-Wt 606, permanent new impacts to tidal wetlands shall be allowed only to protect public safety or homeland security. Evaluation of impacts to tidal wetlands and tidal waters shall be based on:
The standard conditions in Env-Wt 307;
The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
The approval criteria in Env-Wt 313.01;
The evaluation criteria in Env-Wt 313.05;
The project specific criteria in Env-Wt 600;
☐ The CFA required by Env-Wt 603.04; and
The vulnerability assessment required by Env-Wt 603.05.
Projects in tidal surface waters or tidal wetlands shall:
Optimize the natural function of the tidal wetland, including protection or restoration of habitat, water quality, and self-sustaining stability to storm surge;
Be designed with a preference for living shorelines over hardened stabilization practices; and
Be limited to public infrastructure or restoration projects that are in the interest of the general public, including a

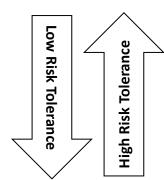
SECTION 10 – GUIDANCE

Your application must follow the New Hampshire Coastal Risk and Hazards Commission's Guiding Principles or other best available science. Below are some of these guidance principles:

- Incorporate science-based coastal flood risk projections into planning;
- Apply risk tolerance* to assessment, planning, design, and construction;
- Protect natural resources and public access;
- Create a bold vision, start immediately, and respond incrementally and opportunistically as projected coastal flood risks increase over time; and
- Consider the full suite of actions including effectiveness and consequences of actions.

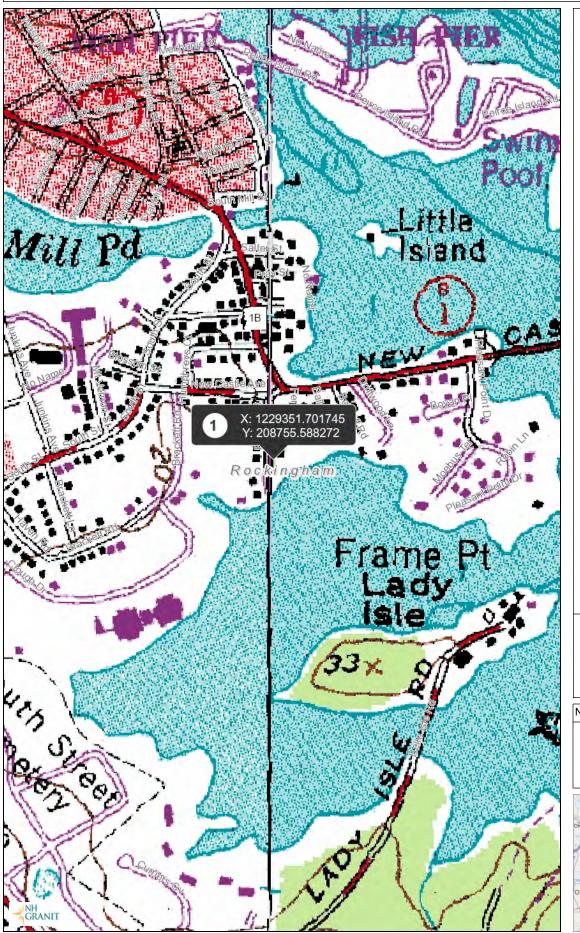
*Risk tolerance is a project's willingness to accept a higher or lower probability of flooding impacts. The diagram below gives examples of project with lower and higher risk tolerance:

Critical infrastructures, historic sites, essential ecosystems, and high value assets typically have lower risk tolerance, and thus should be planned, designed, and constructed using higher coastal flood risk projections.



Sheds, pathways, and small docks typically have higher risk tolerance and thus may be planned, designed, and constructed using less protective coastal flood risk projections.

Map by NH GRANIT



Legend

- State
- County
- \square City/Town

Map Scale

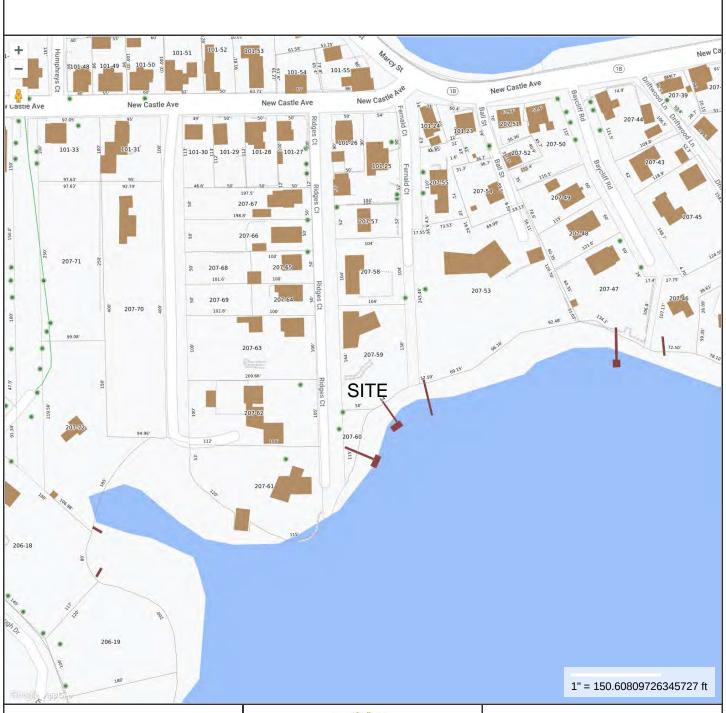
1: 6,494



© NH GRANIT, www.granit.unh.edu Map Generated: 7/6/2020

Notes







MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT

City of Portsmouth, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 3/9/2022 Data updated 3/9/2022 Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

Ambit Engineering Abutter List

Jeffrey M. & Melissa Foy 67 Ridges Court Portsmouth, NH Job # 1153.02

Applicant/Owner(s)

Мар	Lot	Deed	Owner (s) First/Trust	Owner(s) Last, Trustee	Mailing Address	City	State	Zip
207	59	6325/1066	Jeffrey M. & Melissa	Foy	4 Fox Hollow Court	East Kingston	NH	03827

Engineer	Ambit Engineering Civil Engineers & Land Surveyors	200 Griffin Road, Unit #3	Portsmouth	NH	03801
Other Consultants					
Other Consultants					
Other Consultants					

Job #	1153.02		Abutters					
Мар	Lot	Deed	Owner(s) First/Trust	Owner(s) Last /Trustee	Mailing Address	City	State	Zip
207	53		Michael Goelet 2012 Irrevocable Trust	David Sauveur Trustee	19 Morgan Drive	Lebanon	NH	03766
207	58		Jason & Kirsten	Barton	49 Ridges Court	Portsmouth	NH	03801
207	60		Peter Vandermark & Lee D. Vandermark		86 Ridges Court	Portsmouth	NH	03801



26 July, 2023

Jason & Kirsten Barton 49 Ridges Court Portsmouth, NH 03801

RE: New Hampshire DES Wetland & Shoreland Applications for proposed site improvements for Jeffrey M. & Melissa Foy, 67 Ridges Court, Portsmouth, NH.

Dear Property Owner,

Under NH RSA 482-A and RSA 483-B this letter is to inform you in accordance with State Law that a NH DES Wetlands Permit and a NH DES Shoreland Permit will be filed with the New Hampshire Department of Environmental Services (DES) Wetlands Bureau for a permit to impact the previously developed 100' Tidal Buffer Zone and the 250' Protected Shoreland on behalf of your abutter, Jeffrey M. & Melissa Foy.

This letter is sent to inform you as an abutter to the above-referenced property (according to local Municipal records) that **Jeffrey M. & Melissa Foy**, proposes a project that requires construction in the 100' Tidal Buffer Zone and the 250' Protected Shoreland, both jurisdictional areas.

Plans are on file at this office, and once the application is filed, plans that show the proposed project and wetland and other jurisdictional impacts will be available for viewing at the office of the **Portsmouth** clerk, **Portsmouth city offices** during their normal business hours, or once received by DES, at the offices of the DES Wetlands Bureau, (8 a.m. to 4 p.m.) (603) 271-2147. It is suggested that you call ahead to the appropriate office to ensure the application is available for review.

Please feel free to call if you have any questions or comments.

Sincerely,

Steve Riker, CWS Project Scientist/Project Manager sriker@haleyward.com

CERTIFIED MAIL/Return Receipt Requested



Jeffery M. & Melissa Foy-NH DES Wetland Application | 07.26.2023 | Page 1



26 July, 2023

Michael Goelet 2012 Irrevocable Trust David Sauveur Trustee 19 Morgan Drive Lebanon, NH 03766

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Steve Riker, CWS Project Scientist/Project Manager

sriker@haleyward.com

CERTIFIED MAIL/Return Receipt Requested



Jeffrey M. & Melissa Foy-NH DES Wetland Application | 07.26.2023 | Page 1



26 July, 2023

Peter Vandermark & Lee D. Vandermark 86 Ridges Court Portsmouth, NH 03801

RE: New Hampshire DES Wetland & Shoreland Applications for proposed site improvements for Jeffrey M. & Melissa Foy, 67 Ridges Court, Portsmouth, NH.

Dear Property Owner,

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Please feel free to call if you have any questions or comments.

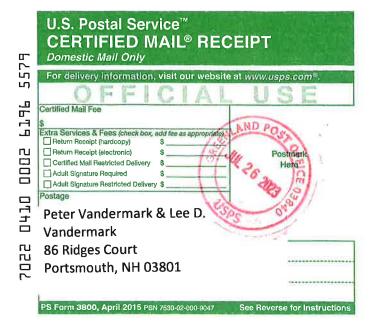
Sincerely,

Steve Riker, CWS
Project Scientist/Project Manager

sriker@haleyward.com

CERTIFIED MAIL/Return Receipt Requested





















New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

To: John Chagnon, Ambit Engineering, Inc.

200 Griffin Road

Unit 3

Portsmouth, NH 03801

From: NH Natural Heritage Bureau

Date: 7/21/2023 (valid until 7/21/2024)

Re: Review by NH Natural Heritage Bureau of request submitted 7/13/2023

Permits: MUNICIPAL POR - Portsmouth, NHDES - Shoreland Standard Permit, NHDES -

Wetland Standard Dredge & Fill - Minor

NHB ID: NHB23-2110 Applicant: Steve Riker

Location: Portsmouth

67 Ridges Court

Project

Description: The project proposes the construction of an attached garage onto the

existing residential structure (in an area that currently exists as asphalt

driveway), reconfiguration of the existing driveway, removal of

pavement and associated grading.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 7/13/2023 9:11:58 AM, and cannot be used for any other project.

Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: NHB23-2110



Book: 6325 Page: 1066

Return to: Jeffrey M. Foy and Melissa Foy 4 Fox Hollow Court East Kingston, NH 03827 E # 21056909 09/07/2021 11:36:39 AM Book 6325 Page 1066 Page 1 of 2 Register of Deeds, Rockingham County

Carey and Stacey

LCHIP ROA582892 25.00
TRANSFER TAX RO109387 39,750.00
RECORDING 14.00
SURCHARGE 2.00

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That Christopher S. Clews, Trustee of the Christopher S. Clews Revocable Trust of 1993 u/d/t 02/05/1993, of 67 Ridges Court, Portsmouth, NH 03801, for consideration paid grants to Jeffrey M. Foy and Melissa Foy, A Married Couple, of 4 Fox Hollow Court, East Kingston, NH 03827, as joint tenants with rights of survivorship, with WARRANTY COVENANTS:

A certain tract or parcel of land with the buildings thereon, situated in Portsmouth, County of Rockingham and State of New Hampshire, bounded and described as follows:

Beginning at a point on the easterly sideline of Ridges Court, at the southwesterly corner of land now or formerly of Ralph Kinch; thence running easterly along the said land of said Kinch, 104 feet to Fernald Court, so-called; thence turning and running southerly along the westerly side of said Fernald Court, 130 feet, more or less, to Little Harbor, 64 feet, more or less, to a point; thence turning and running westerly on a line parallel to and 164 feet distance from the northerly boundary of the within described premises, a distance of 50 feet, more or less, to Ridges Court; thence turning and running northerly along the easterly side of Ridges Court, 164 feet to the point of beginning.

Meaning and intending to convey Lots No. 62, 69 and the northerly portion of Lot 61 on a plan entitled, "Plan of Lots, Belonging to Rienzi Ridge, Portsmouth, N.H., Scale: 1' = 30 feet," recorded in the Rockingham County of Deeds on March 24, 1914. Said plan being No. 0188. For further reference, see Estate of Huldah S. Marden.

The undersigned Trustee is the sole Trustee under the Christopher S. Clews Revocable Trust, created under a certain Declaration of Trust dated February 5, 1993 and thereto has full and absolute power in said Trust Agreement to convey any interest in real estate and improvements thereon, and pledge said property as security, held in said Trust and no purchaser or third party shall be bound to inquire whether the Trustee has said power or is properly exercising said power or to see to the application of any Trust asset paid to the Trustee as a conveyance thereof.

Book: 6325 Page: 1067

Meaning and intending to describe and convey the same premises conveyed to Christopher S. Clews, Trustee of the Christopher S. Clews Revocable Trust, by virtue of a Deed from Christopher S. Clews, dated July 13, 2020 and recorded at the Rockingham County Registry of Deeds in Book 6138, Page 2770.

I, the grantor hereby release all rights of homestead in the above described premises.

Executed this 3rd day of September, 2021.

Christopher S. Clews, Trustee of the Christopher S. Clews Revocable Trust of 1993 u/d/t 02/05/1993

State of New Hampshire County of Rockingham

Then personally appeared before me on this 3rd day of September, 2021, the said Christopher S. Clews, Trustee of the Christopher S. Clews Revocable Trust of 1993 u/d/t 02/05/1993 and acknowledged the foregoing to be his voluntary act and deed.

Notary Public/Justice of the Peace Commission expiration:

COMMISSION EXPIRES AUGUST 5, 2025

Coastal Vulnerability Assessment

Prepared for:

Jeffrey M. & Melissa Foy 67 Ridges Court Portsmouth, New Hampshire 03801

Prepared By:
Ambit Engineering, Inc. Haley Ward
200 Griffin, Unit 3
Portsmouth, New Hampshire 03801



Introduction

This Coastal Vulnerability Assessment (CVA) is being provided in support of a New Hampshire Department of Environmental Services (NHDES) Minor Impact Wetland Permit Application for residential site improvements including construction of a proposed addition, re-configuration of the existing driveway utilizing pervious pavers, installation of three rain gardens, and construction of stone steps and a stone patio at 67 Ridges Court, Portsmouth, NH (herein referred to as "project site"). The project site is a previously developed residential lot located adjacent to Little Harbor, a tidal wetland system. The surrounding land use is residential with similar structures and development.

Methods

On July 1, 2020, Steven D. Riker, CWS from Ambit Engineering, Inc.- Haley Ward. conducted a site visit to evaluate coastal characteristics of the project site. This CVA was completed utilizing the NH Coastal Flood Risk Science and Technical Advisory Panel (2019). New Hamsphire Coastal Flood Risk Summary Part: Guidance for Using Scientific Projections. Report Published by the University of New Hampshire (herein referred to as Guidance Document).

Part 1.1 – Project Type

This project proposes residential site improvements on a previously developed lot adjacent to Little Harbor. For more details regarding the proposed improvements, please refer to the NH DES Wetlands Bureau Application Letter to the Wetlands Inspector and attached Plan Set.

Part 1.2 – Project Location

The project location is 67 Ridges Court, Portsmouth, NH, Tax Map 207, Lot 59 and consists of +/-16,500 sq. ft. of residential upland and +/- 64.1' of shoreline frontage along Little Harbor. Access to the project site will be from Ridges Court for the mobilization of equipment and materials to the site.

Part 1.3 – Timeline for Desired Useful Life

The desired useful life for this project is considered to be 2100 (50-100 years) due to the fact that it is a residential structure which has a life expectancy of approximately 75-100 years.

2.1 – Project Risk Tolerance

The proposed project is considered to have a high risk tolerance considering the proposed residential structure has a relatively low cost, is relatively easy to modify, proposes little to no implications on public function and/or safety; and has relatively low sensitivity to inundation given the elevation and position of the structure on the landscape.

2.2 – Risk Tolerance of Important Access and Service Areas

The risk tolerance of surrounding access and service areas would also be considered as high, as the project occurs on a residential private lot intended for private use; and the primary access to the lot would not be subject to projected sea level rise.

3.1 – Relative Sea Level Rise Scenario (RSLS)

Based on Table 3 in the Guidance Document (see table below), the RSLS for this project (based on the previously determined high risk tolerance) is considered to be on the lower magnitude, and higher probability. The following table depicts the probable see level rise from 2000 through 2150.

Table 3 from the Guidance Document:

Risk Tolerance	High	Medium	Low	Extremely Low
Example Project	Walking Trail	Local Road	Wastewater	Hospital
	*Docking structure	Culvert	Treatment Facility	
	& Stone Revetment		,	
Timeframe	Ma	anage to the follow	ving sea level rise (f	(t*)
	Co	000		
	Lower magnitude	4		Higher magnitude
	Higher probability			Lower probability
2030	0.7	0.9	1.0	1.1
2050	1.3	1.6	2.0	2.3
2100	2.9	3.8	5.3	6.2
2150	4.6	6.4	9.9	11.7

^{*}Added by Ambit Engineering, Inc. based on the application of the Guidance Document towards our project.

3.2 – RSLR Impacts to the Project Evaluation

Please see the attached Figure 1 – Projected SLR's; which depicts the project site and relevant Highest Observable Tide Line (HOTL), MHW, and the projected SLR's for the years 2030, 2050, 2100 and 2150. Relative to surrounding topography and considering the High Risk Tolerance of this project; it is not expected the projected RSLR for this project needs to be a strong consideration. Mean High Water (MHW) associated with the project site is located approximately at elevation 3.75. Considering a 2.9 foot RSLR in the year 2100 resulting in a future MHW elevation of 6.65, and the proposed finished floor of the residential structure to be 15.6 projected RSLR does not need to be considered for this project.

3.3 – Other Factors

Other factors were evaluated in conjunction with RSLR including surface water levels, groundwater levels, and current velocities which will increase with sediment erosion and deposition, which will also change. The projects position in the landscape was also considered relative to other infrastructure. The closest surface water to the project site is the adjacent Little Harbor, projections of RSLR of which have already been depicted and discussed. There are no current restrictions on the project site or associated with the proposed project.

4.1 – RSLR and Coastal Storms

Due to the lowest area of proposed development being elevation 15.6, RSLR and storm surge do not need to be considered for this project.

4.2 – Other Factors

Other factors such as surface water levels, groundwater levels, wind and current velocities have been considered. Considering the high risk tolerance of this project, it is not anticipated that this project has a significant level of vulnerability surface water levels, wind, current velocities and storm surge.

5.1 – Projected RSL-Induced Groundwater Rise

The NH Granit- Coastal Viewer database has projected groundwater rise data associated with RSLR on the project site. Averaging the height of groundwater rise between a 2 foot SLR and a 4 foot SLR results in a groundwater rise of 2.7 feet. Based on knowledge of the site, with an Estimated Seasonal High Water Table approximately 36" below the soil surface the proposed addition (lowest area of proposed development) is not considered to be at high risk from RSL induced groundwater rise as the addition floor will be located at elevation 15.6.

5.2 - Projected Groundwater Depth at the Project Location

Projected groundwater depth on the subject site would likely rise with projected RSLR, but the proposed project involves a structure (foundation) that is designed to be placed below the Estimated Seasonal High Water table.

6.1 – Best Available Precipitation Estimates

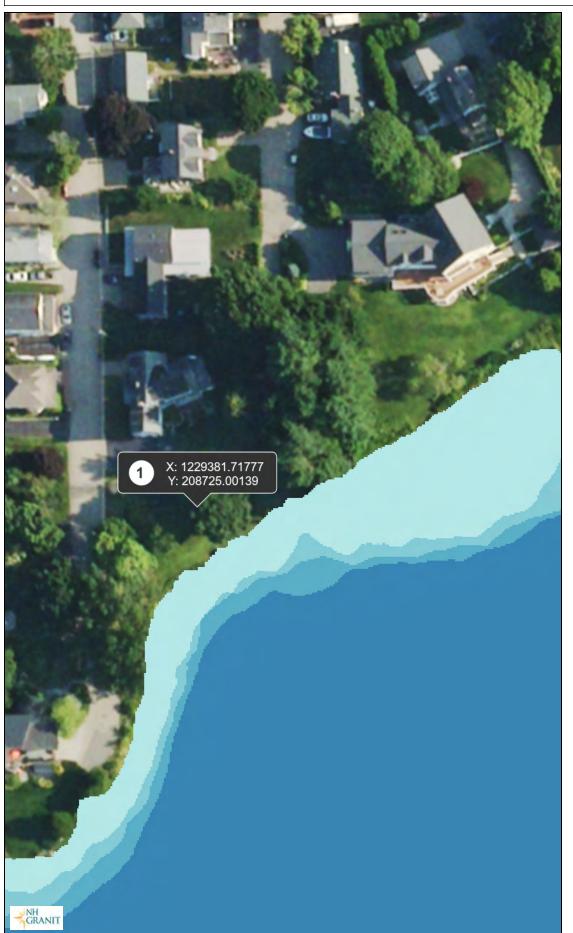
Please see the attached Extreme Precipitation Tables from the Northeast Regional Climate Center.

7.1 – Cumulative Coastal Flood Risk to the Project

Based on the high risk tolerance of this project combined with all other factors including RSLR, coastal storms, RSLR-induced groundwater rise, extreme precipitation and/or freshwater flooding occurring together; this project is not considered to be at high risk from coastal flooding.

7.2 – Possible Actions to Mitigate Coastal Flood Risk

Given the high risk tolerance of the proposed project, it is not anticipated that it is necessary to mitigate for coastal flood risk beyond what has already been incorporated into the design plan for residential development. The projected SLR scenario through 2100 is 2.9', with MHW at +/-elevation 3.75, and the finished floor of the proposed structure being elevation 15.6, providing +/-11.85 feet of freeboard to the proposed development.



Legend

MHHW + 1-ft SLR

0 - 2 2 - 4

2 - 4

6 - 8 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager High Resolution 60cm Image High Resolution 30cm Image Citations

30cm Resolution Metadata

Map Scale

1: 812



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Notes





Legend

MHHW + 2-ft SLR

0 - 2 2 - 4

4 - 6

6 - 8

8 - 10 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager High Resolution 60cm Image High Resolution 30cm Image Citations

30cm Resolution Metadata

Map Scale

1: 812



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Notes





Legend

MHHW + 4-ft SLR

0 - 2 2 - 4

4 - 6

6 - 8

8 - 10 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager High Resolution 60cm Image High Resolution 30cm Image Citations

30cm Resolution Metadata

Map Scale

1: 812



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Notes





Legend

MHHW + 6-ft SLR

0 - 2 2 - 4

4 - 6

6 - 8 8 - 10 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager High Resolution 60cm Image High Resolution 30cm Image Citations

30cm Resolution Metadata

Map Scale

1: 812



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Notes





Legend

MHHW + 8-ft SLR

0 - 2 2 - 4

4 - 6

6 - 8

8 - 10 10 +

Coastal 2019 1-foot RGB

World Imagery

Low Resolution 15m Imager High Resolution 60cm Image High Resolution 30cm Image Citations

30cm Resolution Metadata

Map Scale

1: 812



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Notes



Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches,

Smoothing State
Location

Longitude 70.745 degrees West Latitude 43.071 degrees North

Elevation 0 fee

Date/Time Tue, 21 Jan 2020 12:37:30 -0500

Precipitation estimates multiplied by 1.15 are listed below:

1-yr: 3.06 2-yr: 3.69 10-yr: 5.59 50-yr: 8.49

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1br	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	lyr	0.70	0.98	1.21	1.56	2.03	2.66	2,92	1yr	2.35	2,81	3,22	3.94	4.55	lyr
2yr	0.32	0.50	0.62	0.81	1.02	1.30	2yr	0.88	1.18	1.52	1.94	2.49	3.21	3.57	2yr	2.84	3.43	3.94	4.68	5.33	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.43	3.14	4.07	4.58	5yr	3,60	4.40	5.04	5,94	6.70	5yr
10yr	0.41	0.65	0.82	1.12	1.45	1.89	10yr	1.25	1.73	2.23	2,90	3.75	4.86	5.53	10yr	4.30	5.32	6.09	7.11	7.98	10yr
25yr	0.48	0.76	0.97	1.34	1.78	2.34	25yr	1.54	2.15	2.78	3.64	4.74	6.17	7.10	25yr	5.46	6.83	7.81	9.02	10.05	25yr
50yr	0.54	0.86	1.10	1.54	2.08	2.77	50yr	1.79	2.53	3.30	4.33	5.67	7,38	8.58	50yr	6.54	8.25	9.43	10.81	11.97	50yr
100yr	0,60	0.97	1.25	1.78	2.43	3.27	100yr	2.09	2.99	3.92	5.17	6.77	8.85	10.37	100yr	7.83	9.98	11.39	12.96	14.26	100yr
200yr	0,68	1,11	1.43	2.05	2.84	3.85	200yr	2.45	3.53	4.63	6.14	8.09	10.60	12.54	200yr	9.38	12.06	13.76	15.54	17.00	200yr
500yr	0.80	1.32	1.72	2.50	3.50															21.47	

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		Hir	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
lyr	0.23	0.36	0.44	0.59	0.72	0.88	1yr	0.62	0.86	0.93	1.33	1.69	2.25	2.48	1yr	1 99	2.38	2.87	3.20	3.91	Lyr
2yr	0.31	0.49	0.60	0.81	1.00	1.19	2yr	0,86	1,16	1,37	1.82	2.33	3.06	3.45	2yr	2.71	3.32	3.82	4.55	5.09	2yr
5yr	0.35	0.54	0.67	0.92	1.17	1.40	5yr	1.01	1.37	1,61	2.11	2.73	3.78	4.18	5yr	3.35	4.02	4.72	5.53	6.23	5yr
10yr	0.39	0.59	0.73	1.03	1.33	1.60	10yr	1.14	1,56	1.80	2.38	3.05	4,36	4.85	10yr	3.86	4.66	5 43	6.40	7.18	10yr
25yr	0.44	0.67	0.83	1.19	1.56															8.66	25yr
50yr	0.48	0.73	0.91	1.31	1.76	2.16	50yr	1.52	2 12	2 34	3.06	3.91	5.36	6.76	50yr	4 75	6.50	7.69	9.01	9 99	50yr
100yr	0.53	0.81	1,01	1.46	2 01	2.46	100yr	1 73	2.41	2.62	3.40	4.32	6.03	7.80	100yr	5.34	7.50	8.92	10.47	11.53	100yr
200уг	0.59	0.89	1.13	1.63	2.27	2,81	200yr	196	2.75	2.93	3.76	4.76	6.77	8.99	200yr	5.99	8.64	10.34	12.17	13.33	200yr
500yr	0.68	1.02	1.31	1.90	2.70	3.36	500yr	2.33	3.28	3.41	4.28	5.40	7.89	10.84	500yr	6 99	10,43	12,56	14.89	16.15	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		thr	2hr	3hr	6hr	12hr	24hr	48hr		Iday	2day	4day	7day	10day	
lyr	0.29	0.44	0.54	0.72	0.89	1.09	lýr	0.77	1.06	1.26	1.74	2.20	2,97	3.17	lyr	2.63	3,05	3.58	4.37	5.04	lyr
						1.27															
5yr	0.40	0.62	0.77	1.05	1.34	1.62	5yr	1 15	1.59	1.89	2.54	3.26	4.34	4.97	5yr	3.84	4.78	5,38	6.39	7.17	5yr
10yr	0.47	0.72	0.89	1.25	1.61	1.98	10yr	1.39	1.94	2.29	3.11	3.97	5.34	6.22	10yr	4.72	5 98	6.84	7.86	8.77	10yr
25yr	0.58	0.88	1.09	1.56	2.05	2.58	25yr	1.77	2.52	2.96	4.08	5.17	7.74	8.37	25yr	6.85	8.05	9.20	10.36	11.43	25yr
50yr	0.67	1.03	1.28	1.84	2.47	3.14	50yr	2,13	3.07	3.61	5.02	6.35	9.69	10.50	50yr	8.57	10.10	11.51	12.76	13.99	50yr
100yr	0.79	1,20	1.50	2.17	2.98	3.83	100yr	2,57	3.74	4 39	6.18	7.81	12.11	13.17	100yr	10.72	12.66	14.41	15.74	17.13	100yr
200yr	0.93	1.40	1.77	2.57	3.58	4.68	200yr	3 09	4.57	5_36	7.61	9.61	15,19	16.53	200yr	13.44	15.89	18.08	19.41	20.97	200yr
500yr	1.16	1.72	2.21	3.21	4.57	6.07	500yr	3.94	5.94	6.96	10.07	12.67	20.50	22.33	500yr	18 14	21.48	24 39	25 60	27,40	500yr



Wetland Functions and Values Assessment

Prepared for:

Jeffrey M. & Melissa Foy 67 Ridges Court Portsmouth, New Hampshire 03801

Prepared By:
Ambit Engineering, Inc. Haley Ward
200 Griffin, Unit 3
Portsmouth, New Hampshire 03801



Date: July 18, 2023



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INTRODUCTION

The applicant is proposing site improvements including construction of a proposed addition, re-configuration of the existing driveway utilizing pervious pavers, installation of three rain gardens, and construction of stone steps and a stone patio located at 67 Ridges Court, Portsmouth, New Hampshire. The project site is identified on Portsmouth Tax Map 207 as Lot 59 and is approximately 16,500 sq. ft. in size. As currently designed, the proposed project would require impacts to tidal wetlands and the 100' previously developed Tidal Buffer Zone (TBZ).

The purpose of this report is to present the existing functions and values of the tidal wetlands and to assess any impacts the proposed project may have on their ability to continue to perform these functions and values. The tidal wetlands being impacted were assessed with consideration to their association with Little Harbor and the larger marine ecosystem and was not limited to the tidal wetlands immediately on-site.

METHODS

DATA COLLECTION

The tidal wetlands associated with this project area were identified and characterized through field surveys and review of existing information. Ambit Engineering, Inc. (Ambit) conducted site visits in July of 2020 to characterize the tidal wetlands and collect the necessary information to complete a functions and values assessment. In addition, Ambit contacted the New Hampshire Natural Heritage Bureau (NHB) regarding existing information of documented rare species or natural communities within the vicinity of the project site.

WETLAND FUNCTIONS AND VALUES ASSESSMENT

Ambit assessed the ability of the tidal wetlands to provide certain functions and values and analyzed the potential effects the proposed project may have on their ability to continue to provide those functions and values. Wetland functions and values were assessed using the *Highway Methodology Workbook*, *Wetland Functions and Values*: A *Descriptive Approach*. This method bases function and value determinations on the presence or absence of specific criteria for each of the 13 wetland functions and values (see definitions below). These criteria are assessed through direct field observations and a review of existing resource maps and databases. As part of the evaluation, the most important functions and values associated with the on-site wetlands are identified. In addition, the ecological integrity of the wetlands is evaluated based on the existing levels of disturbance and the overall significance of the wetlands within the local watershed.

Groundwater Interchange (Recharge/Discharge)

This function considers the potential for the project area wetlands to serve as groundwater recharge and/or discharge areas. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.



Floodwater Alteration (Storage and Desynchronization)

This function considers the effectiveness of the wetlands in reducing flood damage by attenuating floodwaters for prolonged periods following precipitation and snow melt events.

° Fish and Shellfish Habitat

This function considers the effectiveness of seasonally or permanently flooded areas within the subject wetlands for their ability to provide fish and shellfish habitat.

° Sediment/Toxicant Retention

This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland to function as a trap for sediments, toxicants, or pathogens, and is generally related to factors such as the type of soils, the density of vegetation, and the position in the landscape.

Nutrient Removal/Retention/Transformation

This wetland function relates to the effectiveness of the wetland to prevent or reduce the adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

Production Export (Nutrient)

This function relates to the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

° Sediment/Shoreline Stabilization

This function considers the effectiveness of a wetland to stabilize stream banks and shorelines against erosion, primarily through the presence of persistent, well-rooted vegetation.

° Wildlife Habitat

This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered.

° Recreation (Consumptive and Non-Consumptive)

This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities.

Educational/Scientific Value

This value considers the effectiveness of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.



° Uniqueness/Heritage

This value relates to the effectiveness of the wetland or its associated water bodies to provide certain special values such as archaeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geologic features.

° Visual Quality/Aesthetics

This value relates to the visual and aesthetic qualities of the wetland.

° Endangered Species Habitat

This value considers the suitability of the wetland to support threatened or endangered species.

FUNCTIONS AND VALUES ASSESSMENT

Results of the wetland functions and values assessment are presented below. This assessment includes a discussion of potential changes to existing wetland functions and values that may occur as a result of the proposed project:

Groundwater Interchange (Recharge/Discharge)

Because there is no identified sand and gravel aquifer underlying the project area, and the wetlands are not underlain by sands or gravel, it is unlikely that significant groundwater recharge is occurring within the tidal wetlands.

Floodwater Alteration (Storage and Desynchronization)

The tidal wetlands and Little Harbor receive floodwaters from the surrounding watershed and connected waterways; therefore, is considered a principal function considering the large size of the combined waterways.

Fish and Shellfish Habitat

The tidal wetland does provide fish and shellfish habitat, is associated with Little Harbor and the Atlantic Ocean; therefore, is considered a principal function.

Sediment/Toxicant Retention

The greater tidal wetland contains dense vegetation and a significant source of sediments or toxicants; therefore, is considered a principal function.

Nutrient Removal/Retention/Transformation

The greater tidal wetland contains dense vegetation and a significant source of sediments or toxicants; therefore, is considered a principal function.



Production Export (Nutrient)

Production export is a wetland function that typically occurs in the form of nutrient or biomass transport via watercourses, foraging by wildlife species, and removal of timber and other natural products. Because the tidal wetland provides fish and wildlife habitat, commercial and recreational fisheries opportunities, and nutrients are transferred over several trophic levels in the marine ecosystem, this is considered a principal function.

Sediment/Shoreline Stabilization

Due to the tidal nature and wave action of this wetland; sediment/shoreline stabilization is considered a principal function.

Wildlife Habitat

The greater tidal wetland and Little Harbor provide a variety of coastal and marine habitat, therefore would be considered a principal function.

Recreation (Consumptive and Non-Consumptive)

The greater tidal wetland and Little Harbor provide a variety of consumptive and non-consumptive recreational opportunities including hunting, fishing and bird watching; therefore, would be considered a principal function.

Education/Scientific Value

The tidal wetland and Little Harbor are part of a larger marine ecosystem with multiple areas of public access making this a principal value.

Uniqueness/Heritage

The tidal wetland and Little Harbor are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with Little Harbor & the Piscataqua river and the surrounding areas making this a principal value.

Visual Quality/Aesthetics

Little Harbor provides aesthetically pleasing coastal views that are viewable from surrounding uplands as well as from the water, making this a principal value.

Endangered Species Habitat

An online inquiry with the NH Natural Heritage Bureau resulted in occurrences of sensitive species near the project area. NHB determined that impacts to these sensitive species are not expected as a result of the project. Given the above factors in regards to threatened or endangered species, this is not considered a function.



PROPOSED IMPACTS

This report is accompanying a New Hampshire Department of Environmental Services (NHDES) Minor Impact Wetland Permit Application request to permit 2,010 sq. ft. of permanent impact and 1,056 sq. ft. of temporary construction impact to the previously developed 100' Tidal Buffer Zone for residential site improvements.

SUMMARY AND CONCLUSIONS

The jurisdictional tidal wetland associated with the project site is part of a large marine system and provides eleven principal functions and values when evaluated as a whole. These functions and values include: floodflow alteration, fish and shellfish habitat, production export, sediment/shoreline stabilization, nutrient removal/retention, sediment/toxicant retention, wildlife habitat, recreation, education/scientific value, uniqueness/heritage, and visual quality aesthetics. While the entire marine system provides these principal functions and values, the proposed impacts associated with the site improvements will not have any effect on its ability to continue to provide them. As the proposed project will reduce impervious surface on the lot and the area within the previously developed 100′ Tidal Buffer Zone, provides for the installation of three rain gardens, includes the installation of a robust planting plan and the use of pervious technology for the proposed driveway, stormwater quality leaving the site will be improved and there are no anticipated impacts to the current functions and values.

The proposed impacts have been minimized to the greatest extent practicable, while allowing reasonable use of the property. The project will not contribute to additional storm water or pollution. It is anticipated that there will be no effect on any fish or wildlife species that currently use the site for food, cover, and/or habitat. The project will not impede tidal flow or alter hydrology, it will not deter use by wildlife species that currently use the wetland area, and it will not impede any migrational fish movement.

Based on our assessment of the current functions and values, the proposed project; it is our belief that the proposed project will have no significant impact on the tidal wetlands or greater marine systems ability to continue to provide their current functions and values.



APPENDIX A

WETLAND FUNCTION - VALUE EVALUATION FORM



Wetland Function – Value Evaluation Form

Wetland Description: Wetland A is a tidal wetland associated with Little Harbor.	File number: 1153.02			
	Wetland identifier: Wetland A			
	Latitude:X:1,229,351.70	Longitude:Y:208,755		
	Preparer(s): Ambit Engin	eering, Inc.		
	200 Griffin Road			
	Date : July 18, 2023			

	Capa	bility	Summary	Principal
Function/Value	Y	N		Yes/No
Groundwater Recharge/Discharge		X	This wetland does not possess the characteristics needed to provide this function as there are no identified underlying sand or gravel aquifers.	_
Floodwater Alteration	X		The tidal wetland and Little Harbor do receive floodwater from the surrounding watershed and connected waterways; therefore, this would be considered a principal function.	Y
Fish and Shellfish Habitat	X		The tidal wetland and Little Harbor are part of a larger coastal marine system and provide both fish and shellfish habitat. This is considered a Principal Function.	Y
Sediment/Toxicant Retention	X		The immediate tidal wetland contains dense vegetation and a source of sediments and toxicants, therefore a principal function.	Y
Nutrient Removal	X		The immediate tidal wetland contains dense vegetation and a source of nutrients, therefore a principal function.	Y
Production Export	X		Because the tidal wetland provides fish and wildlife habitat, commercial and recreational fishing opportunities, and nutrients are transferred over several trophic levels in the marine ecosystem, this is considered a principal function.	Y
Sediment/Shoreline Stabilization	X		Due to the tidal nature and wave action of this wetland; sediment/shoreline stabilization is considered a principal function. The project proposes to stabilize the shoreline with a more structurally stable design.	Y
Wildlife Habitat	X		The greater tidal wetland and Little Harbor provides a variety of coastal and marine habitat, therefore would be considered a principal function.	Y
Recreation	X		The adjacent tidal wetland provides a variety of consumptive and non-consumptive recreational opportunities including hunting, fishing and bird watching; therefore, would be considered a principal function.	Y
Education/Scientific Value	X		The tidal wetland and Little Harbor are part of a larger marine ecosystem with multiple areas of public access making this a principal value.	Y
Uniqueness/Heritage	X		The tidal wetland and Little Harbor are unique to the seacoast area. Additionally, there are pre and post-colonial historical components associated with Little harbor and the Piscataqua river and the surrounding areas making this a principal value.	Y
Visual Quality/Aesthetics	X		Little Harbor provides aesthetically pleasing coastal views that are seeable from surrounding uplands as well as from the water, making this a principal function.	Y
ES Endangered Species Habitat		X	An online inquiry with the NH Natural Heritage Bureau resulted in an occurrences of sensitive species near the project area. NHB determined that impacts to sensitive species are not expected as a result of the project.	_
Other				

JN: 1153.02 Wetland Functions and Values Assessment



APPENDIX B

PHOTO LOG

JN: 1153.02 Wetland Functions and Values Assessment















APPENDIX C

NEW HAMPSHIRE NATURAL HERITAGE BUREAU CORRESPONDENCE

JN: 3050.76 Wetland Functions and Values Assessment

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

To: John Chagnon, Ambit Engineering, Inc.

200 Griffin Road

Unit 3

Portsmouth, NH 03801

From: NH Natural Heritage Bureau

Date: 7/21/2023 (valid until 7/21/2024)

Re: Review by NH Natural Heritage Bureau of request submitted 7/13/2023

Permits: MUNICIPAL POR - Portsmouth, NHDES - Shoreland Standard Permit, NHDES -

Wetland Standard Dredge & Fill - Minor

NHB ID: NHB23-2110 Applicant: Steve Riker

Location: Portsmouth

67 Ridges Court

Project

Description: The project proposes the construction of an attached garage onto the

existing residential structure (in an area that currently exists as asphalt

driveway), reconfiguration of the existing driveway, removal of

pavement and associated grading.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 7/13/2023 9:11:58 AM, and cannot be used for any other project.

Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: NHB23-2110

