Findings of Fact | Wetland Conditional Use Permit
City of Portsmouth Planning Board

Date: March 26, 2026
Property Address: 50 Clough Dr.
Application #: LU-25-181
Decision: □ Approve □ Deny □ Approve with Conditions

Findings of Fact:

Per RSA 676:3, I: The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. **The decision shall include specific written findings of fact that support the decision. Failure of the board to make specific written findings of fact supporting a disapproval shall be grounds for automatic reversal and remand by the superior court upon appeal, in accordance with the time periods set forth in RSA 677:5 or RSA 677:15, unless the court determines that there are other factors warranting the disapproval.** If the application is not approved, the board shall provide the applicant with written reasons for the disapproval. If the application is approved with conditions, the board shall include in the written decision a detailed description of all conditions necessary to obtain final approval.

In order to grant Wetland Conditional Use permit approval the Planning Board shall find the application satisfies criteria set forth in the Section 10.1017.50 (Criteria for Approval) of the Zoning Ordinance.

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	Finding (Meets Criteria for Approval)	Supporting Information
1	*1. The land is reasonably suited to the use activity or alteration.*	Meets Does Not Meet	This lot is already a developed lot with existing playgrounds on site within the wetland buffer. This project proposes a decrease in impervious surfaces within the wetland buffer and is moving the main playground area further from the resource than the current structure.
2	2. *There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.*	Meets Does Not Meet	This project is within a previously developed buffer where playgrounds currently exist. This project proposes pulling some of the existing impacted areas further from the salt marsh and reducing the overall impervious area.

	Zoning Ordinance Sector 10.1017.50 Criteria for Approval	Finding (Meets Criteria for Approval)	Supporting Information
3	*3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.*	**Meets** **Does Not Meet**	The proposed work should reduce impervious surface within the buffer, pull impacts further from the resource, introduce new native vegetation and start to treat existing stormwater. This project appears to reduce existing adverse impacts to the resource and buffer.
4	*4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.*	**Meets** **Does Not Meet**	This project proposes a large addition of new vegetation and planted trees which will increase the existing vegetation within the buffer.
5	*5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.*	**Meets** **Does Not Meet**	This project proposes a reduction in impacts overall to the buffer and in some areas, pulls impacts further from the salt marsh. This appears to be a less impactful alternative to the current playground structures and includes new plantings and stormwater treatment where none exist today.
6	*6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.*	**Meets** **Does Not Meet**	It appears as though the vegetated buffer strip is only being disturbed within the main playground project for loaming and seeding. Additional plantings are encouraged in this area of the buffer to ensure protection of the adjacent resource.
7	**<u>Other Board Findings:</u>**		

westonandsampson.com

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

Wetland Conditional Use Permit Application

February 2026

Planning Board Submission

Little Harbor School
Playground Renovations
50 Clough Street
Portsmouth NH

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

February 25, 2026

Portsmouth Planning Board
1 Junkins Ave, 3rd Floor
Portsmouth, NH 03801

Re: Planning Board - Wetland Conditional Use Permit Application Submission
Little Harbor School - Playground Renovations
50 Clough Street
Portsmouth NH

To Chairman Rick Chellman,

On behalf of the City of Portsmouth, Weston & Sampson Engineers, Inc. is hereby enclosing one (1) copy of the Wetland Conditional Use Permit Application Submission for your review with regards to the proposed renovations to the playgrounds at the Little Harbor School. We are looking to be added to the next Planning Board Meeting agenda currently scheduled for March 26th, 2026.

Along with the required Wetland Conditional Use Permit Application Checklist, the following Attachments been included with this submission:

Attachment 1 Project Narrative
Attachment 2 Site Maps
Attachment 3 Wetland Delineation Report
Attachment 4 Draft NHDES Major Impact Wetlands Application
Attachment 5 Maintenance Plans and Bonded Rubber Info
Attachment 6 Conservation Commission Approval
Attachment 6 Site Plans

The NHDES Major Impact Wetlands Application has been submitted concurrently with the submission of the Wetland Conditional Use Permit Application Submission.

As this application is being submitted on behalf of the City of Portsmouth we understand that all application fees are to be waived.

If you have any questions regarding this submittal, please contact me at 978-573-5802.

Very truly yours,

WESTON & SAMPSON

Devin Herrick, CWS
Project Environmental Scientist

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

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

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

Name of Applicant: Ken Linchey Date Submitted: 1/28/2026

Application # (in City's online permitting): ____________________

Site Address: 50 Clough Drive Map: 206 Lot: 20

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

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	Attachment 3
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	Attachment 1, Section 4.2
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	Attachment 1, Section 4.7
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Attachment 1, Section 4.3

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Wetland buffer enhancement plan. **(10.1017.25)**	Plans, Sheet L600
☐	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	N/A
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	Plans
☐	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	N/A
☐	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	N/A
✔	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	Attachment 1, Section 4.5
✔	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	Attachment 5
✔	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	Attachment 1, Section 4.6
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	See Cover Letter
✔	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	Attachment 4

Applicant's Signature: [signature] **Date:** 1/27/2026

Herrick, Devin

From:	Ken Linchey <klinchey@sau52.org>
Sent:	Monday, December 29, 2025 3:20 PM
To:	Almeida, Antone
Cc:	Herrick, Devin
Subject:	Re: LHS - Wetland Application Submission

Yes, please proceed as we discussed over the phone.
Ken

Sincerely,
Ken Linchey CSFS, CSFM
Director of Buildings & Grounds/Maintenance
Portsmouth School Department
SAU 52 Office: 603-431-5080
Direct line: 603-610-4168 "This number has changed"
Cell: 603-617-0665
klinchey@sau52.org

On Mon, Dec 29, 2025 at 2:18 PM Almeida, Antone <Almeida.Antone@wseinc.com> wrote:

Good afternoon Ken,

I hope you had a great holiday. My apologies if you're still taking time off!

We are seeking owner authorization to proceed with the Wetland Application submission. An email from you confirming that we may submit on your behalf as the authorized representative would be sufficient! Please let us know if this is possible.

For the NHDES Forms, we will need you to sign, which we follow up soon. For the City permit, we just need an authorization email.

Thank you very much,

Antone Almeida (he/him)
PROJECT MANAGER
direct: 617-372-9156
mobile: 860-917-4568

Weston & Sampson design studio

Weston & Sampson
1 Washington Street, 10th Floor | Boston, MA 02108
tel: 617-412-4480
westonandsampson.com
Facebook | X | LinkedIn | Instagram

ATTACHMENT 1

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1.0 BACKGROUND AND EXISTING CONDITIONS

The purpose of this project is to upgrade the City of Portsmouth Little Harbor Elementary School (LHS) Playground and The Portsmouth Early Education Program (PEEP) Playground to be universally accessible (UA) and nature base playgrounds. The term "universally accessible (UA) playground" is often used to describe a playground that offers children full use of all areas, regardless of ability. A UA playground will represent and support the diversity of our community, providing a platform for people to engage socially, physically, creatively and playfully without the need for adaptation or specialized design (based on the seven principles of universal design established by the Center for Universal Design at North Carolina State). A nature-based playground is a play area designed to mimic natural environments, incorporating elements like trees, rocks, logs, and sand features allowing children to engage in imaginative play through exploration and interaction with the natural landscape, promoting physical activity, creativity, and environmental awareness while minimizing the use of manufactured play equipment.

The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The playground pathways will feature accessible routes made from resilient solid surface material, not loose fill or aggregate. Playground design aligns with NH House Bill 467-FN Public Playground Accessibility, which aims to ensure that public playgrounds are accessible to all children, including those with disabilities. The bill requires that at least one public playground in each municipality be made accessible, promoting inclusivity and equal play opportunities for all children.

1.1 Existing Conditions

The Portsmouth Little Harbor Elementary School is located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20. The school is located along the tidal Piscataqua River.

The existing play facilities on the property are broken down into two playgrounds, the first is located on the east side of the school known as the “PEEP Playground” and the second is located on the west side of the school known as the “Little Harbor School Playground”. Both playgrounds will be renovated as part of this proposed project.

1.1.1 PEEP Playground

The existing PEEP Playground includes a play structure with additional loose play equipment, a wood chip base, lawn space and the entire playground is surrounded by a chain link fence. There is also an existing stone retaining wall which separates play area from parking lot which will be retained by the project.

Image 1.1: Google Street Earth Image of the Existing PEEP Playground.

1.1.2 Little Harbor School Playground

The existing Little Harbor School Playground includes a large play structure, monkey bars/climbing structure, a gaga pit, swing sets, a basketball court and associated asphalt play area. There is also a small ephemeral stream which originates from stormwater sheet flow off the existing basketball court. The ephemeral stream dissipates into the grassy play area before reaching the salt marsh.

Image 1.2: Google Street Earth Image of the Existing Little Harbor School Playground.

1.2 Wetland Resource Areas Delineated on Site

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) in Appendix C of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the “Wetlands Delineation Manual”, Technical Report Y-87-1, US ACE, January 1987, and the “Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region”, Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the Wetland Delineation Report in Appendix H and below in Figure 1.

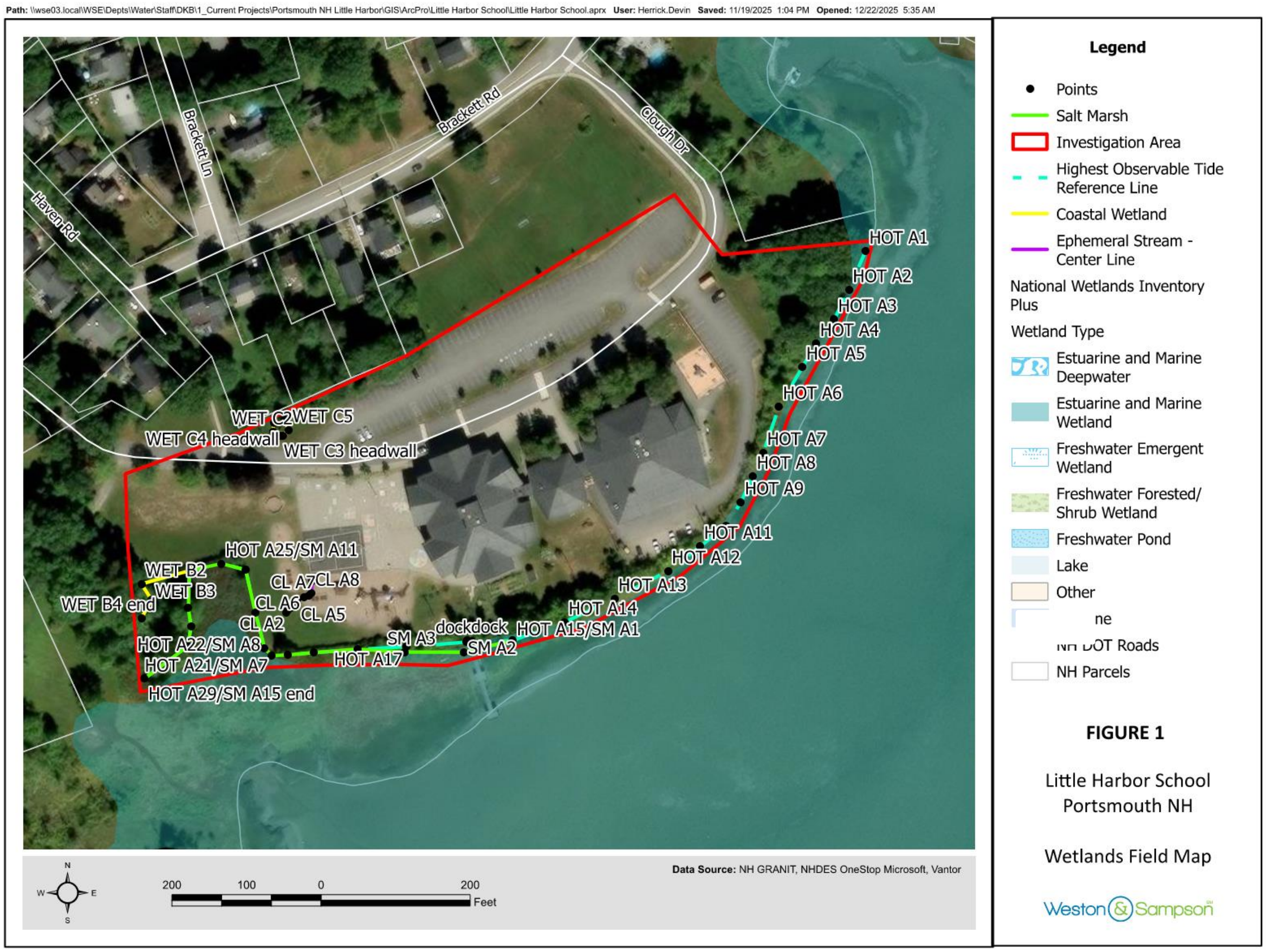


Figure 1: *Wetlands Field Map*

1.3 Applicability of Local Buffer Zones

Article 10 in the Portsmouth Zoning Ordinance has added additional protections in the form of buffer zones off of certain wetland resources. The City of Portsmouth has a 100-foot buffer adjacent to all of its wetlands (including most tidal areas) greater than 10,000 square feet or about a quarter of an acre. Per 10.1014.20 Wetland Buffers *"the required wetland buffer for a jurisdictional wetland or water body shall be defined as all land within 100 feet of the jurisdictional area." "Tidal wetland buffers shall be measured from the edges of tidal wetlands and highest observable tide lines.".* As such an applicable buffer zone has been added to the tidal salt marsh and associated non-tidal wetland (SM A and WET B lines from the delineation report and Figure 1 above), as well as along the Highest Observable Tide line associated with the Piscataqua River (HOT A line from the delineation report and Figure 1 above).

A smaller non-tidal wetland was identified near the parking lot of the school (WET C line from the delineation report and Figure 1 above). As this wetland is less than 10,000 SF in size the local buffer zone is not applicable. Similarly, in discussion with the local Environmental Planner, the local buffer zone was not applied to the ephemeral stream (CL A line from the delineation report and Figure 1 above). A single ephemeral stream was observed within the investigation area. Water originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

2.0 PROPOSED SCOPE OF WORK

The proposed scope will include the removal of existing playground equipment and installation of new play structures with associated landscape features in each of the two playgrounds on site.

2.1 PEEP Playground

The proposed PEEP playground improvements will include a variety of play elements designed for young children and group interaction. Planned equipment includes two play structures for 2-5 aged children, a group seesaw, and a wooden play bridge that will be level with the bonded rubber surfacing to ensure accessibility. A sand play area with natural wood accents is also proposed to encourage sensory and creative play. Finally a large area of grass will be included to enhance the natural open space.

In addition to the play equipment, several landscape and site enhancements are proposed in the PEEP playground to support both functionality and aesthetics. These include new plantings with boulder accents, picnic tables, and new fencing surrounding the play area. The proposed location of the playground fencing will be slightly modified in shape from the existing layout in order to increase the play space by approximately 1,000 SF. Wherever possible the existing fence posts will be re-used and spray painted for aesthetic improvement. Concrete paving within the limits of the play area will serve multiple purposes, including a bag drop and an accessible area for replenishing sand; this space will also accommodate loose play items such as a play kitchen. New asphalt walking paths are proposed in generally the same configuration as existing conditions, with selective reductions in paved area to minimize impervious surfaces within the project limits. The landscape plan also includes the installation of five new trees and approximately thirty six new shrubs and herbaceous native species (See Image 2-1).

Image 2-1: PEEP Playground Planting Plan, Plan Sheet L601

PLANT SCHEDULE - PEEP PLAYGROUND					
TREES					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	3	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5"-3" CAL. B&B	WELL- BRANCHED
LS	1	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SWEETGUM	2"-2.5" CAL. B&B	WELL- BRANCHED
TC	1	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5"-3" CAL. B&B	WELL- BRANCHED
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
IG	7	ILEX GLABRA 'SHAMROCK'	INKBERRY	#5 CONT.	48" O.C. SPACING
RA	18	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	36" O.C. SPACING
RF	11	RUDBECKIA FULGIDA	ORANGE CONEFLOWER	#2 CONT., 18" HT.	24" O.C. SPACING

2.2 Little Harbor Playground

The proposed playground equipment improvements include the installation of two new swing sets and a large play structure with a climbing element. The equipment is currently planned to be installed over an engineered wood fiber base; however, the City is exploring the availability of funding to instead utilize a permeable poured-in-place or bonded rubber safety surfacing. This alternative would not alter the proposed limits of work. In addition, the existing gaga pit will be relocated to a new location, removing the majority of the structure from the 100-foot wetland buffer where it is currently situated. The relocated gaga pit will be constructed on a concrete foundation and filled with engineered wood fiber.

Proposed landscape and site improvements focus on environmental stewardship, safety, and improved site functionality. Stormwater collection will be formalized through the creation of a rain garden designed to allow student interaction with overland flow while maintaining sheet flow into the adjacent grassy area. The existing asphalt play area, including the basketball court, will be relocated farther from the wetland, resulting in a significant overall reduction in asphalt play surface. A concrete curb/mow strip will be installed around areas of engineered wood fiber to help contain the material. All existing trees on site will be retained, and additional site amenities will include a new timber guard rail and a bike rack.

New plantings will further enhance the landscape and ecological function of the site. Planting will occur in two locations; surrounding the proposed Little Harbor Playground space and within the bioretention planting/rain garden. Tree species were selected in accordance with the City of Portsmouth Street Tree Manual.

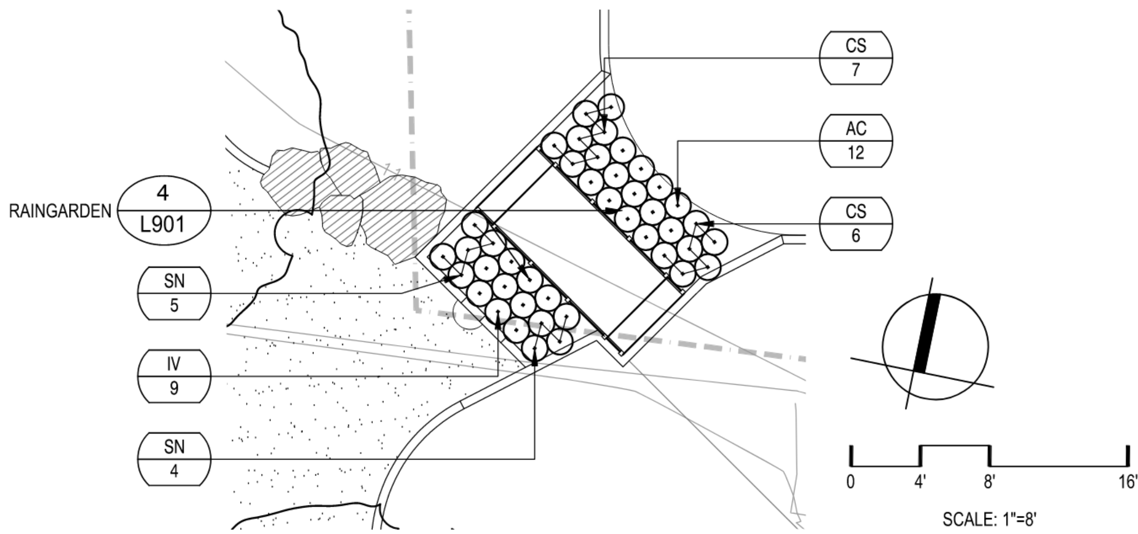
For the Little Harbor Playground space, the landscape plan also includes the installation of ten new trees and approximately forty eight new shrubs and herbaceous native species (See Image 2-2). The small mounds created for playground privacy and protection will receive Northeast Annual & Perennial Wildflower Mix.

Image 2-2: Little Harbor Playground Planting Plan, Plan Sheet L600

PLANT SCHEDULE - LHS PLAYGROUND					
TREES					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	2	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5"-3" CAL. B&B	WELL- BRANCHED
QB	7	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5"-3" CAL. B&B	WELL- BRANCHED
TC	1	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5"-3" CAL. B&B	WELL- BRANCHED
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
MP	22	MORELLA PENSYLVANICA (FEMALE)	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
MPW	2	MORELLA PENSYLVANICA 'WILDWOOD' (MALE)	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
RA	24	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	36" O.C. SPACING
SEED MIX					
ABRV.	QTY	NAME			NOTES
N/A	1 LB	NORTHEAST ANNUAL & PERENNIAL WILDFLOWER MIX - ERNMX-168 *8-12 LB PER ACRE. NO COVER CROP IS RECOMMENDED WITH THIS MIX*			NE WILDFLOWER SEED MIX

The rain garden located adjacent to the existing ephemeral stream will also receive additional plantings, including forty three herbaceous species, to support stormwater management and native habitat enhancement. (See Image 2-3).

Image 2-3: Little Harbor Rain Garden Planting Plan, Plan Sheet L600



PLANT SCHEDULE - LHS PLAYGROUND					
BIORETENTION PLANTER					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
AC	12	ANEMONE CANADENSIS	WINDFLOWER	#2 POT	18" O.C. SPACING
CS	13	CAREX STRICTA	TUSSOCK SEDGE	#2 POT	18" O.C. SPACING
IV	9	IRIS VERSICOLOR	BLUEFLAG IRIS	#2 POT	18" O.C. SPACING
SN	9	SYMPHYOTRICHUM NOVAE-ANGLIAE 'GRAPE CRUSH'	GRAPE CRUSH NEW ENGLAND ASTER	#2 POT	18" O.C. SPACING

2.3 Construction Sequence

The following is the intended construction sequence of the project, subject to change based on contractor means and methods.

The proposed playground improvements are anticipated to be constructed over a 16-week period starting in the Spring of 2026, subject to permitting, weather, and material availability. Construction will begin with pre-construction activities, including final permit approvals, contractor mobilization, utility locating, and installation of erosion control measures, temporary fencing and signage to secure the work area. Surveying and layout will be completed to establish the locations of new play equipment, pathways, and landscape improvements.

Following mobilization, selective demolition and site clearing will occur. Existing playground equipment and portions of concrete and asphalt paving within the project limits will be removed as necessary. This work will be performed using a mini excavator, skid steer loader, concrete saws, and dump trucks to haul debris off-site or to designated recycling areas.

Once demolition is complete, earthwork and grading activities will commence. The site will be rough and fine graded to accommodate the new play areas, accessible routes, and revised path alignments.

Excavation will be completed for poured-in-place surfacing, wood ship/sand containment, and equipment footings, followed by placement and compaction of aggregate base materials using compactors and small rollers to ensure stable subgrades.

Concrete footings and underground preparations will then be installed for the playground structures. Ready-mix concrete will be placed using concrete trucks and hand-finishing tools, with careful attention to accessibility requirements and level transitions between play elements and surfacing.

Concrete forms will be set, poured, finished, and cured to meet accessibility and durability standards. After concrete work is complete, new asphalt walking paths will be installed in generally the same configuration as existing conditions, with selective reductions in paved areas to minimize impervious surfaces. Asphalt placement will be performed using a small paver and roller.

Installation of playground equipment and surfacing will follow. The play structures will be installed, with equipment placed using small lifting equipment as needed. Play areas will be constructed, and poured-in-place surfacing will be installed throughout the play areas as described above, including flush transitions to ensure accessibility.

Following equipment installation, site furnishings and enclosures will be added. New perimeter fencing will be installed around the PEEP playground, other site accents will be placed, using small loaders and hand tools. Landscaping will then be completed, including the installation new trees, shrubs and native herbaceous species, along with soil preparation, mulching, and initial watering.

The project will conclude with final grading, site cleanup, and inspections. Once the site is stabilized. temporary erosion and sedimentation controls will be removed.

3.0 ENVIRONMENTAL CONSIDERATIONS – STANDARD DREDGE AND FILL WETLANDS PERMIT

As part of the proposed project there will be unavoidable impacts areas which fall under the jurisdiction of the NHDES Wetlands Bureau.

3.1 Ephemeral Stream

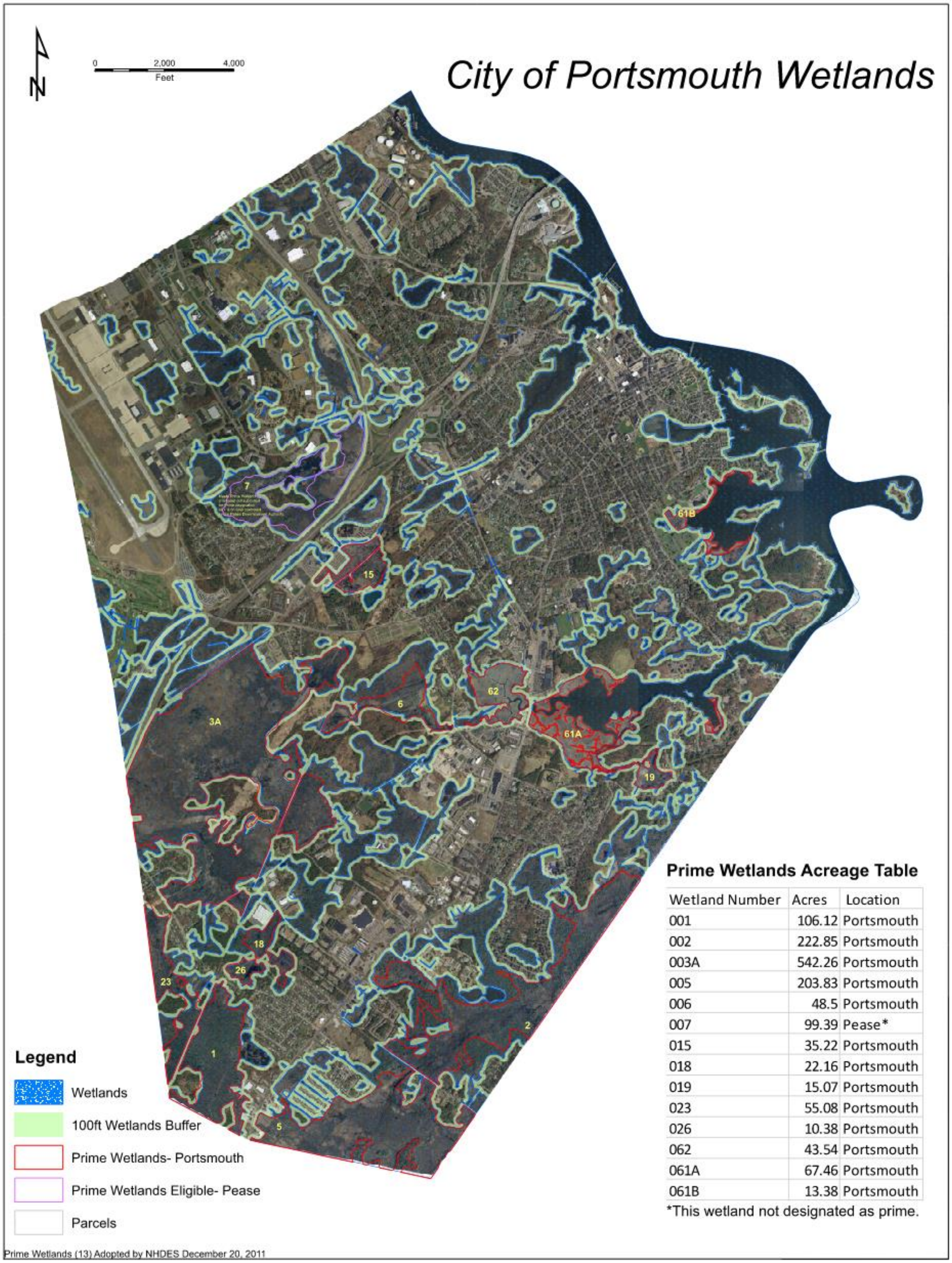
As described in the wetland delineation report (Appendix H), there is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

There will be no direct impacts to the ephemeral stream however there will be impacts directly adjacent to the stream be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. The discharge from the rain garden will flow into the existing ephemeral stream without changing it's existing characteristics.

3.2 Duly Established 100-Foot Prime Wetland Buffer

Under RSA 482-A, prime wetlands are wetlands of substantial significance because of their size, unspoiled character, fragile condition or other relevant factors. Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. A prime wetland designated by the City of Portsmouth as wetland number 061B is located concurrently with the salt marsh delineated on site (see Image 1 below). The Prime Wetlands Designation Document for the City of Portsmouth was authored on January 25, 2011 and the Prime Wetland Map (see Image 1 below) was adopted by NHDES on December 20. 2011.

The proposed impacts to the Little Harbor School Playground will overlap with the Duly Established 100-Foot Prime Wetland Buffer associated with Prime Wetland Number 061B. Existing conditions in this area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer. These impact areas are located within the same footprint as the Previously Developed Tidal Buffer Zone (TBZ).



Wetland Number	Acres	Location
001	106.12	Portsmouth
002	222.85	Portsmouth
003A	542.26	Portsmouth
005	203.83	Portsmouth
006	48.5	Portsmouth
007	99.39	Pease*
015	35.22	Portsmouth
018	22.16	Portsmouth
019	15.07	Portsmouth
023	55.08	Portsmouth
026	10.38	Portsmouth
062	43.54	Portsmouth
061A	67.46	Portsmouth
061B	13.38	Portsmouth

*This wetland not designated as prime.

Image 1: Portsmouth Prime Wetlands Map

3.3 Previously Developed Tidal Buffer Zone (TBZ)

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12.

Existing conditions in this Previously Developed TBZ area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh/highest observable tide line than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Previously Developed TBZ. These impact areas are located within the same footprint as the Duly Established 100-Foot Prime Wetland Buffer.

3.4 Total Impacts

The total amount of proposed impacts to jurisdictional area is 28,238 SF. Impacts are summarized in Table 1 below.

Table 1: NHDES Jurisdictional Impact Summary

Jurisdictional Area	Purpose	Permanent Impact	Temporary Impact
Duly-established 100-foot prime wetland buffer	Playground renovation	17,968 SF	10,274 SF
Previously-developed TBZ	Playground renovation	17,968 SF	10,274 SF
Total		**17,968 SF**	**10,274 SF**

3.5 Project Classification

The proposed project is being submitted as a Major Impact Project based on the following criteria:

3.5.1 Previously Developed Tidal Buffer Zone

This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Previously Developed TBZ.

Per Env-Wt 610.17 (b) Project Classifications since the amount of impact area exceeds 10.000 SF the proposed project requires the submission as a Major Impact project.

3.5.2 100-Foot Prime Wetland Buffer Waiver

This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer.

Per Env-Wt 407.02 (a) "*a project that impacts a PRA and that does not qualify for a project-type exception (PTE) under Env-Wt 407.04 shall be classified as a major project regardless of the size of the impact*."

4.0 ENVIRONMENTAL CONSIDERATIONS - ZONING ARTICLE 10

The City of Portsmouth has a 100-foot buffer adjacent to all of its wetlands (including most tidal areas) greater than 10,000 square feet or about a quarter of an acre. New construction, ground disturbance and fill or removal of soil are not allowed in the Wetland buffer without a City Conditional Use Permit. The complete Wetlands Protection Ordinance can be found in Article 10 of the City's Zoning Ordinance Section 10.1010.

In Portsmouth, the first 25 feet from the edge of a wetland area is known as the Vegetated Buffer Strip. Within this area, cutting and clearing of vegetation is not permitted unless it is to remove invasive species by hand. Between 25 and 50 feet, the City has a Limited Cut Area. In this area, property owners may cut up to 50% of the trees that are greater than six inches in diameter dbh (the diameter of the tree at 4.5 feet up from the ground). The use of fertilizer is prohibited in both the vegetated buffer strip and limited cut area. Beyond the limited cut area, only low phosphate and slow release fertilizers are allowed in the wetland buffer.

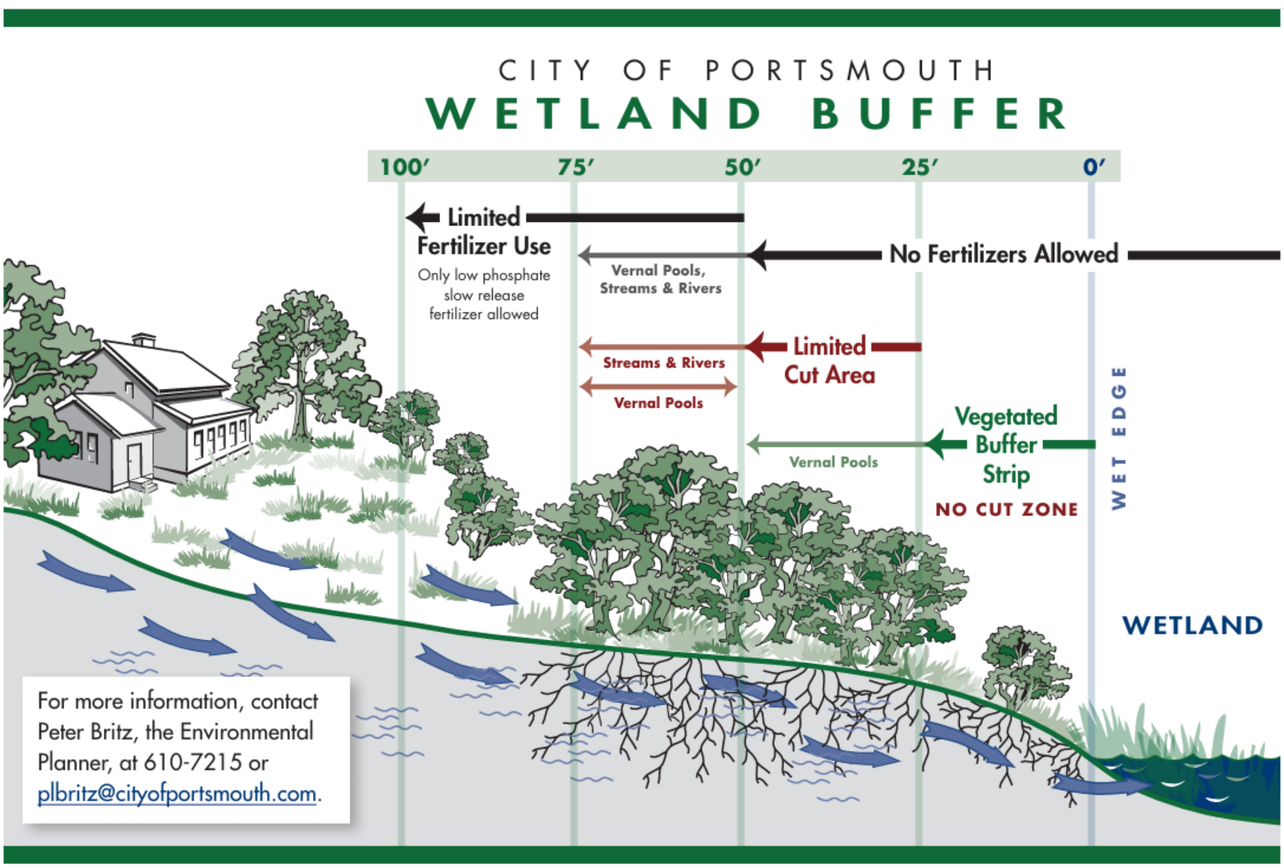


Image 2: *City of Portsmouth Wetland Buffer*

In the case of the Little Harbor School property, the local 100-foot wetland buffer is concurrent with the state's Previously Developed Tidal Buffer Zone and 100-Foot Prime Wetland Buffer Waiver.

Existing conditions in the 100-foot wetland buffer zone area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh/highest observable tide line than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Previously Developed TBZ. These impact areas are located within the same footprint as the Previously Developed Tidal Buffer Zone and 100-Foot Prime Wetland Buffer Waiver.

4.1 Total Impacts

The total amount of proposed impacts to jurisdictional area is 28,238 SF. Impacts are summarized in Table 2 below.

Table 2: *Local Jurisdictional Impact Summary*

Jurisdictional Area	Permanent Impact	Temporary Impact
0-25 feet – 25 foot Buffer Vegetated Buffer Strip	228 SF	1,206 SF
25-50 feet – 50 foot Buffer Limited Cut Area	2,983 SF	2,651 SF
50-100 feet – 100 foot Buffer	14,757 SF	6,417 SF
Total	**17,968 SF**	**10,274 SF**

4.2 Additional Information Zoning 10.1017.22

Per the City's Zoning 10.1017.22 (3) the following additional information is required:

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

The proposed project does include more than 250 feet of alteration to the wetland buffer zone. Within the buffer zone vegetation consists of landscaped lawn used as part of the school's play area. Vegetation consists of standard lawn species such as:

- Perennial ryegrass – *Lolium perenne*
- Fine fescue – *Festuca rubra*
- Red clover – *Trifolium pratense*
- White clover – *Trifolium repens*
- Common plantain – *Plantago major*

While there is a large amount of phragmites present within the salt marsh itself, the invasives are mostly confined to within the wetland. As a result, less than 1% of the wetland buffer is composed of invasives.

A breakdown of impervious area can be found in Section 4.3 below.

4.3 Impervious Surfaces

The proposed project seeks to move the existing impervious play surface further back from the wetlands as existing conditions. There is 150,595 SF of 100-foot wetland buffer zone present on the subject parcel. Under existing conditions there are 22,975 SF (15.3%) of impervious area present within the 100-foot wetland buffer zone. Under proposed conditions there will be 21,025 SF (14%) of impervious area present within the 100-foot wetland buffer zone. This represents a 1,950 SF decrease in impervious area.

4.4 Erosion Controls

Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

4.5 Maintenance Plans

Pervious technology will be utilized on the playground surfaces to allow for increased infiltration. See attached maintenance plan for impervious areas, Attachment 5. Additionally, the proposed project includes the installation of a rain garden. The rain garden adjacent to the existing ephemeral stream will also receive additional plantings, including thirty four herbaceous species, to support stormwater management and native habitat enhancement. A maintenance plan for the proposed plantings has been included in Attachment 5.

4.6 Permanent Wetland Boundary Markers

The Zoning Ordinance requires the placement of permanent wetland boundary markers along the buffer zone. Given that the buffer zone runs through an active play area associated with a school, placing permanent markers at this line would be impractical. The applicant is open to installing any required permanent wetland boundary markers and requests the Conservation Commission's assistance with understanding what may be appropriate given the use of this property.

4.7 Avoidance and Minimization Zoning 10.1017.23

Per the City's Zoning 10.1017.23 the following additional information is required:

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

The proposed project will not have any direct wetland impacts, only impacts to the 100-foot wetland buffer zone. The project has specifically avoided direct impacts to wetlands by keeping the limit of work contained to within the existing playground footprints. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the buffer zone for playground renovations. The proposed project seeks to reduce impacts to the buffer zone by pulling the impervious area further away from the wetlands than existing conditions.

ATTACHMENT 2

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:04 PM **Opened:** 12/22/2025 5:35 AM

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

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N
W E
S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area
- National Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 12:30 PM Opened: 11/19/2025 12:32 PM

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

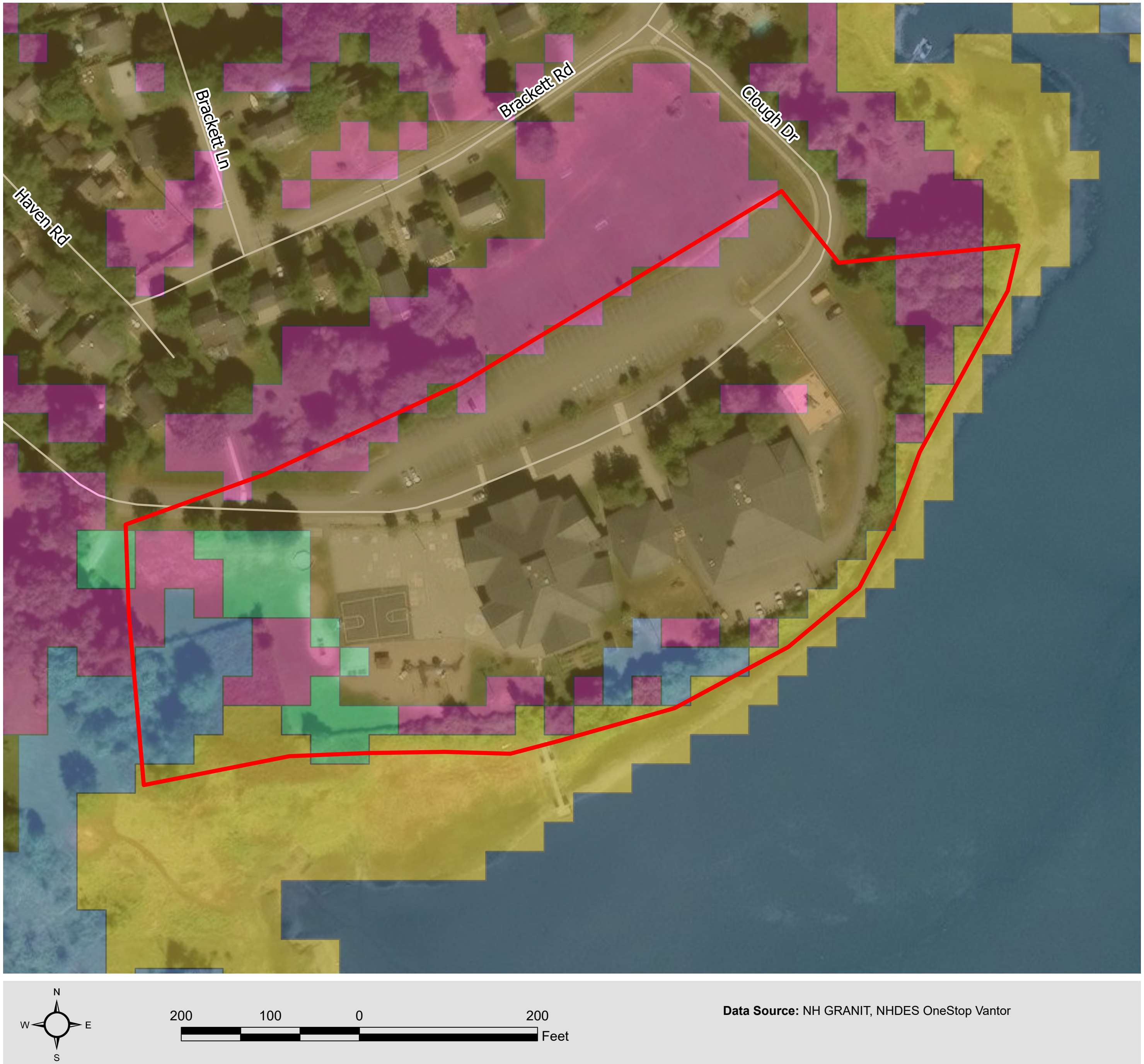
FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:34 PM **Opened:** 11/19/2025 12:35 PM



Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Habitat Land Cover
  - Alpine
  - Appalachian oak-pine
  - Cliff and Talus
  - Coastal island
  - Developed Impervious
  - Developed or Barren land
  - Dune
  - Floodplain forest
  - Grassland
  - Hemlock-hardwood-pine
  - High-elevation spruce-fir
  - Lowland spruce-fir
  - Northern hardwood-conifer
  - Northern swamp
  - Open water
  - Peatland
  - Pine barren
  - Rocky ridge
  - Salt marsh
  - Sand/Gravel
  - Temperate swamp
  - Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:02 PM **Opened:** 11/19/2025 1:03 PM

Map by NH DES OneStop Data Mapper_PRA

11/19/2025, 12:50:13 PM

- ArcGIS World Geocoding Service
- City/Town
- Parcels
- Flood Plain Wetlands Adjacent to Tier 3 Streams

Tidal Wetlands

- Brackish Marsh
- High Marsh, J. gerardii
- High Marsh, S.patens / D.spicata
- Low Marsh
- Mudflat
- Phragmites australis
- Recently Flooded Forest
- Short form S. alterniflora
- Terrestrial border

NH 2021 2022 6in RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 0.02 0.04 0.07 mi

0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 1:02 PM Opened: 11/19/2025 1:03 PM

Legend

Investigation Area

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

- ArcGIS World Geocoding Service
- City/Town
- Parcels
- Prime Wetlands
- Prime Wetlands with 100ft Buffer
- NH 2021 2022 6in RGB
- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

N

0 50 100 200 300 Meters

0 300 600 1200 1800 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

ATTACHMENT 3

westonandsampson.com

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

Wetland Delineation Report

September & November 2025

Little Harbor School
50 Clough Street
Portsmouth NH

Wetland Delineation Conducted By:
Devin Herrick, CWS

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 SITE DESCRIPTION

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

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

- Tidal Surface Water
- Tidal Buffer Zone
- Tidal Wetland – Salt Marsh
- Non-Tidal Wetland
- Ephemeral Stream

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

2.2 Wetland Delineation Methodology

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

The Federal Delineation Method identifies wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology. Pink flags with distinct flag numbers are left in the field to show wetland limits. Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations, the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceeds 50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference and Env-Wt 301(c) as described above.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, and water stained leaves.

2.3 Tidal Surface Water

Per Env-Wt 602.58 Tidal surface water means "any surface water that is subject to the ebb and flow of the tide". The Reference Line for coastal waters per RSA 483-B:4, XVII. Is "the highest observable tide line, which means a line defining the furthest landward limit of tidal flow, not including storm events, which can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks further flow of the tide." Per Env-Wt 602.23 "Highest observable tide line (HOTL)" means "a line defining the farthest landward limit of tidal flow, not including storm events, that can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt-tolerant vegetation, or a physical barrier that blocks inland flow of the tide"

Based on the current mapping available from the United States Geological Survey (USGS) the tidal surface water identified within the investigation area is a part of Portsmouth Harbor/the Piscataqua River.

Wetland flags left in the field included:

- Highest Observable Tide (HOT)-A1 through HOT-A29 (HOT "A" Series)

These flags were placed based on a strand line of flotsam and debris, and/or the landward margin of salt-tolerant vegetation.

Tidal waters are considered to be "Surface Waters of the State" (RSA 485-A:2, XIV) and as such at the state level they are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A). Other local, state or federal regulations may apply to these areas.

Utilizing the New Hampshire hydrography dataset archived by the Geographically Referenced Analysis and Information Transfer System (GRANIT) the Piscataqua River identified within the investigation area is a seventh order stream. Since the Piscataqua River is a fourth order stream or higher is considered a "public water" per RSA 483-B:4, XVI and is subject to the Shoreland Water Quality Protection Act (RSA 483-B).

2.4 Developed Tidal Buffer Zone

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12 which indicates that developed upland "means an upland area on a lot within the tidal buffer zone or sand dune where:

(a) The natural soil and vegetation characteristics on more than 50% of the lot have been legally altered and have not returned to a natural state;
(b) If the lot is in a tidal buffer zone, developed lots abut at least 2 sides of the lot;
(c) If the lot is in a dune slack area, the lot is surrounded on 4 sides by developed lots or roadways;
(d) If the lot is in a dune, the back side of a fore dune is within the line of encroachment and the lot is

surrounded on 3 sides by developed lots or roadways; and

(e) At least one of the following is true:

(1) The lot has legally been filled or excavated in whole or in part, whether prior to jurisdiction or pursuant to a permit or other authorization;

(2) The lot contains at least one paved or graded area that is, has been, or will be used for vehicular

parking or traffic; or

(3) One or more residential or commercial buildings has been built on the lot.

The Little Harbor School property contains natural soil and vegetation characteristics on more than 50% of the lot that have been legally altered and have not returned to a natural state. Additionally, the lot is in a tidal buffer zone and developed lots abut at least 2 sides of the lot. As such, the investigation area is considered previously developed tidal buffer zone.

At the state level in NH, the tidal buffer zone is regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.5 Tidal Wetland – Salt Marsh

According to the "Life In New Hampshire Salt Marshes A Quick-Reference Field Guide" prepared by the New Hampshire Department of Environmental Services (NHDES) Coastal Program:

Salt marshes are important transitional habitat between the ocean and the land; they are estuaries where fresh and salt water mix. Salt marsh plants (halophytes) are salt tolerant and adapted to water levels that fluctuate with the tide. Tides carry in nutrients that stimulate plant growth in the marsh and carry out organic material that feeds fish and other coastal organisms. Over time, salt marshes accumulate organic material, forming into a dense layer called peat.

Low Marsh: The low marsh is located along the seaward edge of the salt marsh. It is usually flooded at every tide and exposed during low tide. It tends to occur as a narrow band along creeks and ditches, whereas the high marsh is more expansive and is flooded less frequently. The predominant plant species *found in the low marsh is the tall form of Spartina alterniflora (smooth cordgrass). This species can reach a height of six feet and is very tolerant of daily flooding and exposure.*

High Marsh: The high marsh lies between the low marsh and the marsh's upland border. It can be very expansive in some areas, sometimes extending hundreds of yards inland from the low marsh area. Soils in the high marsh are mostly saturated, and the high marsh is generally flooded only during higher than average high tides. Plant diversity is low (usually less than 25 species), with the dominant species being the grasses and rushes such as Spartina patens (salt hay grass), Distichlis spicata (spike grass), Juncus geradii (black grass), and the short form of Spartina alterniflora. Other plant species commonly found in the high marsh are Aster tenufolius (perennial salt marsh aster), and Limonium nashii (sea lavender).

Env-Wt 602.22 High salt marsh means "a tidal marsh zone located above mean high water and inundated during periods of extreme high tide and storm surge associated with coastal storms".

Wetland flags left in the field included:

- Salt Marsh (SM)-A1 through SM-A15 (SM "A" Series)

These flags were placed based on the landward margin of salt-tolerant vegetation.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as E2EM1P, E – Estuarine, 2 – Intertidal, EM – Emergent, 1 – Persistent, P – Irregularly Flooded.

At the state level in NH, tidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.6 Non-Tidal Wetland

Per Env-Wt 103.47 "Non-tidal wetland" means a wetland that is not subject to periodic inundation by tidal waters. The limit of the nontidal wetlands were determined utilizing the Federal Delineation Method by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions. Wetland flags left in the field included:

- WET-B1 through WET-B4 (WET "B" Series)
- WET-C1 through WET-C5 (WET "C" Series)

Dominant vegetation within the non-tidal wetlands included *Acer rubrum, Fraxinus pennsylvanica, Frangula alnus, Equisetum sylvaticum, Onoclea sensibilis, and Celastrus orbiculatus* species that generally thrive in wet conditions. Soils within the non-tidal wetland were composed of a silty loam with redoximorphic features. Other indicators of wetland hydrology included saturation, water stained leaves and oxidized rhizospheres.

Dominant vegetation in the adjacent upland areas included *Acer rubrum, Acer platanoides, Frangula alnus, Potentilla simplex, Onoclea sensibilis, and Celastrus orbiculatus*. Soils within the upland were composed of sandy loam with no evidence of mottling or hydrology within the top 12 inches.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as PFO1E, P – Palustrine, FO – Forested, 1 – Broad-Leaved Deciduous, E – Seasonally Flooded/Saturated.

At the state level in NH, nontidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.7 Ephemeral Stream

Env-Wt 102.64 "Ephemeral stream" means a watercourse that is located above the water table year-round and is not fed by groundwater, such that runoff from rainfall and snowmelt is the primary source of stream flow and so the stream has flowing water only during, and for a short duration after, precipitation or spring thaw events, but which has less flow than an intermittent stream and no evidence of riffles, meander bends, point bars, or braiding.

A single ephemeral stream was observed within the investigation area. Water originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Wetland flags left in the field included:

- Center Line CL-A1 through CL-A9 (CL “A” Series)

At the state level in NH, ephemeral streams are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.8 Other Protected Areas

Weston & Sampson created Environmental Resources Maps (see Figures 3-5) of the site to determine the presence of other protected areas. These areas included:

- Priority Resource Area (PRA)
- Designated River Segment/Corridor
- Prime Wetlands
- FEMA 100 Year Floodplain
- Wildlife Action Plan

Priority Resource Area (PRA)

Per Env-Wt 103.66 “Priority resource area (PRA) means “a jurisdictional area that:

(a) Has documented occurrences of protected species or habitat;

(b) Is a bog;

(c) Is a floodplain wetland contiguous to a tier 3 or higher watercourse;

(d) Is a designated prime wetlands;

(e) Is a duly-established 100-foot buffer of a designated prime wetlands;

(f) Is a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; or

(g) Is any combination of (a) through (f), above.

The Portsmouth Harbor/the Piscataqua River is a tidal water and would be considered a PRA. The investigation area includes a duly-established 100-foot buffer of a designated prime wetland which is also considered a PRA.

Designated River Segment/Corridor

The New Hampshire Rivers Management and Protection Program (RMPP) was established in 1988 with the passage of RSA 483 to protect certain rivers, called Designated Rivers, for their outstanding natural and cultural resources. The New Hampshire Department of Environmental Services RMPP maintains a NH Designated River Corridor Web Map viewer showing all of the jurisdictional designated river segments. The Designated River corridor is defined as the river and the land area located within a distance of 1,320 feet (1/4 mile) of the normal high water mark or to the landward extent of the 100 year floodplain of a designated river as designated by the Federal Emergency Management Agency, whichever distance is larger.

A map of the investigation area utilizing the NH Designated River Corridor Web Map viewer is shown in Figure 4. There are no designated river segments or corridors located within the investigation area.

Prime Wetlands

Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. The conservation commission, planning board, or governing body shall give written notice to the owner of the affected land and all abutters 30 days prior to the public hearing, before designating any property as prime wetlands.

The investigation area included a prime wetland designated by the City of Portsmouth as wetland number 061B.

FEMA 100 Year Floodplain

The Federal Emergency Management Agency (FEMA) has designated a series of zones which area defined according to varying levels of flood risk. Per FEMA a flood is any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. The 100-year floodplain is the zone with a 1% annual chance of flooding. FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site.

See Figure 3 for FIRM map. Based on FEMA flood maps the investigation area is partially located within the 100-year floodplain.

Wildlife Action Plan

In 2020 an update was completed of the New Hampshire Fish and Game Wildlife Action Plan. According to the NH Fish and Game the aim of the Wildlife Action Plan seeks to "identify species in greatest need of conservation, habitats that are at the greatest risk, as well as land uses and activities that present the greatest threats to wildlife and habitat." The NH Wildlife Action Plan includes three sets of mapping data available for use by stakeholders:

1. Habitat Land Cover Map: which shows where the different types of wildlife habitat are located throughout the state.
2. Highest Ranked Habitat by Ecological Condition Map: which shows where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.
3. Aquatic Habitats Map: which provides an assessment of surface water habitats.

After learning what habitat may be present within a proposed project area the Wildlife Action Plan informs stakeholders about strategies for managing and protecting wildlife. The data from these maps is available on the Geographically Referenced Analysis and Information Transfer System (GRANIT) viewer.

The investigation area was investigated on the GRANIT viewer and two maps were produced (Figures 5.1 and 5.2). According to the Habitat Land Cover data the investigation area is composed of Developed Impervious, Developed or Barren land, Grassland, Hemlock-hardwood-pine, and Salt marsh cover types. The Highest Ranked Habitat by Ecological Condition data indicates that portions of investigation area are located with highest ranking habitat.

Endangered and Rare Species/Habitat

The New Hampshire Natural Heritage Bureau (NHB) keeps records of known locations of rare species and natural communities. The NHB Datacheck Tool allows the user to outline the limits of the proposed project area in order to determine if there are any records of rare species and natural communities within the proposed project limits.

The approximate proposed project limits were mapped using the NHB Datacheck Tool. Initial NHB Data Check results indicate that there are Ecological Review records in the vicinity of the approximate proposed project limits (see Appendix C). Further consultation with NHDES will be needed to determine what rare species and/or natural communities were identified. This mapping is regularly updated and subject to change.

If any portion of the project involves a federal nexus (i.e. federal permitting, federal funding ect.) than additional information may be required from the U.S. Fish and Wildlife Service.

3.0 SUMMARY

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field.

Additional environmental mapping was conducted using NH Granit data layers and FEMA FIRM mapping. This additional mapping indicates that a prime wetland and a duly-established 100-foot buffer of a designated prime wetland are present on the site. Additionally portions of the site are located within the 100-year flood zone and Highest Ranked Habitat.

4.0 REFERENCES

United States Department of Agriculture, Natural Resources Conservation Service. *2018. Field Indicators of Hydric Soils in the United States, Version 8.2.* L. M. Vasilas, G. W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USACOE, January 1987, Corps of Engineers Wetlands Delineation Manuel, Wetlands Research Program Technical Report Y-87-1.

FEMA Flood Map Service Center, online at msc.fema.gov/portal Assessed on 11/19/2025.
Tiner, Jr., Ralph W., 2005, Field Guide to Nontidal Wetland Identification

New England Hydric Soils Technical Committee, 2019, Version 4, *Field Indicator of Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:04 PM **Opened:** 12/22/2025 5:35 AM

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

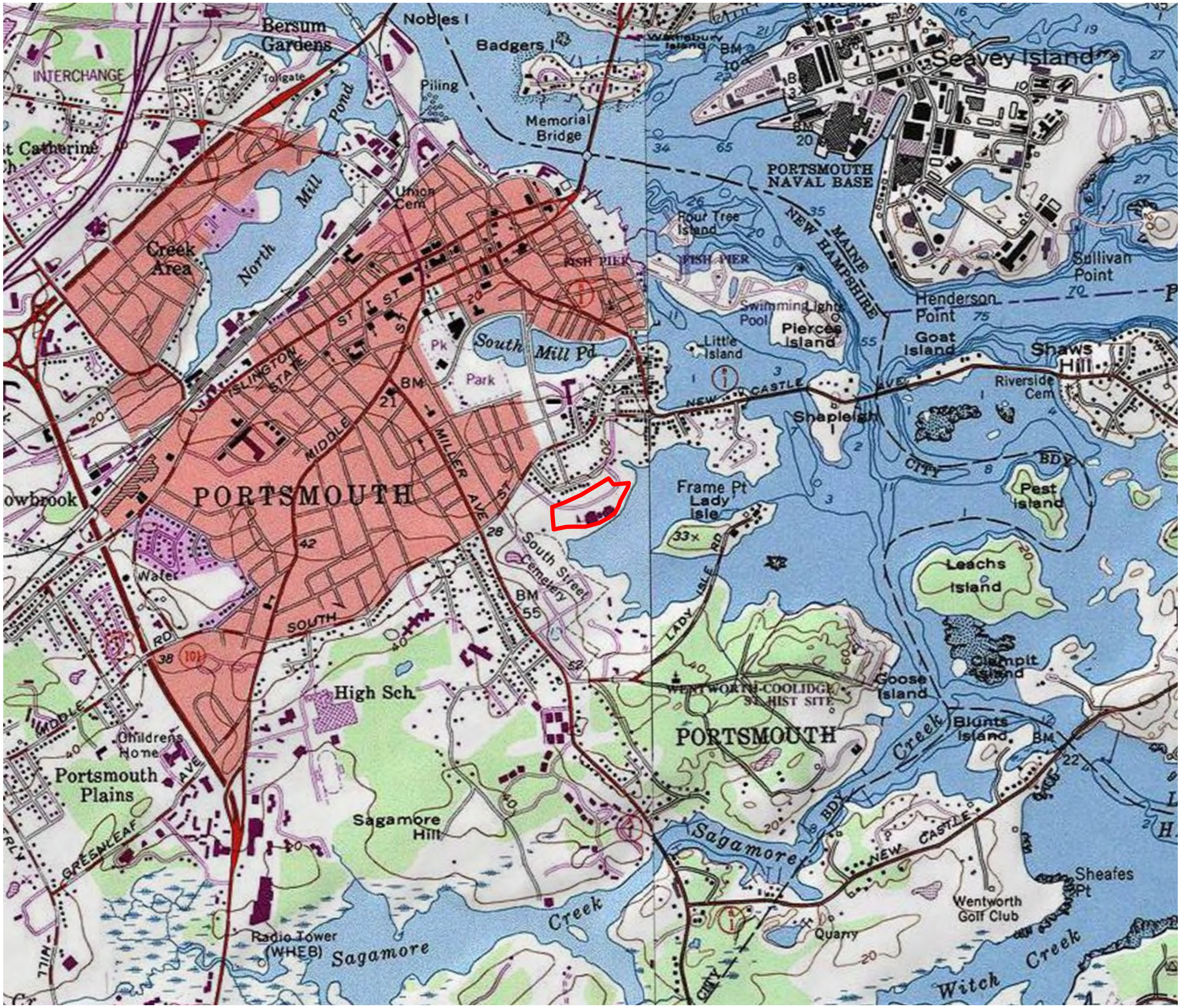
FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:20 PM **Opened:** 11/19/2025 12:21 PM



N
W E
S

1,200 600 0 1,200
Feet

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 12:30 PM Opened: 11/19/2025 12:31 PM

Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area
- National Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 12:30 PM Opened: 11/19/2025 12:31 PM

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:32 PM

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
  - 1 Highest Ranked Habitat in New Hampshire
  - 2 Highest Ranked Habitat in Biological Region
  - 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:34 PM **Opened:** 11/19/2025 12:35 PM

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Habitat Land Cover
  - Alpine
  - Appalachian oak-pine
  - Cliff and Talus
  - Coastal island
  - Developed Impervious
  - Developed or Barren land
  - Dune
  - Floodplain forest
  - Grassland
  - Hemlock-hardwood-pine
  - High-elevation spruce-fir
  - Lowland spruce-fir
  - Northern hardwood-conifer
  - Northern swamp
  - Open water
  - Peatland
  - Pine barren
  - Rocky ridge
  - Salt marsh
  - Sand/Gravel
  - Temperate swamp
  - Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 1:02 PM Opened: 11/19/2025 1:03 PM

Map by NH DES OneStop Data Mapper_PRA

11/19/2025, 12:50:13 PM

ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:02 PM **Opened:** 11/19/2025 1:03 PM

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

- ArcGIS World Geocoding Service
- City/Town
- Parcels
- Prime Wetlands
- Prime Wetlands with 100ft Buffer
- NH 2021 2022 6in RGB
- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

APPENDIX A

ACOE Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Little Harbor School City/County: Portsmouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Wetland

Investigator(s): Devin herrick, CWS Section, Township, Range: ____

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066306° Long: -70.754230° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ___	**Is the Sampled Area within a Wetland?** **Yes** X **No** ___
Hydric Soil Present?	Yes X No ___	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes X No ___	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 10

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: WET B Wetland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2. *Frangula alnus*	10	Yes	FAC
3. *Acer rubrum*	5	No	FAC
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Equisetum sylvaticum*	25	Yes	FACW
2. *Onoclea sensibilis*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
Woody Vine Stratum (Plot size: 30)			
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	40	x 3 =	120
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	120 (A)		290 (B)

Prevalence Index = B/A = 2.42

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET B Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/2	100					Loamy/Clayey	
8-16	2.5YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
16-20	2.5YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
_X_ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
___ Iron Monosulfide (A18)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
___ High Chroma Sands (S11) (**LRR K, L)**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
_X_ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) (**LRR K, L**)
___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Red Parent Material (F21) **(outside MLRA 145)**
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: ______
Depth (inches): ______

Hydric Soil Present? **Yes** _X_ **No** ___

Remarks:

AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Little Harbor School City/County: Portmsouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Upland

Investigator(s): Devin herrick, CWS Section, Township, Range: ____

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066548° Long: -70.754442° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification: ____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No X
Hydric Soil Present?	Yes ___	No X
Wetland Hydrology Present?	Yes ___	No X

Is the Sampled Area within a Wetland? **Yes** ___ **No** X
If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET B Upland

Tree Stratum (Plot size: 30)

	Species	Absolute % Cover	Dominant Species?	Indicator Status
1.	*Acer rubrum*	10	Yes	FAC
2.	*Acer platanoides*	15	Yes	UPL
3.	*Fraxinus pennsylvanica*	5	No	FACW
4.	*Malus prunifolia*	5	No	UPL
5.				
6.				
7.				
		35	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)

	Species	Absolute % Cover	Dominant Species?	Indicator Status
1.	*Frangula alnus*	25	Yes	FAC
2.				
3.				
4.				
5.				
6.				
7.				
		25	=Total Cover	

Herb Stratum (Plot size: 5)

	Species	Absolute % Cover	Dominant Species?	Indicator Status
1.	*Potentilla simplex*	10	Yes	FACU
2.	*Onoclea sensibilis*	5	Yes	FACW
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		15	=Total Cover	

Woody Vine Stratum (Plot size: 30)

	Species	Absolute % Cover	Dominant Species?	Indicator Status
1.	*Celastrus orbiculatus*	5	Yes	FACU
2.				
3.				
4.				
		5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:		
OBL species	0	x 1 =	0	
FACW species	10	x 2 =	20	
FAC species	35	x 3 =	105	
FACU species	15	x 4 =	60	
UPL species	20	x 5 =	100	
Column Totals:	80	(A)	285	(B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET B Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Sandy	
10-16	10YR 4/3	100					Sandy	
16-20	10YR 4/4	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
___ Iron Monosulfide (A18)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
___ High Chroma Sands (S11) (**LRR K, L)**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) (**LRR K, L**)
___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Red Parent Material (F21) **(outside MLRA 145)**
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ____________

Depth (inches): ____________

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

APPENDIX B

Site Photographs

Photo 1: Little Harbor School Playground

Photo 2: PEEP Playground

Photo 3: Portsmouth Harbor/Piscataqua River

Photo 4: Highest Observable Tide Line

Photo 5: Salt Marsh

Photo 6: Non-Tidal Wetland


Photo 7: Ephemeral Stream

APPENDIX C

NHB Datacheck Forms

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

To: Devin Herrick, Weston & Sampson Engineering
55 Walkers Brook Drive
Reading, MA 01857
herrick.devin@wseinc.com

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc: NHFG Review, David Simmons

Date: 12/04/2025 (valid until 12/04/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: NHDES - Shoreland Standard Permit, NHDES - Wetlands Standard Dredge & Fill

DCT ID: DCT25-3222

Town: Portsmouth
Location: 50 CLOUGH DR

Project Description: The propose project includes the replacement of two playgrounds on the property of the Little Harbor School. All work will occur in uplands. To be completed by the end of 2026.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information it was determined that there are potential impacts. Please carefully read the comments below and consultation instructions on the following pages.

Plant and Exemplary Natural Community Comments: If all work is within existing disturbed areas of the playground footprints, then no ecological review for plants is needed. If work is proposed outside of the existing playground footprints, then please provide proposed plans and representative photos during the growing season of the proposed impact areas (or at the very least without snow cover).

Wildlife and Critical Habitat Comments: An ecological review is needed to further assess potential impacts to protected wildlife and critical habitat. Please refer to the Wildlife Ecological Review Instructions below for guidance on how to submit an ecological review request and information about when an ecological review is required vs recommended.

Plant and Exemplary Natural Community Ecological Review Instructions

Unless otherwise noted, an ecological review is required if plant and/or ENC records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules of a state agency

If a project is not legally required to obtain an ecological review but this letter contains plant and/or ENC records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 217-A.

To request an ecological review for plants and/or ENCs:

1. Email (preferred), mail, or hand-deliver any materials requested in the "Plant and Exemplary Natural Community Comments" section above to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with the plant/ENC ecological review process call 603-271-6261.

Wildlife and Critical Habitat Ecological Review Instructions

Requesting an Ecological Review by NHDES

An ecological review for wildlife will be completed by the NHDES Ecological Review Section if a NHDES permit, authorization, or approval is needed. *If you do not need any NHDES permits, authorizations, or approvals then please see the section regarding NHFG reviews conducted by the NH Fish and Game Department (NHFG) below.*

Unless otherwise noted, an ecological review by NHDES is required if wildlife/critical habitat records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules regarding the permit, approval, or written authorization pursuant to RSA 482-A, RSA 485-A, and RSA 236.

If a project requiring a NHDES permit, authorization, or approval is not legally required to obtain an ecological review, but this letter contains wildlife or critical habitat records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 212-A.

To request an ecological review for wildlife with DES:

1. Email (preferred), mail, or hand-deliver project information following the guidance of Fis1004.03(c) to:

    Department of Environmental Services
    Ecological Review Section
    P.O. Box 95
    29 Hazen Drive
    Concord, New Hampshire 03302-0095
    ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with wildlife ecological review process call 603-271-0467 or visit the wildlife environmental review page for guideline materials including a suggested checklist of materials to provide for ecological review.

Wildlife and Critical Habitat Review Instructions (continued)

Requesting a Wildlife Review by NHFG

Wildlife reviews to assess potential impacts to protected wildlife and critical habitat for any need outside of NHDES permits, authorizations, and approvals are completed by the New Hampshire Fish and Game Department, Nongame & Endangered Wildlife Program.

To request a wildlife review with NHFG:

1. Email (preferred), mail, or hand-deliver available project information to:

   New Hampshire Fish and Game Department
   Attn. Wildlife Division, Nongame Program
   11 Hazen Drive
   Concord, New Hampshire 03301
   nhfgreview@wildlife.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Wildlife Review" in the subject line of the request.

For help with the NHFG wildlife review process call 603-271-2461.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (iPaC) website for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or 603-223-2541).

Ecological Review Database records:
The following record(s) may be impacted by the proposed project. Please refer to this list when coordinating.

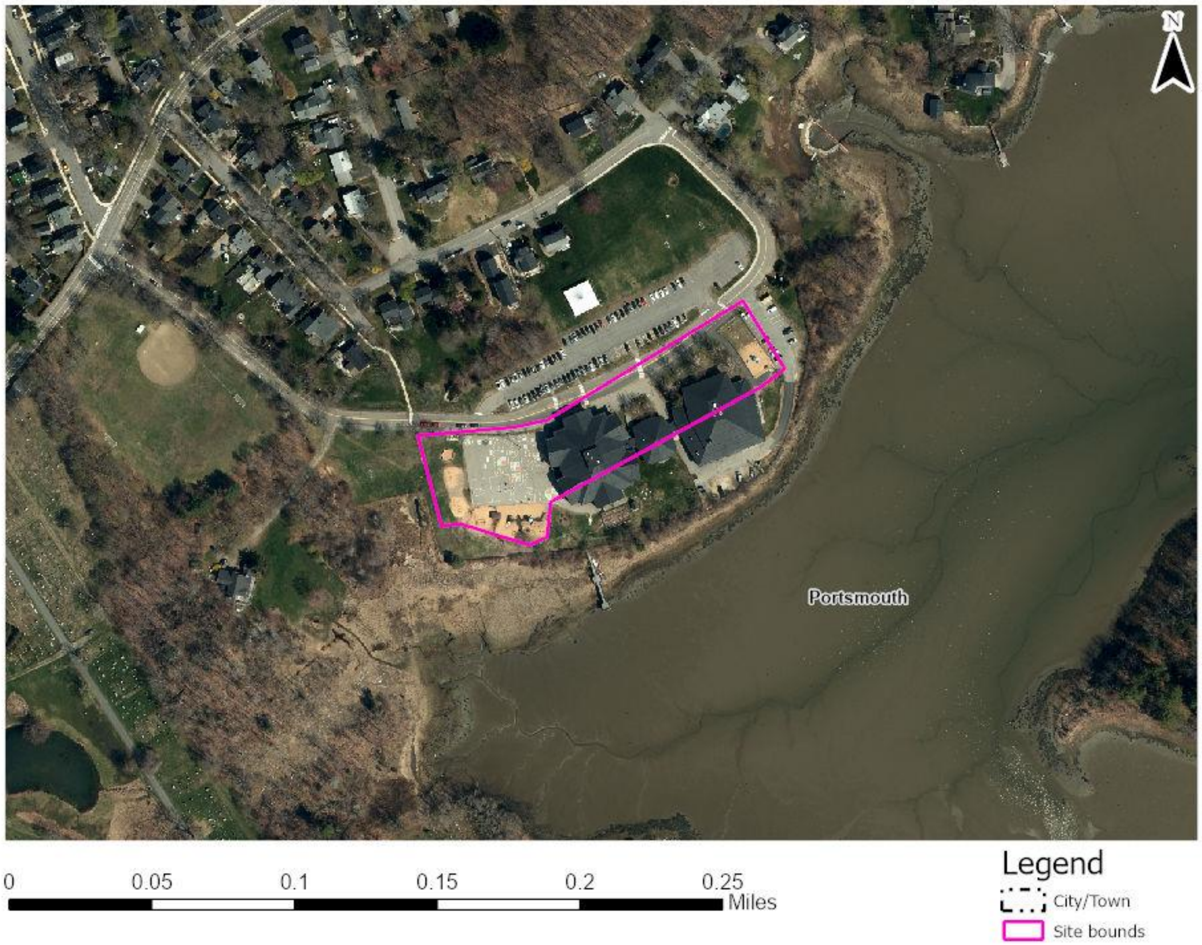
Plant species	State[1]	Federal	Notes
marsh elder (*Iva frutescens*)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
northern blazing star (*Liatris novae-angliae var. novae-angliae*)*	E	--	Threats to this highly imperilled species are development activities that eliminate its habitat and invasion of its open, grassy habitat by trees and shrubs.

Vertebrate species	State[1]	Federal	Notes
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see above).
Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).

[1]Codes: "E" = Endangered, "T" = Threatened, “SC” = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.
An asterisk (*) indicates that the most recent report for that occurrence was 25 or more years ago.

Disclaimer:
DataCheck Tool screening only includes documented and verified occurrences of protected species and exemplary natural communities. The list of protected species and habitat on this letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, surveys are the best way to determine what resources are present on site.

DCT25-3222


N
Portsmouth
0
0.05
0.1
0.15
0.2
0.25
Miles
Legend
City/Town
Site bounds

ATTACHMENT 4

Weston & Sampson

westonandsampson.com

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

Wetlands Major Impact Application

February 2026

Little Harbor School
Playground Renovations
50 Clough Street
Portsmouth NH

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

February 25, 2026

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

Re: Wetlands Major Impact Application Submission
Little Harbor School - Playground Renovations
50 Clough Street
Portsmouth NH

To whom it may concern:

On behalf of the City of Portsmouth, Weston & Sampson Engineers, Inc. is hereby enclosing one (1) copy of the Wetlands Major Impact application for your review with regards to the proposed renovations to the playgrounds at the Little Harbor School.

Along with the required NHDES forms and project narrative, additional information for this application is included in the following appendices:

Appendix A	Avoidance and Minimization
Appendix B	ACOE Secondary Impacts Checklist
Appendix C	Maps
Appendix D	NHB
Appendix E	Section 106 DHR
Appendix F	Abutters List and Notice
Appendix G	Photos
Appendix H	Wetland Delineation Report
Appendix I	Functional Assessment
Appendix J	Maintenance Plans and Bonded Rubber Info
Appendix K	Request for Concurrent Processing
Appendix L	Plans

A fee in the amount of $16,945.20 has also been included as part of this application.

If you have any questions regarding this submittal, please contact me at 978-573-5802.

Very truly yours,

WESTON & SAMPSON

Devin Herrick

Devin Herrick, CWS
Technical Specialist

NHDES-W-06-012

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 name: City of Portsmouth - Ken Linchey			Town name: Portsmouth
Administrative Use Only	Administrative Use Only	Administrative Use Only	**File No.:** **Check No.:** **Amount:** **Initials:**

A person may request a waiver of the requirements in administrative 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 Land Resources Management Permit Planning Tool (LRMPPT), the DataCheck Tool, the Stream Crossing Initiative Data Viewer or other sources to assist in identifying key features such as Priority Resource Areas (PRAs), protected species or habitats, coastal areas, designated rivers or designated prime wetlands.*	
Has the required planning been completed?	☒ Yes ☐ No
Does the property contain a PRA? If yes, provide the following information:	☒ Yes ☐ No
• Does the project qualify for an Impact Classification Adjustment (such as a New Hampshire Fish and Game Department (NHFG) agreement for a classification downgrade) or a Project-Type Exception (such as a Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	☐ Yes ☒ No
• Protected species or habitat?	☒ Yes ☐ No
• If yes, species or habitat name(s): Atlantic Sturgeon, Peregrine Falcon, Shortnose Sturgeon	
• DataCheck project ID number: DCT25-3222	
• Bog?	☐ Yes ☒ No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	☒ Yes ☐ No
• Designated prime wetland or duly-established 100-foot buffer?	☒ Yes ☐ No
• Sand dune, tidal wetland, tidal water or undeveloped tidal buffer zone?	☐ Yes ☐ No
Is the property within a designated river corridor? If yes, provide the following information:	☐ Yes ☒ No
• Name of Local River Management Advisory Committee (LAC):	
• A copy of the application was sent to the LAC on (mm/dd/yyyy):	
For dredging projects, is the subject property contaminated?	☐ Yes ☐ No
If yes, list contaminant: Not Applicable	
Is there potential to impact impaired waters, Class A waters or Outstanding Resource Waters?	☐ Yes ☒ No
For stream crossing projects, provide watershed size (see LRMPPT or Stream Stats):	

SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i)) *Provide a description of the project and the purpose of the project, the need for the proposed impacts to jurisdictional areas, an outline of the scope of work to be performed, and whether impacts are temporary or permanent.*		
The purpose of this project is to upgrade the Portsmouth Little Harbor Elementary School playgrounds to be universally accessible (UA) and nature base playgrounds. As part of the proposed project there will be unavoidable impacts areas which fall under the jurisdiction of the NHDES Wetlands Bureau including an ephemeral stream, 100-foot prime wetland buffer, and previously developed tidal buffer zone. This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact.		
SECTION 3 - PROJECT LOCATION *Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.*		
Address: 50 Clough Drive		
Town or city: Portsmouth		
Tax map/block/lot/unit: 206/20		
U.S. Geological Survey (USGS) topo map waterbody name: ☒ n/a		
(Optional) Latitude / longitude in decimal degrees (to five decimal places): 43.06640°/-70.75320°		
SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a)) *If the applicant is a trust or a company, then complete with the trust or company information.*		
Name: City of Portsmouth - Ken Linchey, Portsmouth School Department		
Mailing address: 1 Junkins Avenue		
Town or city: Portsmouth	State: NH	ZIP: 03801
Email address: klinchey@sau52.org	Phone: 603-610-4168	
Electronic communication: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically: KL		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c)) ☐ **N/A**		
Last name, first name, middle initial: Herrick. Devin		
Company name: Weston & Sampson Engineers		
Mailing address: 55 Walkers Brook Drive, Suite 100		
Town or city: Reading	State: MA	ZIP: 01867
Email address: herrick.devin@wseinc.com	Phone: 978-573-5802	
Electronic communication: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically: DKH		

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: City of Portsmouth		
Mailing address: PO BOX 628		
Town or city: PORTSMOUTH	State: NH	ZIP: 03802
Email address: klinchey@sau52.org	Phone: 603-610-4168	
Electronic communication: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically: KL		

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

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):
See attached project description for for resource specific information Env-Wt 600.

SECTION 8 - AVOIDANCE AND MINIMIZATION

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

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

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

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

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

Mitigation pre-application meeting date (mm-dd-yyyy):	☒ N/A - Mitigation is not required.

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (ENV-WT 313.01(A)(1)C)

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

☐ I confirm submittal.	☒ N/A – Compensatory mitigation is not required)

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

For each jurisdictional area that will be or 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; meaning work was started or completed without a permit).

For intermittent and ephemeral streams, LF of impact are 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, LF of impact are calculated by summing the lengths of disturbances to the channel and banks.

Permanent (PERM) impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials). Temporary (TEMP) impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERM. SF	PERM. LF	PERM. ATF	TEMP. SF	TEMP. LF	TEMP. ATF
Wetlands	Forested wetland			☐			☐
	Scrub-shrub wetland			☐			☐
	Emergent wetland			☐			☐
	Wet meadow			☐			☐
	Vernal pool			☐			☐
	Designated prime wetland			☐			☐
	Duly-established 100-foot prime wetland buffer	17,968 SF	N/A	☐	10,274 SF	N/A	☐
Surface Water	Intermittent / ephemeral stream			☐			☐
	Perennial stream or river			☐			☐
	Lake / pond			☐			☐
	Docking - lake / pond			☐			☐
	Docking - river			☐			☐
Banks	Bank - intermittent stream			☐			☐
	Bank - perennial stream / river			☐			☐
	Bank / shoreline - lake / pond			☐			☐
Tidal	Tidal waters			☐			☐
	Tidal marsh			☐			☐
	Sand dune			☐			☐
	Undeveloped tidal buffer zone (TBZ)			☐			☐
	Previously-developed TBZ	17,968 SF	N/A	☐	10,274 SF	N/A	☐
	Docking - tidal water			☐			☐
TOTAL		17,968 SF	N/A		10,274 SF	N/A	

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)				
☐ Minimum impact: Flat fee of $600.				
☐ Non-enforcement related, publicly funded and supervised restoration projects, regardless of impact classification: flat fee of $600 (refer to RSA 482-A:3, 1(c) for restrictions).				
☒ Minor or major impact fee: Calculate using the table below:				
Permanent and temporary (non-docking):	28,242	SF	× $0.60 =	$ 16,945.20
Seasonal docking structure:		SF	× $3.00 =	$
Permanent docking structure:		SF	× $6.00 =	$
Projects proposing shoreline structures (including docks): add $600.				$
Total				$ 16,945.20
The application fee for minor or major impact is the above calculated total or $600, whichever is greater.				$ 16,945.20

SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05) *Indicate the project classification.*		
☐ Minimum impact project	☐ Minor project	☒ Major project

SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11) *Initial each box below to certify.*	
Initials: KL DKH	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: KL DKH	The information submitted on or with the application is true, complete and not misleading to the best of the signer's knowledge and belief.
KL Initials: DKH	The signer understands that: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the office of professional licensure and certification established by RSA 310.
KL Initials: DKH	If the applicant is not the owner of the property, each property owner's 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 311.11)		
Signature (owner):	Print name legibly: Kenneth Linchey	Date: 1/28/26
Signature (applicant, if different from owner):	Print name legibly: Kenneth Linchey	Date: 1/28/26
Signature (agent, if applicable):	Print name legibly: Dawn Hewcke	Date: 1/28/2026

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))	
As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town or city indicated below.	
Town or city clerk signature:	Print name legibly:
Town or city:	Date:

DIRECTIONS FOR TOWN/CITY CLERK:
Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal conservation commission, the local governing body (board of selectmen or town/city council), and the planning board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:
Submit the original permit application form bearing the signature of the town/city clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. If not filing electronically, make check or money order payable to "Treasurer – State of NH."

Impervious Area Certification Statement

Subject Parcel: Little Harbor Elementary School located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20.

Applicant: City of Portsmouth - Ken Linchey, Portsmouth School Department

I, Ken Linchey, Applicant for the proposed Little Harbor School Playground Renovations Project, herby certify that the existing and proposed impervious area within the Tidal Buffer Zone (TBZ) on the parcel is less than 20%. This statement is required per Env-Wt 610.04 (h).

Impervious area within the protected tidal zone is currently 15.3% of the lot. There is 150,595 SF of TBZ present on the subject parcel. Under existing conditions there are 22,975 SF (15.3%) of impervious area present within the TBZ. Under proposed conditions there will be 21,025 SF (14%) of impervious area present within the TBZ. This represents a 1,950 SF decrease in impervious area.

Applicant Signature

1/28/26

Date

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LIST OF APPENDICES

1.0 BACKGROUND AND EXISTING CONDITIONS

The purpose of this project is to upgrade the City of Portsmouth Little Harbor Elementary School (LHS) Playground and The Portsmouth Early Education Program (PEEP) Playground to be universally accessible (UA) and nature base playgrounds. The term "universally accessible (UA) playground" is often used to describe a playground that offers children full use of all areas, regardless of ability. A UA playground will represent and support the diversity of our community, providing a platform for people to engage socially, physically, creatively and playfully without the need for adaptation or specialized design (based on the seven principles of universal design established by the Center for Universal Design at North Carolina State). A nature-based playground is a play area designed to mimic natural environments, incorporating elements like trees, rocks, logs, and sand features allowing children to engage in imaginative play through exploration and interaction with the natural landscape, promoting physical activity, creativity, and environmental awareness while minimizing the use of manufactured play equipment.

The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The playground pathways will feature accessible routes made from resilient solid surface material, not loose fill or aggregate. Playground design aligns with NH House Bill 467-FN Public Playground Accessibility, which aims to ensure that public playgrounds are accessible to all children, including those with disabilities. The bill requires that at least one public playground in each municipality be made accessible, promoting inclusivity and equal play opportunities for all children.

1.1 Existing Conditions

The Portsmouth Little Harbor Elementary School is located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20. The school is located along the tidal Piscataqua River.

The existing play facilities on the property are broken down into two playgrounds, the first is located on the east side of the school known as the “PEEP Playground” and the second is located on the west side of the school known as the “Little Harbor School Playground”. Both playgrounds will be renovated as part of this proposed project.

1.1.1 PEEP Playground

The existing PEEP Playground includes a play structure with additional loose play equipment, a wood chip base, lawn space and the entire playground is surrounded by a chain link fence. There is also an existing stone retaining wall which separates play area from parking lot which will be retained by the project.

Image 1.1: Google Street Earth Image of the Existing PEEP Playground.

1.1.2 Little Harbor School Playground

The existing Little Harbor School Playground includes a large play structure, monkey bars/climbing structure, a gaga pit, swing sets, a basketball court and associated asphalt play area. There is also a small ephemeral stream which originates from stormwater sheet flow off the existing basketball court. The ephemeral stream dissipates into the grassy play area before reaching the salt marsh.

Image 1.2: Google Street Earth Image of the Existing Little Harbor School Playground.

1.2 Wetland Resource Areas Delineated on Site

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) in Appendix C of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the Wetland Delineation Report in Appendix H and below in Figure 1.

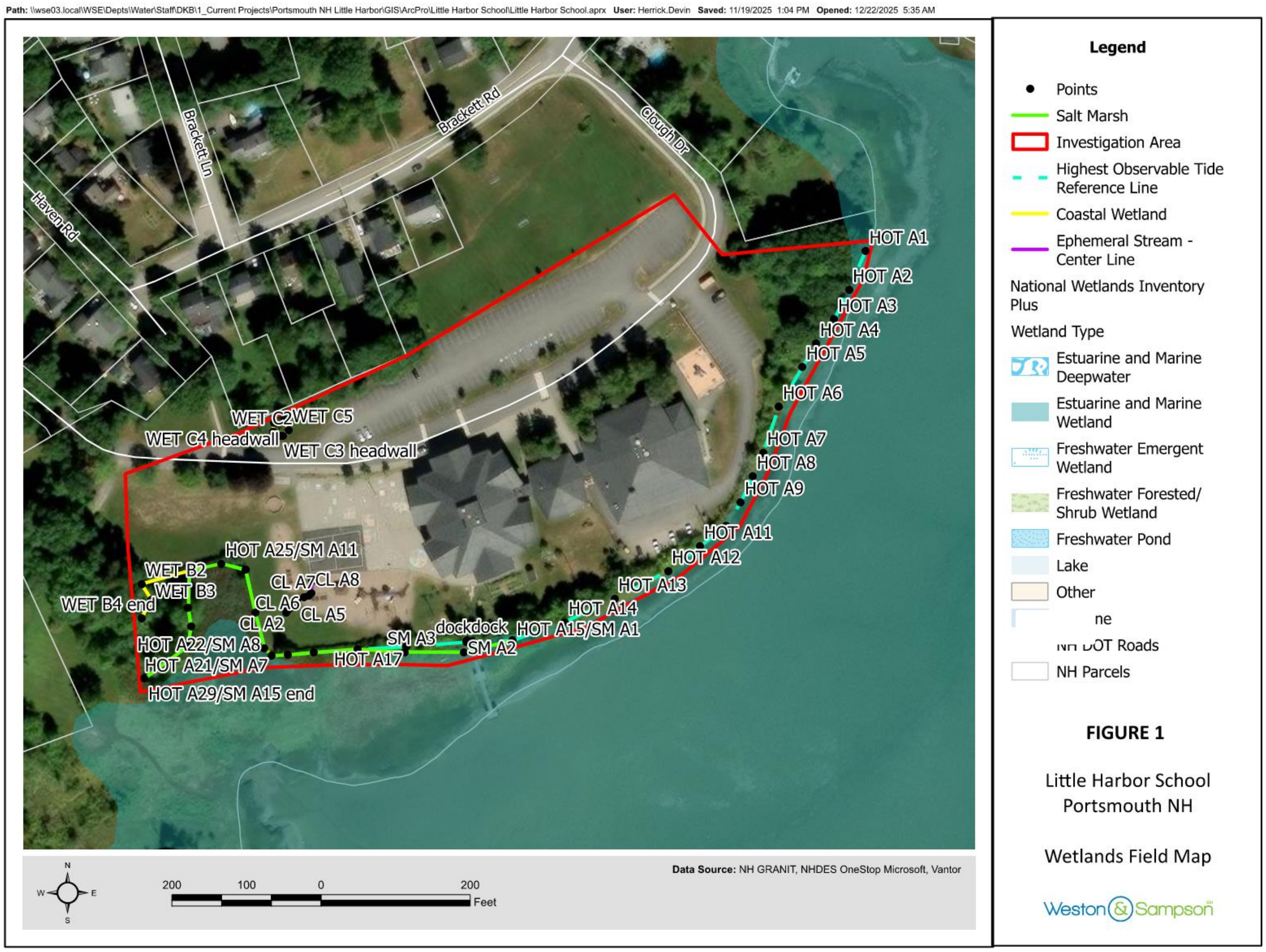


Figure 1: Wetlands Field Map

2.0 PROPOSED SCOPE OF WORK

The proposed scope will include the removal of existing playground equipment and installation of new play structures with associated landscape features in each of the two playgrounds on site.

2.1 PEEP Playground

The proposed PEEP playground improvements will include a variety of play elements designed for young children and group interaction. Planned equipment includes two play structures for 2-5 aged children, a group seesaw, and a wooden play bridge that will be level with the bonded rubber surfacing to ensure accessibility. A sand play area with natural wood accents is also proposed to encourage sensory and creative play. Finally a large area of grass will be included to enhance the natural open space.

In addition to the play equipment, several landscape and site enhancements are proposed in the PEEP playground to support both functionality and aesthetics. These include new plantings with boulder accents, picnic tables, and new fencing surrounding the play area. The proposed location of the playground fencing will be slightly modified in shape from the existing layout in order to increase the play space by approximately 1,000 SF. Wherever possible the existing fence posts will be re-used and spray painted for aesthetic improvement. Concrete paving within the limits of the play area will serve multiple purposes, including a bag drop and an accessible area for replenishing sand; this space will also accommodate loose play items such as a play kitchen. New asphalt walking paths are proposed in generally the same configuration as existing conditions, with selective reductions in paved area to minimize impervious surfaces within the project limits. The landscape plan also includes the installation of five new trees and approximately thirty six new shrubs and herbaceous native species (See Image 2-1).

Image 2-1: PEEP Playground Planting Plan, Plan Sheet L601

PLANT SCHEDULE - PEEP PLAYGROUND					
TREES					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	3	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5"-3" CAL. B&B	WELL- BRANCHED
LS	1	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SWEETGUM	2"-2.5" CAL. B&B	WELL- BRANCHED
TC	1	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5"-3" CAL. B&B	WELL- BRANCHED
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
IG	7	ILEX GLABRA 'SHAMROCK'	INKBERRY	#5 CONT.	48" O.C. SPACING
RA	18	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	36" O.C. SPACING
RF	11	RUDBECKIA FULGIDA	ORANGE CONEFLOWER	#2 CONT., 18" HT.	24" O.C. SPACING

2.2 Little Harbor Playground

The proposed playground equipment improvements include the installation of two new swing sets and a large play structure with a climbing element. The equipment is currently planned to be installed over an engineered wood fiber base; however, the City is exploring the availability of funding to instead utilize a permeable poured-in-place or bonded rubber safety surfacing. This alternative would not alter the proposed limits of work. In addition, the existing gaga pit will be relocated to a new location, removing the majority of the structure from the 100-foot wetland buffer where it is currently situated. The relocated gaga pit will be constructed on a concrete foundation and filled with engineered wood fiber.

Proposed landscape and site improvements focus on environmental stewardship, safety, and improved site functionality. Stormwater collection will be formalized through the creation of a rain garden designed to allow student interaction with overland flow while maintaining sheet flow into the adjacent grassy area. The existing asphalt play area, including the basketball court, will be relocated farther from the wetland, resulting in a significant overall reduction in asphalt play surface. A concrete curb/mow strip will be installed around areas of engineered wood fiber to help contain the material. All existing trees on site will be retained, and additional site amenities will include a new timber guard rail and a bike rack.

New plantings will further enhance the landscape and ecological function of the site. Planting will occur in two locations; surrounding the proposed Little Harbor Playground space and within the bioretention planting/rain garden. Tree species were selected in accordance with the City of Portsmouth Street Tree Manual.

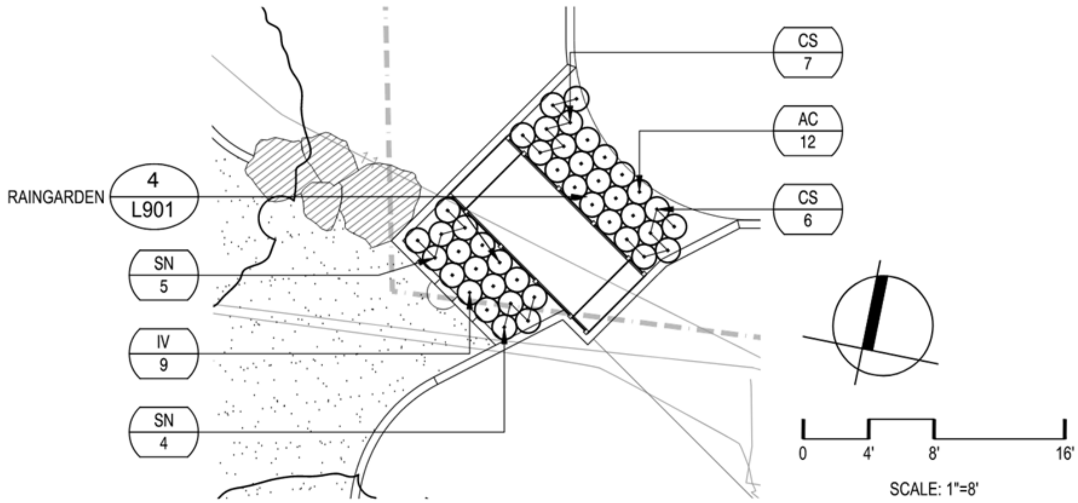
For the Little Harbor Playground space, the landscape plan also includes the installation of ten new trees and approximately forty eight new shrubs and herbaceous native species (See Image 2-2). The small mounds created for playground privacy and protection will receive Northeast Annual & Perennial Wildflower Mix.

Image 2-2: Little Harbor Playground Planting Plan, Plan Sheet L600

PLANT SCHEDULE - LHS PLAYGROUND					
TREES					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	2	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5"-3" CAL. B&B	WELL- BRANCHED
QB	7	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5"-3" CAL. B&B	WELL- BRANCHED
TC	1	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5"-3" CAL. B&B	WELL- BRANCHED
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
MP	22	MORELLA PENSYLVANICA (FEMALE)	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
MPW	2	MORELLA PENSYLVANICA 'WILDWOOD' (MALE)	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
RA	24	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	36" O.C. SPACING
SEED MIX					
ABRV.	QTY	NAME			NOTES
N/A	1 LB	NORTHEAST ANNUAL & PERENNIAL WILDFLOWER MIX - ERNMX-168 *8-12 LB PER ACRE. NO COVER CROP IS RECOMMENDED WITH THIS MIX*			NE WILDFLOWER SEED MIX

The rain garden located adjacent to the existing ephemeral stream will also receive additional plantings, including forty three herbaceous species, to support stormwater management and native habitat enhancement. (See Image 2-3).

Image 2-3: Little Harbor Rain Garden Planting Plan, Plan Sheet L600



PLANT SCHEDULE - LHS PLAYGROUND					
BIORETENTION PLANTER					
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
AC	12	ANEMONE CANADENSIS	WINDFLOWER	#2 POT	18" O.C. SPACING
CS	13	CAREX STRICTA	TUSSOCK SEDGE	#2 POT	18" O.C. SPACING
IV	9	IRIS VERSICOLOR	BLUEFLAG IRIS	#2 POT	18" O.C. SPACING
SN	9	SYMPHYOTRICHUM NOVAE-ANGLIAE 'GRAPE CRUSH'	GRAPE CRUSH NEW ENGLAND ASTER	#2 POT	18" O.C. SPACING

2.3 Construction Sequence

The following is the intended construction sequence of the project, subject to change based on contractor means and methods.

The proposed playground improvements are anticipated to be constructed over a 16-week period starting in the Spring of 2026, subject to permitting, weather, and material availability. Construction will begin with pre-construction activities, including final permit approvals, contractor mobilization, utility locating, and installation of erosion control measures, temporary fencing and signage to secure the work area. Surveying and layout will be completed to establish the locations of new play equipment, pathways, and landscape improvements.

Following mobilization, selective demolition and site clearing will occur. Existing playground equipment and portions of concrete and asphalt paving within the project limits will be removed as necessary. This work will be performed using a mini excavator, skid steer loader, concrete saws, and dump trucks to haul debris off-site or to designated recycling areas.

Once demolition is complete, earthwork and grading activities will commence. The site will be rough and fine graded to accommodate the new play areas, accessible routes, and revised path alignments.

Excavation will be completed for poured-in-place surfacing, wood ship/sand containment, and equipment footings, followed by placement and compaction of aggregate base materials using compactors and small rollers to ensure stable subgrades.

Concrete footings and underground preparations will then be installed for the playground structures. Ready-mix concrete will be placed using concrete trucks and hand-finishing tools, with careful attention to accessibility requirements and level transitions between play elements and surfacing.

Concrete forms will be set, poured, finished, and cured to meet accessibility and durability standards. After concrete work is complete, new asphalt walking paths will be installed in generally the same configuration as existing conditions, with selective reductions in paved areas to minimize impervious surfaces. Asphalt placement will be performed using a small paver and roller.

Installation of playground equipment and surfacing will follow. The play structures will be installed, with equipment placed using small lifting equipment as needed. Play areas will be constructed, and poured-in-place surfacing will be installed throughout the play areas as described above, including flush transitions to ensure accessibility.

Following equipment installation, site furnishings and enclosures will be added. New perimeter fencing will be installed around the PEEP playground, other site accents will be placed, using small loaders and hand tools. Landscaping will then be completed, including the installation new trees, shrubs and native herbaceous species, along with soil preparation, mulching, and initial watering.

The project will conclude with final grading, site cleanup, and inspections. Once the site is stabilized. temporary erosion and sedimentation controls will be removed.

3.0 ENVIRONMENTAL CONSIDERATIONS – STANDARD DREDGE AND FILL WETLANDS PERMIT

As part of the proposed project there will be unavoidable impacts areas which fall under the jurisdiction of the NHDES Wetlands Bureau.

3.1 Ephemeral Stream

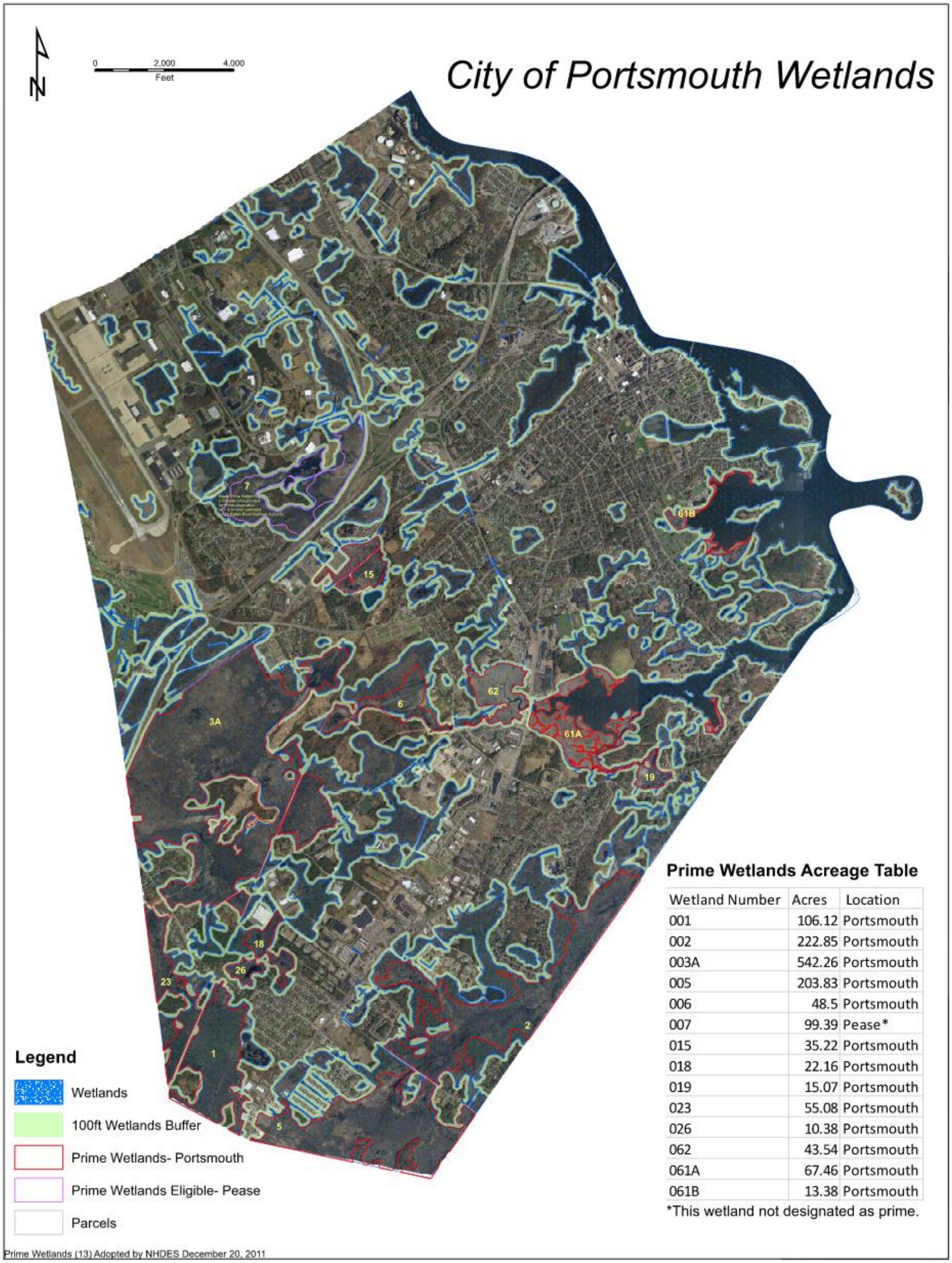
As described in the wetland delineation report (Appendix H), there is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

There will be no direct impacts to the ephemeral stream however there will be impacts directly adjacent to the stream be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. The discharge from the rain garden will flow into the existing ephemeral stream without changing it's existing characteristics.

3.2 Duly Established 100-Foot Prime Wetland Buffer

Under RSA 482-A, prime wetlands are wetlands of substantial significance because of their size, unspoiled character, fragile condition or other relevant factors. Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. A prime wetland designated by the City of Portsmouth as wetland number 061B is located concurrently with the salt marsh delineated on site (see Image 1 below). The Prime Wetlands Designation Document for the City of Portsmouth was authored on January 25, 2011 and the Prime Wetland Map (see Image 1 below) was adopted by NHDES on December 20. 2011.

The proposed impacts to the Little Harbor School Playground will overlap with the Duly Established 100-Foot Prime Wetland Buffer associated with Prime Wetland Number 061B. Existing conditions in this area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer. These impact areas are located within the same footprint as the Previously Developed Tidal Buffer Zone (TBZ).



Prime Wetlands Acreage Table

Wetland Number	Acres	Location
001	106.12	Portsmouth
002	222.85	Portsmouth
003A	542.26	Portsmouth
005	203.83	Portsmouth
006	48.5	Portsmouth
007	99.39	Pease*
015	35.22	Portsmouth
018	22.16	Portsmouth
019	15.07	Portsmouth
023	55.08	Portsmouth
026	10.38	Portsmouth
062	43.54	Portsmouth
061A	67.46	Portsmouth
061B	13.38	Portsmouth

*This wetland not designated as prime.

Image 1: Portsmouth Prime Wetlands Map

3.3 Previously Developed Tidal Buffer Zone (TBZ)

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12.

Existing conditions in this Previously Developed TBZ area include portions of the playground and developed play yard. The proposed projects seeks to move the playground further away from the salt marsh/highest observable tide line than existing conditions. Permanent impacts will include any changes to topography or cover type within the Buffer while temporary impacts are those areas within the limit of work which will return to pre-existing conditions upon completion of the project. This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Previously Developed TBZ. These impact areas are located within the same footprint as the Duly Established 100-Foot Prime Wetland Buffer.

3.4 Total Impacts

The total amount of proposed impacts to jurisdictional area is 28,238 SF. Impacts are summarized in Table 1 below.

Table 1: NHDES Jurisdictional Impact Summary

Jurisdictional Area	Purpose	Permanent Impact	Temporary Impact
Duly-established 100-foot prime wetland buffer	Playground renovation	17,968 SF	10,274 SF
Previously-developed TBZ	Playground renovation	17,968 SF	10,274 SF
Total		**17,968 SF**	**10,274 SF**

3.5 Project Classification

The proposed project is being submitted as a Major Impact Project based on the following criteria:

3.5.1 Previously Developed Tidal Buffer Zone

This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Previously Developed TBZ.

Per Env-Wt 610.17 (b) Project Classifications since the amount of impact area exceeds 10.000 SF the proposed project requires the submission as a Major Impact project.

3.5.2 100-Foot Prime Wetland Buffer Waiver

This proposed project proposes 17,968 square feet (SF) or permanent impact and 10,274 SF of temporary impact to the Duly Established 100-Foot Prime Wetland Buffer.

Per Env-Wt 407.02 (a) "*a project that impacts a PRA and that does not qualify for a project-type exception (PTE) under Env-Wt 407.04 shall be classified as a major project regardless of the size of the impact*."

3.6 Methods, Timing, and Manner

An explanation as to methods, timing, and manner as to how the project will meet standard permit conditions specified in Env-Wt 307 is provided below.

Env-Wt 307.02 Requirements for Coverage Under State General Permits.
The proposed project does not include work that is in areas under the jurisdiction of the U.S. Army Corps of Engineers (US ACE).

Env-Wt 307.03 Protection of Water Quality Required.
Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

Env-Wt 307.04 Protection of Fisheries and Breeding Areas Required.
No work shall produce suspended sediment in jurisdictional areas that provide value as bird migratory areas or fish and shellfish spawning or nursery areas.

Env-Wt 307.05 Protection Against Invasive Species Required.
Any heavy machinery on site shall be inspected for and cleaned of all vegetative matter by a method and in a location that prevents the spread of the vegetative matter to jurisdictional areas. To prevent the use of soil or seed stock containing nuisance or invasive species, the contractor responsible for work shall follow the Invasive Plant BMPs.

Env-Wt 307.06 Protection of Rare, Threatened or Endangered Species and Critical Habitat.
Consultation is occurring to ensure no impacts to the species identified as part of the Natural Heritage Bureau (NHB) Data Check.

Env-Wt 307.07 Consistency Required with Shoreland Water Quality Protection Act.
This project is subject to the *Shoreland Water Quality Protection Act* and the proposed project will be submitted concurrently.

Env-Wt 307.08 Protection of Designated Prime Wetlands and Duly-Established 100-Foot Buffers.
(a) Water quality and environmental minimization measures shall be in place to ensure that functions and values of prime wetlands and duly-established 100-foot buffers are protected.
Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

(b) Duly-established 100-foot buffers shall not be disturbed unless specifically authorized under RSA 482-A.
The proposed project is seeking authorization for the proposed alteration.

Env-Wt 307.10 Dredging Activity Conditions.
The proposed project does not include any dredging.

Env-Wt 307.11 Filling Activity Conditions.
Any fill used on site shall be clean sand, gravel, rock, or other material that meets the project's specifications for its use; and does not contain any material that could contaminate surface or groundwater or otherwise adversely affect the ecosystem in which it is used.

Env-Wt 307.12 Restoring Temporary Impacts; Site Stabilization.
Within 3 days of final grading or temporary suspension of work in an area that is in or adjacent to surface waters, all exposed soil areas shall be stabilized by seeding and mulching, if during the growing season; or mulching with tackifiers on slopes less than 3:1 or netting and pinning on slopes steeper than 3:1 if not within the growing season. If any temporary impact area that is stabilized with seeding or plantings does not have at least 75% successful establishment of wetlands vegetation after 2 growing seasons, the area shall be replanted or reseeded, as applicable.

Env-Wt 307.13 Property Line Setbacks.
Dredging, filling, or construction activity within a jurisdictional area, that is covered by an LSA or for which a standard permit is required shall occur at least 10 feet from an abutting property line.

Env-Wt 307.14 Rock Removal.
No rock removal is proposed.

Env-Wt 307.15 Use of Heavy Equipment in Wetlands.
Heavy equipment shall not be operated in any jurisdictional area unless specifically authorized in the permit for the project.

Env-Wt 307.16 Adherence to Approved Plans Required.
For any project for which plans were submitted and an SPN, PBN, LSA, EXP, or standard permit was issued, all work on the project shall be done in accordance with the approved plans.

Env-Wt 307.17 Unpermitted Activities.
No work will be done without a permit in violation of RSA 482-A:3:

Env-Wt 307.18 Reports.
Monitoring will occur at the end of each growing season for two years following completion of the proposed project.

3.7 Mitigation

Per discussion with NHDES, mitigation is not required for impacts to the previously developed TBZ. The existing conditions include the presence of two playgrounds and proposed conditions will remain part of the play area for the Little Harbor School. The proposed project will seek to improve conditions by pulling impervious area further away from the wetlands than existing conditions and installing a rain garden to provide some stormwater treatment.

3.8 Project Specific Criteria

Env-Wt 610.04 Plans and Other Information Required.
The following plans and other information shall be submitted with applications for work within the protected tidal zone:

(a) Existing and proposed contours at 2-foot intervals measured from the HOTL;
See project plans in Appendix L.

(b) If any portion of the subject parcel is located in a regulatory floodplain, the location of the 100-year flood boundary the zone, and water elevation as shown on the applicable FEMA Flood Insurance Rate Map;
See project plans in Appendix L

(c) All other applicable local and state setbacks;
See project plans in Appendix L

(d) The dimensions and locations of all:
- *(1) Existing and proposed structures;*
- *(2) Existing and proposed impervious areas;*
- *(3) Existing and proposed disturbed areas;*
- *(4) Areas to remain in an unaltered state;*
- *(5) Existing cleared areas, such as gardens, lawns, and paths; and*
- *(6) Proposed temporary impacts associated with completion of the project;*

See project plans in Appendix L

(e) Proposed methods of erosion and siltation controls, identified graphically and labeled on a plan, or otherwise annotated as needed for clarity;
See project plans in Appendix L

(f) A plan of any planting(s) proposed in the waterfront buffer, showing the proposed location(s) and Latin names and common names of proposed species;
See project plans in Appendix L

(g) If applicable, the location of an existing or proposed 6-foot-wide foot path to the waterbody or a temporary access path;
Not applicable.

(h) For any project proposing that the impervious area be at least 15% but not more than 20% within the protected tidal zone, a statement signed by the applicant certifying that the impervious area is not more than 20%;
Impervious area within the protected tidal zone is 15.3% of the lot. There is 150,595 SF of TBZ present on the subject parcel. Under existing conditions there are 22,975 SF (15.3%) of impervious area present within the TBZ. Under proposed conditions there will be 21,025 SF (14%) of impervious area present within the TBZ. This represents a 1,950 SF decrease in impervious area. Attached please find a statement from the applicant certifying that the impervious area is not more than 20%.

(i) For any project proposing that the impervious area be greater than 20% within the protected tidal zone, plans for a stormwater management system that will infiltrate increased stormwater from development, provided that if impervious area is or is proposed to be greater than 30% the stormwater management systems shall be designed by a professional engineer;
Impervious area within the protected tidal zone is less than 20% on the lot.

(j) For any project involving pervious surfaces, a plan with specifications of how those surfaces will be maintained; and
See attached maintenance plan for impervious areas, Appendix J.

(k) All other relevant features necessary to clearly define both existing conditions and the proposed project.
See project plans in Appendix L.

3.9 Local Conservation Commission

The proposed project was heard before the Portsmouth Conservation Commission at their meeting on February 11, 2026 at which point they voted to support the project. A letter outlining their support has been sent to NHDES.

APPENDIX A

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: **City of Portsmouth** **TOWN NAME:** Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the Avoidance and Minimization Narrative or Checklist 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 proposed project will not have any direct wetland impacts, only impacts to the previously developed tidal buffer zone. The project has specifically avoided direct impacts to wetlands by keeping the limit of work contained to within the existing playground footprints. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the TBZ for playground renovations. The proposed project seeks to reduce impacts to the TBZ by pulling the impervious area further away from the wetlands than existing conditions.

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.

This proposed project will not have any impact to tidal or non-tidal marshes. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the TBZ for playground renovations. The proposed project seeks to reduce impacts to the TBZ by pulling the impervious area further away from the wetlands than existing conditions.

SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))

Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

There is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

There will be no direct impacts to the ephemeral stream however there will be impacts directly adjacent to the stream be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. The discharge from the rain garden will flow into the existing ephemeral stream without changing it's existing characteristics.

SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))

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.

This proposed project will not have any impact to tidal or non-tidal marshes. Due to the close proximity of the wetland resources, there is no way to avoid impacts to the TBZ for playground renovations. The proposed project seeks to reduce impacts to the TBZ by pulling the impervious area further away from the wetlands than existing conditions.

Consultation is occurring to ensure no impacts to the species identified as part of the Natural Heritage Bureau (NHB) Data Check.

Prior to the commencement of any work on site, erosion control measures will be installed in accordance with the manufacturer's recommended specifications to prevent any migration of sediment into the reservoirs. Proposed erosion control measures include straw wattles. These erosion control measures shall be maintained so as to ensure continued effectiveness in minimizing erosion and retaining sediment on-site during construction.

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.

The proposed project will improve recreational opportunities at the school. The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities.

The school propoerty does include a dock with water access however it is behind a locked gate and not publicly accessible. The proposed project will not have any impact on public commerce or navigation.

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 project does not inlcude any impacts to floodplain wetlands, the limit of work is located outside of the floodplain and will not cause any increase in water directed towards the floodplain.

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.

There will be no proposed impact to natural riverine forested wetland systems and scrub-shrub marsh complexes of high ecological integrity as part of this project.

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 proposed project does not inlcude any impacts to wetlands which impact drinking water supply or groundwater aquifer levels.
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.
There is an ephemeral stream on site which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events. There will be no direct impacts to the ephemeral stream however there will be impacts directly adjacent to the stream be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. The discharge from the rain garden will flow into the existing ephemeral stream without changing it’s existing characteristics.

SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1))

Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.

The only surface water present within the limit of work is an ephemeral stream which originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

There will be no direct impacts to the ephemeral stream however there will be impacts directly adjacent to the stream be for the installation of a rain garden with native plantings to allow for student interaction and improved stormwater handling. The discharge from the rain garden will flow into the existing ephemeral stream without changing it's existing characteristics.

SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2))

Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.

The proposed project does not include any docking structures.

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.
The proposed project will have no impact on any abutters or the use of their property.

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.
The proposed project will improve recreational opportunities at the school. The existing playground equipment is outdated and does not fully support the required uses by the community. The proposed playgrounds will be designed to be accessible and focus on being 'barrier free' for children in grades K-5. This inclusive design will feature classic play structures, nature-based elements, garden/landscape experiences, and ensuring accessibility and enjoyment for all children regardless of their abilities. The school propoerty does include a dock with water access however it is behind a locked gate and not publicly accessible. The proposed project will not have any impact on public commerce or navigation.

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.
No new shoreline structures are proposed as part of this project.

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.
No new shoreline structures are proposed as part of this project.

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: US ACE Highway Methodology
NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: DEVIN HERRICK
DATE OF ASSESSMENT: 12/28/2025
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.

APPENDIX B

US Army Corps of Engineers ®
New England District

Appendix B

Regional General Permits (GPs)
Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the New Hampshire DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, go to www.nae.usace.army.mil/regulatory, "Forms/Publications" and then "Application and Plan Guideline Checklist." Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

All Projects:

- Corps application form (ENG Form 4345) as appropriate.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible black and white (no color) plans no larger than 11"x17" with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
- Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don't use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
- Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
- Show project limits with existing and proposed conditions.
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- Delineation of all waterways and wetlands on the project site,:
- Use Federal delineation methods and include Corps wetland delineation data sheets. See GC 2 and www.nero.noaa.gov/hcd for eelgrass survey guidance.
- GP 3, Moorings, contains eelgrass survey requirements for the placement of moorings.
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.

US Army Corps of Engineers ®
New England District

New Hampshire General Permits (GPs)
Appendix B - Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 5, regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm to determine if there is an impaired water in the vicinity of your work area.*	X	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/. The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	N/A	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	Unknown	
2.7 What is the area of the proposed fill in wetlands?	0 SF	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	Unknown	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index	X	

3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or "Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green, respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological Condition.") Map information can be found at: • PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.		X
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the GC 21?	N/A	
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		X
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?	N/A	
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	X	

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.
** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.
`

APPENDIX C

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

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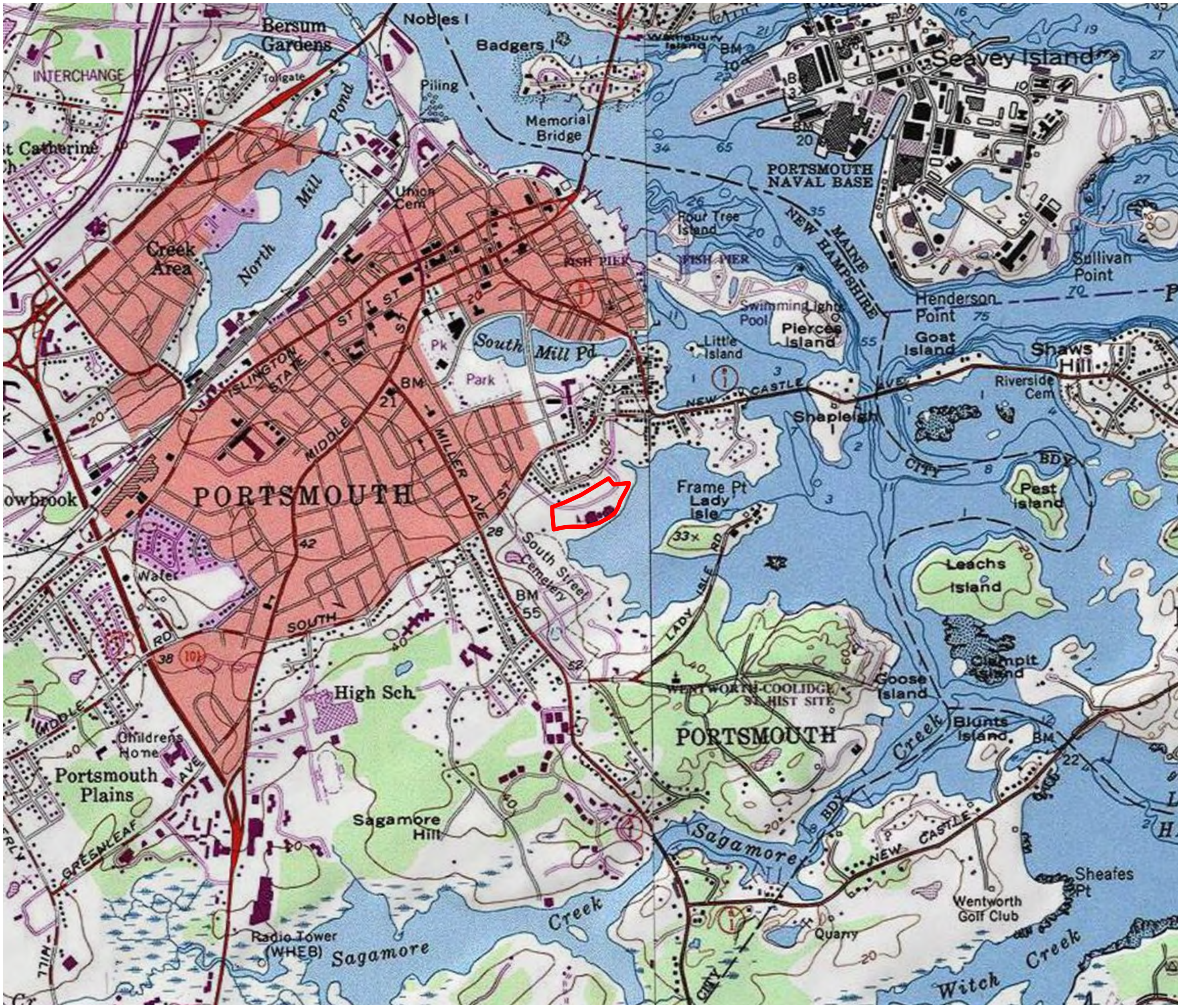

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Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

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Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area

National Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

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Legend

Investigation Area

NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat

1 Highest Ranked Habitat in New Hampshire

2 Highest Ranked Habitat in Biological Region

3 Supporting Landscapes

NH DOT Roads

NH Parcels

New Hampshire Political Boundaries

FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

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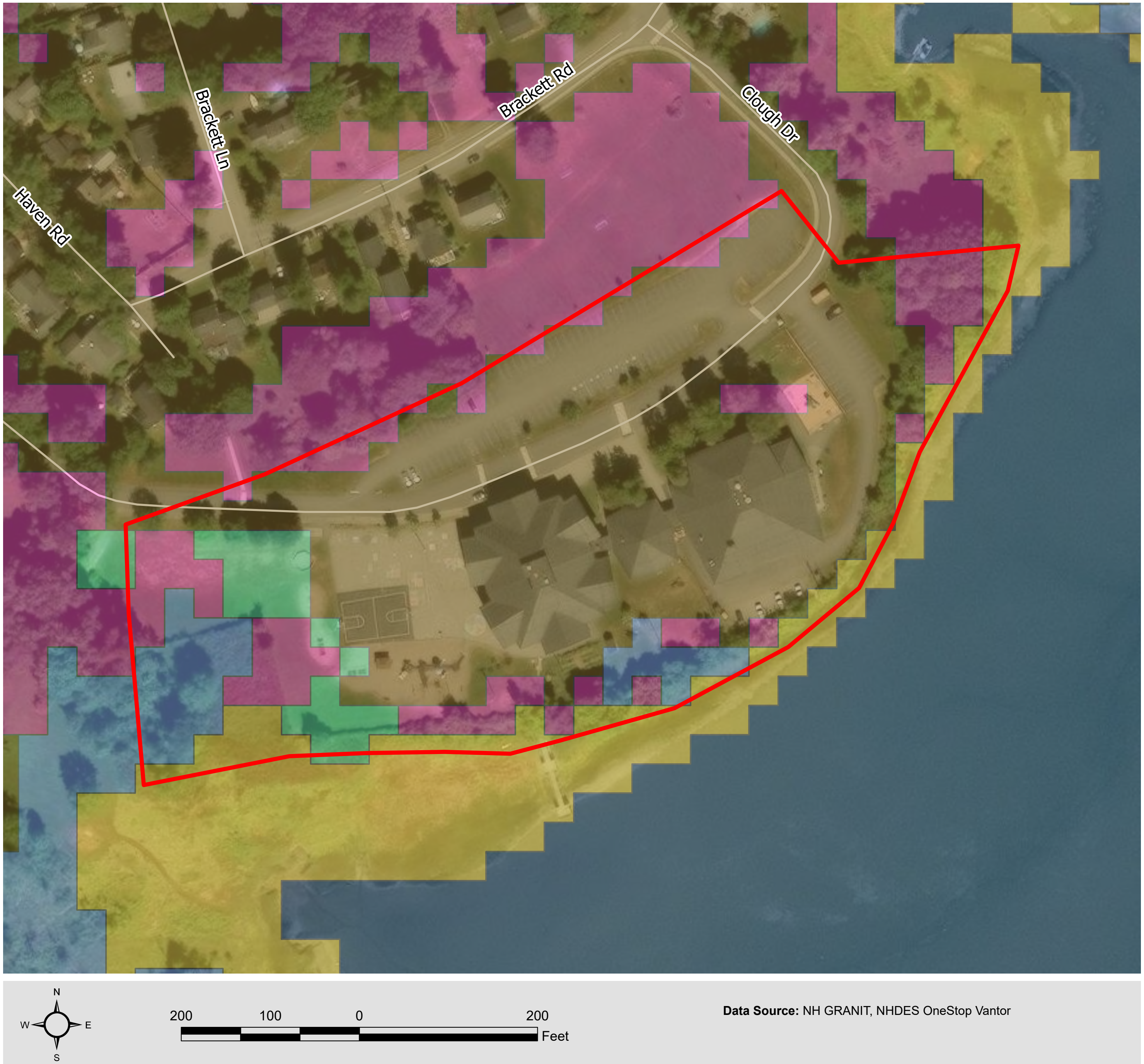

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Habitat Land Cover
  - Alpine
  - Appalachian oak-pine
  - Cliff and Talus
  - Coastal island
  - Developed Impervious
  - Developed or Barren land
  - Dune
  - Floodplain forest
  - Grassland
  - Hemlock-hardwood-pine
  - High-elevation spruce-fir
  - Lowland spruce-fir
  - Northern hardwood-conifer
  - Northern swamp
  - Open water
  - Peatland
  - Pine barren
  - Rocky ridge
  - Salt marsh
  - Sand/Gravel
  - Temperate swamp
  - Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

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Legend

Investigation Area

Map by NH DES OneStop Data Mapper_PRA

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ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

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Data Source: NH GRANIT, NHDES OneStop, FEMA

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Legend

Investigation Area

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

ArcGIS World Geocoding Service
City/Town
Parcels
Prime Wetlands
Prime Wetlands with 100ft Buffer
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0, 50, 100, 200, 300

Feet: 0, 300, 600, 1200, 1800

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

APPENDIX D

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

To: Devin Herrick, Weston & Sampson Engineering
55 Walkers Brook Drive
Reading, MA 01857
herrick.devin@wseinc.com

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc: NHFG Review, David Simmons

Date: 12/04/2025 (valid until 12/04/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: NHDES - Shoreland Standard Permit, NHDES - Wetlands Standard Dredge & Fill

DCT ID: DCT25-3222

Town: Portsmouth
Location: 50 CLOUGH DR

Project Description: The propose project includes the replacement of two playgrounds on the property of the Little Harbor School. All work will occur in uplands. To be completed by the end of 2026.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information it was determined that there are potential impacts. Please carefully read the comments below and consultation instructions on the following pages.

Plant and Exemplary Natural Community Comments: If all work is within existing disturbed areas of the playground footprints, then no ecological review for plants is needed. If work is proposed outside of the existing playground footprints, then please provide proposed plans and representative photos during the growing season of the proposed impact areas (or at the very least without snow cover).

Wildlife and Critical Habitat Comments: An ecological review is needed to further assess potential impacts to protected wildlife and critical habitat. Please refer to the Wildlife Ecological Review Instructions below for guidance on how to submit an ecological review request and information about when an ecological review is required vs recommended.

Plant and Exemplary Natural Community Ecological Review Instructions

Unless otherwise noted, an ecological review is required if plant and/or ENC records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules of a state agency

If a project is not legally required to obtain an ecological review but this letter contains plant and/or ENC records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 217-A.

To request an ecological review for plants and/or ENCs:

1. Email (preferred), mail, or hand-deliver any materials requested in the "Plant and Exemplary Natural Community Comments" section above to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with the plant/ENC ecological review process call 603-271-6261.

Wildlife and Critical Habitat Ecological Review Instructions

Requesting an Ecological Review by NHDES

An ecological review for wildlife will be completed by the NHDES Ecological Review Section if a NHDES permit, authorization, or approval is needed. *If you do not need any NHDES permits, authorizations, or approvals then please see the section regarding NHFG reviews conducted by the NH Fish and Game Department (NHFG) below.*

Unless otherwise noted, an ecological review by NHDES is required if wildlife/critical habitat records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules regarding the permit, approval, or written authorization pursuant to RSA 482-A, RSA 485-A, and RSA 236.

If a project requiring a NHDES permit, authorization, or approval is not legally required to obtain an ecological review, but this letter contains wildlife or critical habitat records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 212-A.

To request an ecological review for wildlife with DES:

1. Email (preferred), mail, or hand-deliver project information following the guidance of Fis1004.03(c) to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include “Ecological Review Request” in the subject line of the request.

For help with wildlife ecological review process call 603-271-0467 or visit the wildlife environmental review page for guideline materials including a suggested checklist of materials to provide for ecological review.

Wildlife and Critical Habitat Review Instructions (continued)

Requesting a Wildlife Review by NHFG

Wildlife reviews to assess potential impacts to protected wildlife and critical habitat for any need outside of NHDES permits, authorizations, and approvals are completed by the New Hampshire Fish and Game Department, Nongame & Endangered Wildlife Program.

To request a wildlife review with NHFG:

1. Email (preferred), mail, or hand-deliver available project information to:

   New Hampshire Fish and Game Department
   Attn. Wildlife Division, Nongame Program
   11 Hazen Drive
   Concord, New Hampshire 03301
   nhfgreview@wildlife.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Wildlife Review" in the subject line of the request.

For help with the NHFG wildlife review process call 603-271-2461.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (iPaC) website for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or 603-223-2541).

Ecological Review Database records:

The following record(s) may be impacted by the proposed project. Please refer to this list when coordinating.

Plant species	State[1]	Federal	Notes
marsh elder (*Iva frutescens*)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
northern blazing star (*Liatris novae-angliae var. novae-angliae*)*	E	--	Threats to this highly imperilled species are development activities that eliminate its habitat and invasion of its open, grassy habitat by trees and shrubs.

Vertebrate species	State[1]	Federal	Notes
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see above).
Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).

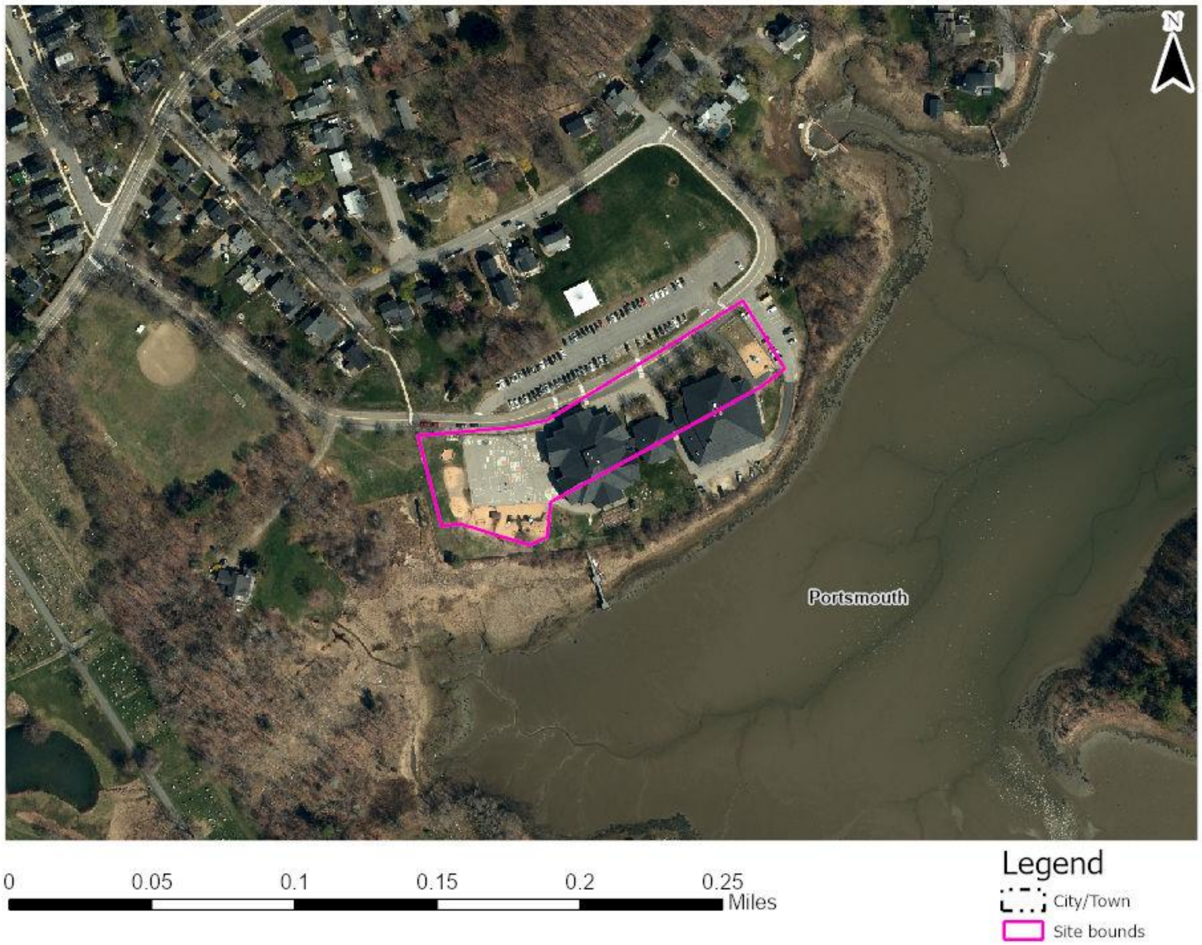
[1]Codes: "E" = Endangered, "T" = Threatened, “SC” = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.

An asterisk (*) indicates that the most recent report for that occurrence was 25 or more years ago.

Disclaimer:

DataCheck Tool screening only includes documented and verified occurrences of protected species and exemplary natural communities. The list of protected species and habitat on this letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, surveys are the best way to determine what resources are present on site.

DCT25-3222



www.des.nh.gov
29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

APPENDIX E

State of New Hampshire
DEPARTMENT OF NATURAL & CULTURAL RESOURCES
DIVISION OF HISTORICAL RESOURCES

172 Pembroke Road Concord, New Hampshire 03301
Phone: 603-271-3483 Fax: 603-271-3433
TDD Access: Relay NH 1-800-735-2964
nhdhr.dncr.nh.gov

NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

December 29, 2025

Devin Herrick

Re: 2025PR01114 - Little Harbor School Playground Renovation

Dear Devin Herrick,

In accordance with state and federal statutes [New Hampshire RSA 227C:9 and Section 106 of the National Historic Preservation Act (16 U.S.C. 470)] and with federal Advisory Council on Historic Preservation regulations, Protection of Historic Properties (36 CFR Part 800), the New Hampshire Division of Historical Resources/State Historic Preservation Office (NHSHPO) has reviewed information regarding the above-referenced project.

Based upon this review, no known historic resources appear to be affected by the project. Therefore, it is the opinion of the NHSHPO that the project will result in ***No Historic Properties Affected*** under 36 CFR Part 800.4(d)(1).

No further consultation is required unless there are any changes in approved plans, the need for additional work is identified, or an unanticipated discovery occurs. If further correspondence is required, please refer to the project review number noted above.

If you have any questions, please email Liz Schneible at: elizabeth.a.schneible@dncr.nh.gov

Thank you for the opportunity to comment.

Sincerely,

Nadine Miller

Nadine Miller
Deputy State Historic Preservation Officer
NH Division of Historical Resources

APPENDIX F

Parcel 0206-0020
Abutters List – Wetlands

Abutters List

Env-Wt 102.03 "Abutter" means any person who holds title to abutting property or who owns flowage rights on abutting property.

Env-Wt 102.04 "Abutting property" means any property immediately contiguous to the property on which a project has occurred or is proposed, provided that:

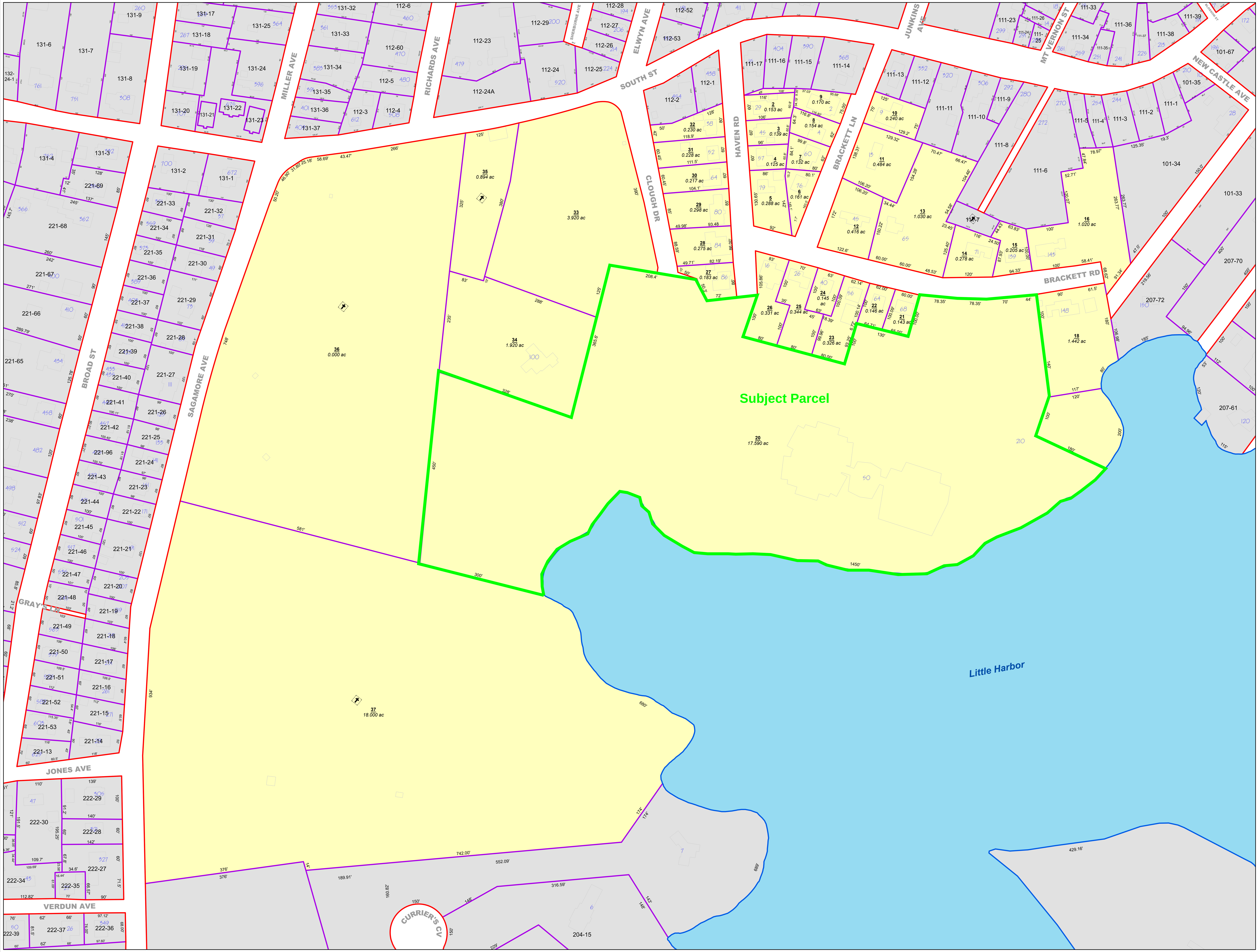
> *(a) The term does not include any property that is separated by a public road from the property on which a project has occurred or is proposed, or that is more than ¼-mile from the limits of the work or proposed work;*
>
> *(b) For any project located on the shoreline of a surface water body, the term includes any property within 100 feet of the shoreline impact in any direction;*
>
> *(c) For any project that will impact a watercourse, the term includes any property within 100 feet*
> *upstream or downstream of the impact area; and*
>
> *(d) If an abutting property is owned in whole or in part by the person who undertook the work or is proposing to undertake the work, or is necessary to meet a frontage requirement, the term includes the next contiguous property, subject to the ¼-mile limitation.*

Subject Property:
Map-Lot 0206-0020
Location 50 Clough Dr
Owner City of Portsmouth
Owner Address PO Box 628, Portsmouth, NH 03802

Abutters:

Property ID	Site Address	Owner Name	Owner Name 2	Owner Address	City	State	Zip
0206-0021-0000	68 BRACKETT RD	LACROCE EUGENE JR	LACROCE KIMBERLY	68 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0022-0000	64 BRACKETT RD	EDWARDS MICHAEL J & LEANNE A		64 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0023-0000	56 BRACKETT RD	SAYERS PATRICK J		56 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0025-0000	26 BRACKETT RD	BACON FAMILY REVOCABLE TRUST	BACON ROBERT A & CAROLEE M TRUSTEES	26 BRACKETT RD	PORTSMOUTH	NH	03801
0206-0026-0000	16 BRACKETT RD	ANDERSON NANCY B	ANDERSON JOHN W	16 BRACKETT RD	PORTSMOUTH	NH	03801

0206-0027-0000	86 HAVEN RD	PARKER KERRIN J REVO TRUST OF 2012	PARKER KERRIN J TRUSTEE	86 HAVEN RD	PORTSMOUTH	NH	03801
0206-0034-0000	100 CLOUGH DR	BANJO FAMILY REVOCABLE TRUST	RITZO CAROL B TRUSTEE	100 CLOUGH DR	PORTSMOUTH	NH	03801
0206-0033-0000	CLOUGH DR	CITY OF PORTSMOUTH	REC	PO BOX 628	PORTSMOUTH	NH	03802
0206-0036-0000	SOUTH ST	PROPRIETORS CEMETERY/SOUTH CHURCH CHARITY FUND	C/O JOHN CHAGNON/AMBIT ENGINEERING	200 GRIFFIN RD UNIT 3	PORTSMOUTH	NH	03801
0206-0037-0000	SAGAMORE AVE	CEMETERY REALTY TRUST	GRIFFIN RUTH L GRIFFIN TIMOTHY G TRSTES	479 RICHARDS AVE	PORTSMOUTH	NH	03801
0206-0018-0000		SUPRESSED PARCEL Per Assessor					
0206-0019-0001		SUPRESSED PARCEL Per Assessor					



Partial Legend

See the cover sheet for the complete legend.

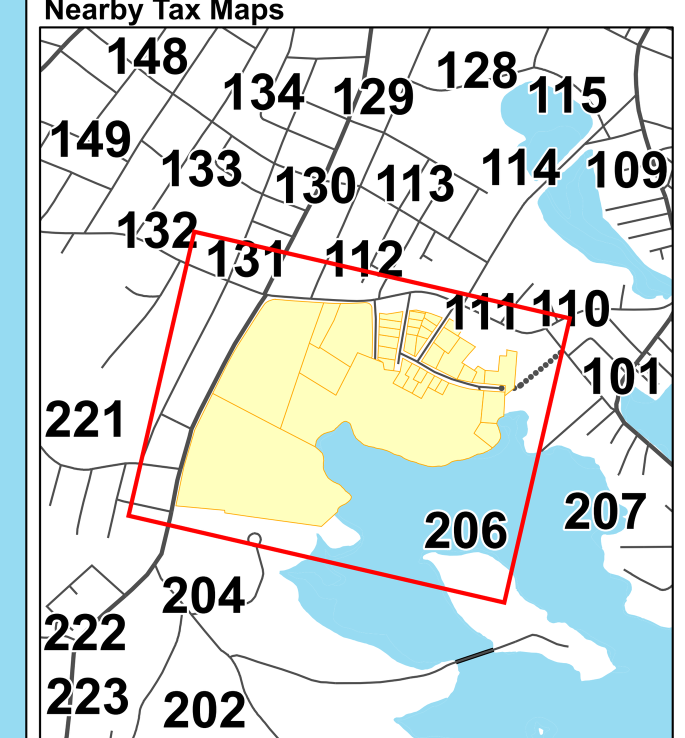
7-5A	Lot or lot-unit number
2.56 ac	Parcel area in acres (ac) or square feet (sf)
38	Address number
233-137	Parcel number from a neighboring map
68'	Parcel line dimension
SIMS AVE	Street name
	Parcel/Parcel boundary
	Parcel/ROW boundary
	Water boundary
	Structure (1994 data)
	Parcel covered by this map
	Parcel from a neighboring map (see other map for current status)

0 50 100 200 300 Feet

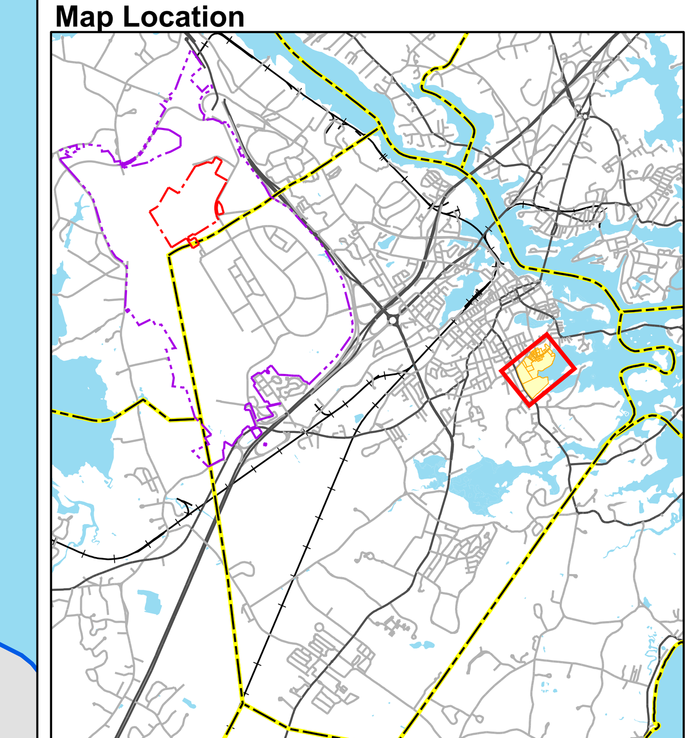
0 20 40 80 Meters

This map is for assessment purposes only. It is not intended for legal description or conveyance. Parcels are mapped as of April 1. Building footprints are 2006 data and may not represent current structures. Streets appearing on this map may be paper (unbuilt) streets. Lot numbers take precedence over address numbers. Address numbers shown on this map may not represent posted or legal addresses.

Nearby Tax Maps



Map Location



Portsmouth, New Hampshire
2025

Tax Map 206

ABUTTER NOTIFICATION
OF
NHDES WETLANDS PERMIT APPLICATION

Via Certified Mail

February 24, 2026

RE: NHDES Wetlands Permit Application
Little Harbor School Playground Renovation
50 Clough Drive, Portsmouth NH
Tax Map: 206 Lot 020

Dear Abutter:

This letter is to inform you that a Wetlands Permit Application will be filed with the NH Department of Environmental Services (DES) Wetland Bureau for a Wetlands Permit associated with the above referenced project for the renovation of two playgrounds at the Little Harbor School. Under state law RSA 482-A:3 I (d)(1), I am required to notify you via certified mail about the application, which proposes work abutting your property at the following address:

50 Clough Drive, Portsmouth NH 03801 (Lot 206-020)

Once it is filed, the permit application, including plans that show the proposed project will be available for viewing at the City Clerk's Office in Portsmouth or at the NHDES offices by scheduling a file review by calling (603) 271-2919.

If you have questions, you may contact Devin Herrick with Weston & Sampson Engineers at the contact information provided below.

Sincerely,

Devin Herrick, CWS
Technical Specialist
Weston & Sampson
55 Walkers Brook Drive, Suite 100
Reading, MA 01867 (HQ)
tel: 978-532-1900 ext. 2117

cc: NHDES Wetlands Bureau

Abutter Mailing – Little Harbor School Portsmouth Pg 1 of 2

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LACROCE EUGENE JR
LACROCE KIMBERLY
68 BRACKETT RD
PORTSMOUTH, NH 03801

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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EDWARDS MICHAEL J & LEANNE A
64 BRACKETT RD
PORTSMOUTH, NH 03801

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SAYERS PATRICK J
56 BRACKETT RD
PORTSMOUTH, NH 03801

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BACON FAMILY REVOCABLE TRUST
BACON ROBERT A & CAROLEE M
TRUSTEES
26 BRACKETT RD
PORTSMOUTH, NH 03801

for Instructions

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ANDERSON NANCY B
ANDERSON JOHN W
16 BRACKETT RD
PORTSMOUTH, NH 03801

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PARKER KERRIN J REVO TRUST OF 2012
PARKER KERRIN J TRUSTEE
86 HAVEN RD
PORTSMOUTH, NH 03801

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Abutter Mailing – Little Harbor School Portsmouth Pg 2 of 2

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BANJO FAMILY REVOCABLE TRUST
RITZO CAROL B TRUSTEE
100 CLOUGH DR
PORTSMOUTH, NH 03801

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CITY OF PORTSMOUTH - REC
PO BOX 628
PORTSMOUTH, NH 03802

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- ☐ Adult Signature Restricted Delivery $

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2/24/2026

PROPRIETORS CEMETERY/SOUTH
CHURCH CHARITY FUND
C/O JOHN CHAGNON/AMBIT ENGINEERING
200 GRIFFIN RD UNIT 3
PORTSMOUTH, NH 03801

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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- ☐ Adult Signature Restricted Delivery $

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2/24/2026

CEMETERY REALTY TRUST
GRIFFIN RUTH L GRIFFIN TIMOTHY G
TRSTES
479 RICHARDS AVE
PORTSMOUTH, NH 03801

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

APPENDIX G

Photo 1: Little Harbor School Playground

Photo 2: PEEP Playground

Photo 3: Portsmouth Harbor/Piscataqua River

Photo 4: Highest Observable Tide Line

Photo 5: Salt Marsh

Photo 6: Non-Tidal Wetland

Photo 7: Ephemeral Stream

Photo Key

APPENDIX H

westonandsampson.com

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

Wetland Delineation Report

September & November 2025

Little Harbor School
50 Clough Street
Portsmouth NH

Wetland Delineation Conducted By:
Devin Herrick, CWS

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 SITE DESCRIPTION

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. This investigation area is located on a developed parcel which has an existing school. Please see Figure 1 (Wetlands Field Map) and Figure 2 (USGS Topographic Map) of this report for the investigation area.

Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field using pink flagging by a Weston & Sampson employee who is a NH Certified Wetland Scientist trained in the wetland delineation process using the US Army Corps of Engineers Wetland Delineation methodology (Federal Delineation Method) utilizing the "Wetlands Delineation Manual", Technical Report Y-87-1, US ACE, January 1987, and the "Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region", Version 2.0, US ACE, January 2012. Further descriptions of these wetland resource areas are presented in the following sections.

2.0 DELINEATION OF WETLAND RESOURCES

2.1 Site Observations

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

- Tidal Surface Water
- Tidal Buffer Zone
- Tidal Wetland – Salt Marsh
- Non-Tidal Wetland
- Ephemeral Stream

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

2.2 Wetland Delineation Methodology

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

The Federal Delineation Method identifies wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology. Pink flags with distinct flag numbers are left in the field to show wetland limits. Vegetation, hydrology and soils are assessed in both wetland and upland areas to accurately place the wetland limits at each site. The percentage of vegetative species was estimated by creating sample plots. Sample plot radius for trees, saplings, shrubs, groundcover and woody vine strata was 30', 15', 15', 5' and 30', respectively. After creating the sample plot areas, the percent basal area coverage of each species within the monitoring plot was recorded. Using these field observations, the percent dominance of each species within its stratum was calculated. The 50/20 Rule was then used to determine dominance. Dominant species were considered the most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceeds 50% of the total dominance measure (basal area) for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum. Once the dominant species were determined, they were treated equally to determine the presence of hydrophytic vegetation. If the number of dominant species with a Wetland Indicator Status of FAC (excluding FAC-), FACW or OBL is greater than, or equal to, the number of remaining dominant species, the area was considered a jurisdictional wetland resource area based on vegetation.

A soil sample from each wetland sample plot is also taken. Each soil sample goes to a depth of at least 12-24 inches. The soil is characterized to determine if the soil sample is considered a hydric (wetland) soil. Soil samples, including mottles, are characterized based on color using Munsell Soil-Color charts as a color reference and Env-Wt 301(c) as described above.

The general area is then assessed for hydrologic conditions, including, but not limited to, site inundation, depth to free water, depth of soil saturation, water marks, drift lines, sediment deposits, and water stained leaves.

2.3 Tidal Surface Water

Per Env-Wt 602.58 Tidal surface water means “any surface water that is subject to the ebb and flow of the tide”. The Reference Line for coastal waters per RSA 483-B:4, XVII. Is “the highest observable tide line, which means a line defining the furthest landward limit of tidal flow, not including storm events, which can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks further flow of the tide.” Per Env-Wt 602.23 “Highest observable tide line (HOTL)” means “a line defining the farthest landward limit of tidal flow, not including storm events, that can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt-tolerant vegetation, or a physical barrier that blocks inland flow of the tide”

Based on the current mapping available from the United States Geological Survey (USGS) the tidal surface water identified within the investigation area is a part of Portsmouth Harbor/the Piscataqua River.

Wetland flags left in the field included:

- Highest Observable Tide (HOT)-A1 through HOT-A29 (HOT "A" Series)

These flags were placed based on a strand line of flotsam and debris, and/or the landward margin of salt-tolerant vegetation.

Tidal waters are considered to be "Surface Waters of the State" (RSA 485-A:2, XIV) and as such at the state level they are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A). Other local, state or federal regulations may apply to these areas.

Utilizing the New Hampshire hydrography dataset archived by the Geographically Referenced Analysis and Information Transfer System (GRANIT) the Piscataqua River identified within the investigation area is a seventh order stream. Since the Piscataqua River is a fourth order stream or higher is considered a "public water" per RSA 483-B:4, XVI and is subject to the Shoreland Water Quality Protection Act (RSA 483-B).

2.4 Developed Tidal Buffer Zone

Per Env-Wt 602.52 the tidal buffer zone means "the area identified in RSA 482-A:4, I as bordering on tidal waters within 100 feet of the highest observable tide line, which can contain banks, upland areas, bogs, salt marsh, swamps, meadows, flats, or other lowlands subject to tidal action." This investigation area does include land within 100 feet of the highest observable tide line of the Portsmouth Harbor/Piscataqua River. The entire investigation area is located within the developed Little Harbor School Property. This investigation area is considered developed based on Env-Wt 602.12 which indicates that developed upland "means an upland area on a lot within the tidal buffer zone or sand dune where:

(a) The natural soil and vegetation characteristics on more than 50% of the lot have been legally altered and have not returned to a natural state;
(b) If the lot is in a tidal buffer zone, developed lots abut at least 2 sides of the lot;
(c) If the lot is in a dune slack area, the lot is surrounded on 4 sides by developed lots or roadways;
(d) If the lot is in a dune, the back side of a fore dune is within the line of encroachment and the lot is

surrounded on 3 sides by developed lots or roadways; and

(e) At least one of the following is true:

(1) The lot has legally been filled or excavated in whole or in part, whether prior to jurisdiction or pursuant to a permit or other authorization;

(2) The lot contains at least one paved or graded area that is, has been, or will be used for vehicular

parking or traffic; or

(3) One or more residential or commercial buildings has been built on the lot.

The Little Harbor School property contains natural soil and vegetation characteristics on more than 50% of the lot that have been legally altered and have not returned to a natural state. Additionally, the lot is in a tidal buffer zone and developed lots abut at least 2 sides of the lot. As such, the investigation area is considered previously developed tidal buffer zone.

At the state level in NH, the tidal buffer zone is regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.5 Tidal Wetland – Salt Marsh

According to the "Life In New Hampshire Salt Marshes A Quick-Reference Field Guide" prepared by the New Hampshire Department of Environmental Services (NHDES) Coastal Program:

Salt marshes are important transitional habitat between the ocean and the land; they are estuaries where fresh and salt water mix. Salt marsh plants (halophytes) are salt tolerant and adapted to water levels that fluctuate with the tide. Tides carry in nutrients that stimulate plant growth in the marsh and carry out organic material that feeds fish and other coastal organisms. Over time, salt marshes accumulate organic material, forming into a dense layer called peat.

Low Marsh: The low marsh is located along the seaward edge of the salt marsh. It is usually flooded at every tide and exposed during low tide. It tends to occur as a narrow band along creeks and ditches, whereas the high marsh is more expansive and is flooded less frequently. The predominant plant species *found in the low marsh is the tall form of Spartina alterniflora (smooth cordgrass). This species can reach a height of six feet and is very tolerant of daily flooding and exposure.*

High Marsh: The high marsh lies between the low marsh and the marsh's upland border. It can be very expansive in some areas, sometimes extending hundreds of yards inland from the low marsh area. Soils in the high marsh are mostly saturated, and the high marsh is generally flooded only during higher than average high tides. Plant diversity is low (usually less than 25 species), with the dominant species being the grasses and rushes such as Spartina patens (salt hay grass), Distichlis spicata (spike grass), Juncus geradii (black grass), and the short form of Spartina alterniflora. Other plant species commonly found in the high marsh are Aster tenufolius (perennial salt marsh aster), and Limonium nashii (sea lavender).

Env-Wt 602.22 High salt marsh means "a tidal marsh zone located above mean high water and inundated during periods of extreme high tide and storm surge associated with coastal storms".

Wetland flags left in the field included:

- Salt Marsh (SM)-A1 through SM-A15 (SM "A" Series)

These flags were placed based on the landward margin of salt-tolerant vegetation.

These wetlands are classified using the Cowardin "*Classification of Wetlands and Deepwater Habitats of the United States*" as E2EM1P, E – Estuarine, 2 – Intertidal, EM – Emergent, 1 – Persistent, P – Irregularly Flooded.

At the state level in NH, tidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.6 Non-Tidal Wetland

Per Env-Wt 103.47 "Non-tidal wetland" means a wetland that is not subject to periodic inundation by tidal waters. The limit of the nontidal wetlands were determined utilizing the Federal Delineation Method by locating the transitional area between wetland and upland vegetation, soils and hydrologic conditions. Wetland flags left in the field included:

- WET-B1 through WET-B4 (WET “B” Series)
- WET-C1 through WET-C5 (WET “C” Series)

Dominant vegetation within the non-tidal wetlands included *Acer rubrum, Fraxinus pennsylvanica, Frangula alnus, Equisetum sylvaticum, Onoclea sensibilis, and Celastrus orbiculatus* species that generally thrive in wet conditions. Soils within the non-tidal wetland were composed of a silty loam with redoximorphic features. Other indicators of wetland hydrology included saturation, water stained leaves and oxidized rhizospheres.

Dominant vegetation in the adjacent upland areas included *Acer rubrum, Acer platanoides, Frangula alnus, Potentilla simplex, Onoclea sensibilis, and Celastrus orbiculatus*. Soils within the upland were composed of sandy loam with no evidence of mottling or hydrology within the top 12 inches.

These wetlands are classified using the Cowardin “*Classification of Wetlands and Deepwater Habitats of the United States*” as PFO1E, P – Palustrine, FO – Forested, 1 – Broad-Leaved Deciduous, E – Seasonally Flooded/Saturated.

At the state level in NH, nontidal wetlands are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.7 Ephemeral Stream

Env-Wt 102.64 “Ephemeral stream” means a watercourse that is located above the water table year-round and is not fed by groundwater, such that runoff from rainfall and snowmelt is the primary source of stream flow and so the stream has flowing water only during, and for a short duration after, precipitation or spring thaw events, but which has less flow than an intermittent stream and no evidence of riffles, meander bends, point bars, or braiding.

A single ephemeral stream was observed within the investigation area. Water originates from the asphalt playground surface (basketball court). The channelized stream terminates and becomes diffuse in the vegetated playground lawn before reaching the nearby salt marsh. No connection to the water table was observed and water only flows within the channel during storm events.

Wetland flags left in the field included:

- Center Line CL-A1 through CL-A9 (CL "A" Series)

At the state level in NH, ephemeral streams are regulated by the Fill and Dredge in Wetlands Act (RSA 482-A), unless otherwise specified by rule or law. Other local, state or federal regulations may apply to these areas.

2.8 Other Protected Areas

Weston & Sampson created Environmental Resources Maps (see Figures 3-5) of the site to determine the presence of other protected areas. These areas included:

- Priority Resource Area (PRA)
- Designated River Segment/Corridor
- Prime Wetlands
- FEMA 100 Year Floodplain
- Wildlife Action Plan

Priority Resource Area (PRA)

Per Env-Wt 103.66 "Priority resource area (PRA) means "a jurisdictional area that:

> *(a) Has documented occurrences of protected species or habitat;*
>
> *(b) Is a bog;*
>
> *(c) Is a floodplain wetland contiguous to a tier 3 or higher watercourse;*
>
> *(d) Is a designated prime wetlands;*
>
> *(e) Is a duly-established 100-foot buffer of a designated prime wetlands;*
>
> *(f) Is a sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone; or*
>
> *(g) Is any combination of (a) through (f), above.*

The Portsmouth Harbor/the Piscataqua River is a tidal water and would be considered a PRA. The investigation area includes a duly-established 100-foot buffer of a designated prime wetland which is also considered a PRA.

Designated River Segment/Corridor

The New Hampshire Rivers Management and Protection Program (RMPP) was established in 1988 with the passage of RSA 483 to protect certain rivers, called Designated Rivers, for their outstanding natural and cultural resources. The New Hampshire Department of Environmental Services RMPP maintains a NH Designated River Corridor Web Map viewer showing all of the jurisdictional designated river segments. The Designated River corridor is defined as the river and the land area located within a distance of 1,320 feet (1/4 mile) of the normal high water mark or to the landward extent of the 100 year floodplain of a designated river as designated by the Federal Emergency Management Agency, whichever distance is larger.

A map of the investigation area utilizing the NH Designated River Corridor Web Map viewer is shown in Figure 4. There are no designated river segments or corridors located within the investigation area.

Prime Wetlands

Per RSA 482-A:15.1(a) Any municipality, by its conservation commission, or, in the absence of a conservation commission, the planning board, or, in the absence of a planning board, the local governing body, may undertake to designate, map, and document prime wetlands lying within its boundaries, or if such areas lie only partly within its boundaries, then that portion lying within its boundaries. The conservation commission, planning board, or governing body shall give written notice to the owner of the affected land and all abutters 30 days prior to the public hearing, before designating any property as prime wetlands.

The investigation area included a prime wetland designated by the City of Portsmouth as wetland number 061B.

FEMA 100 Year Floodplain

The Federal Emergency Management Agency (FEMA) has designated a series of zones which area defined according to varying levels of flood risk. Per FEMA a flood is any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. The 100-year floodplain is the zone with a 1% annual chance of flooding. FEMA Flood Insurance Rate Maps (FIRM) were created online from the FEMA website to determine if there is a 100-year flood zone at the site.

See Figure 3 for FIRM map. Based on FEMA flood maps the investigation area is partially located within the 100-year floodplain.

Wildlife Action Plan

In 2020 an update was completed of the New Hampshire Fish and Game Wildlife Action Plan. According to the NH Fish and Game the aim of the Wildlife Action Plan seeks to "identify species in greatest need of conservation, habitats that are at the greatest risk, as well as land uses and activities that present the greatest threats to wildlife and habitat." The NH Wildlife Action Plan includes three sets of mapping data available for use by stakeholders:

1. Habitat Land Cover Map: which shows where the different types of wildlife habitat are located throughout the state.
2. Highest Ranked Habitat by Ecological Condition Map: which shows where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.
3. Aquatic Habitats Map: which provides an assessment of surface water habitats.

After learning what habitat may be present within a proposed project area the Wildlife Action Plan informs stakeholders about strategies for managing and protecting wildlife. The data from these maps is available on the Geographically Referenced Analysis and Information Transfer System (GRANIT) viewer.

The investigation area was investigated on the GRANIT viewer and two maps were produced (Figures 5.1 and 5.2). According to the Habitat Land Cover data the investigation area is composed of Developed Impervious, Developed or Barren land, Grassland, Hemlock-hardwood-pine, and Salt marsh cover types. The Highest Ranked Habitat by Ecological Condition data indicates that portions of investigation area are located with highest ranking habitat.

Endangered and Rare Species/Habitat

The New Hampshire Natural Heritage Bureau (NHB) keeps records of known locations of rare species and natural communities. The NHB Datacheck Tool allows the user to outline the limits of the proposed project area in order to determine if there are any records of rare species and natural communities within the proposed project limits.

The approximate proposed project limits were mapped using the NHB Datacheck Tool. Initial NHB Data Check results indicate that there are Ecological Review records in the vicinity of the approximate proposed project limits (see Appendix C). Further consultation with NHDES will be needed to determine what rare species and/or natural communities were identified. This mapping is regularly updated and subject to change.

If any portion of the project involves a federal nexus (i.e. federal permitting, federal funding ect.) than additional information may be required from the U.S. Fish and Wildlife Service.

3.0 SUMMARY

On September 12th, 2025 and November 21st, 2025, a wetland delineation was conducted at the Little Harbor School in Portsmouth, NH. Wetland areas including, a tidal perennial stream bank, a tidal wetland – salt marsh, a non-tidal wetland, and an ephemeral stream were identified and flagged in the field.

Additional environmental mapping was conducted using NH Granit data layers and FEMA FIRM mapping. This additional mapping indicates that a prime wetland and a duly-established 100-foot buffer of a designated prime wetland are present on the site. Additionally portions of the site are located within the 100-year flood zone and Highest Ranked Habitat.

4.0 REFERENCES

United States Department of Agriculture, Natural Resources Conservation Service. *2018. Field Indicators of Hydric Soils in the United States, Version 8.2.* L. M. Vasilas, G. W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USACOE, January 1987, Corps of Engineers Wetlands Delineation Manuel, Wetlands Research Program Technical Report Y-87-1.

FEMA Flood Map Service Center, online at msc.fema.gov/portal Assessed on 11/19/2025.
Tiner, Jr., Ralph W., 2005, Field Guide to Nontidal Wetland Identification

New England Hydric Soils Technical Committee, 2019, Version 4, *Field Indicator of Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

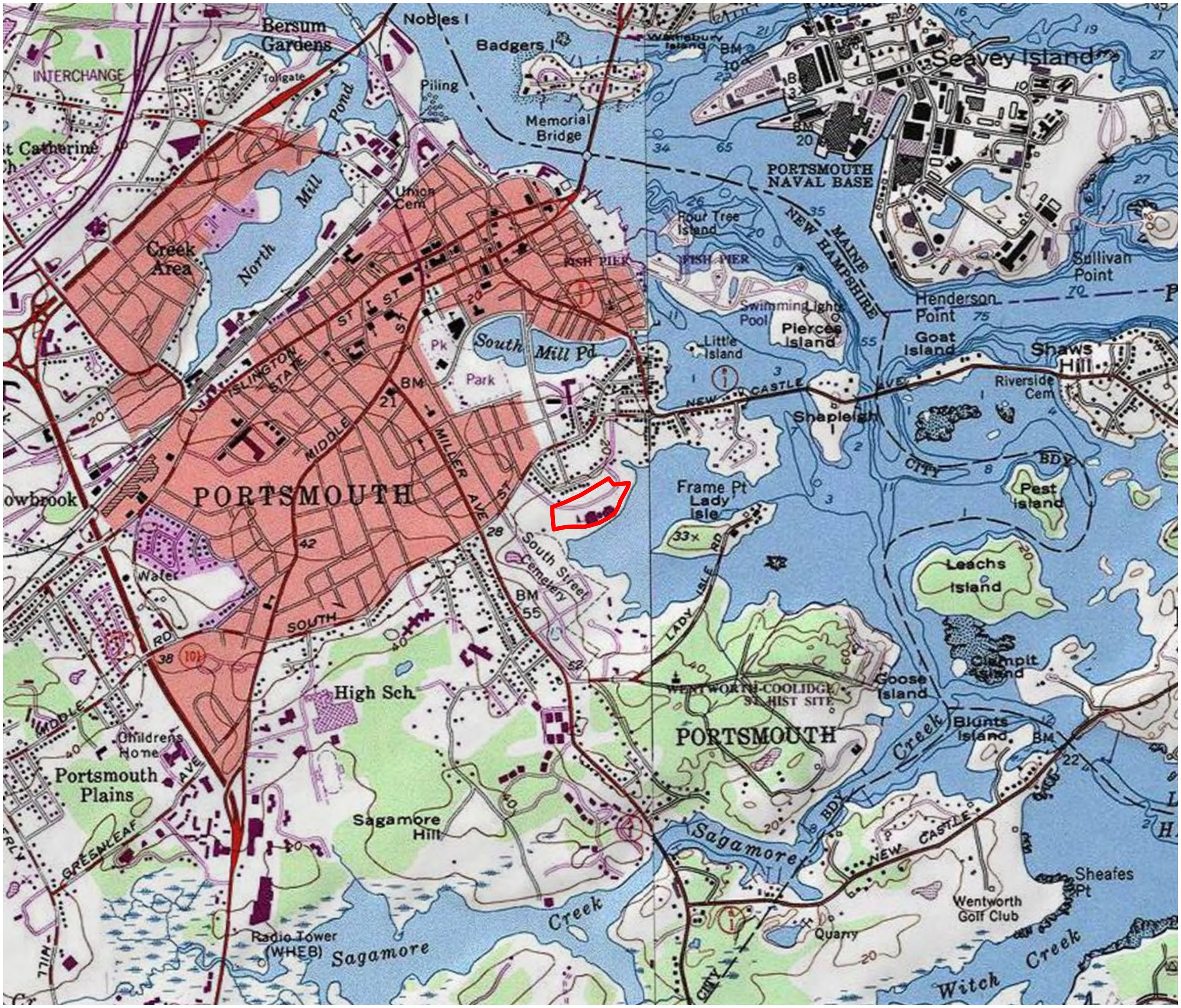
FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:20 PM **Opened:** 11/19/2025 12:21 PM



N
W E
S

1,200 600 0 1,200
Feet

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 12:30 PM Opened: 11/19/2025 12:31 PM

Legend

- Investigation Area
- National Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:31 PM

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 12:30 PM Opened: 11/19/2025 12:32 PM

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

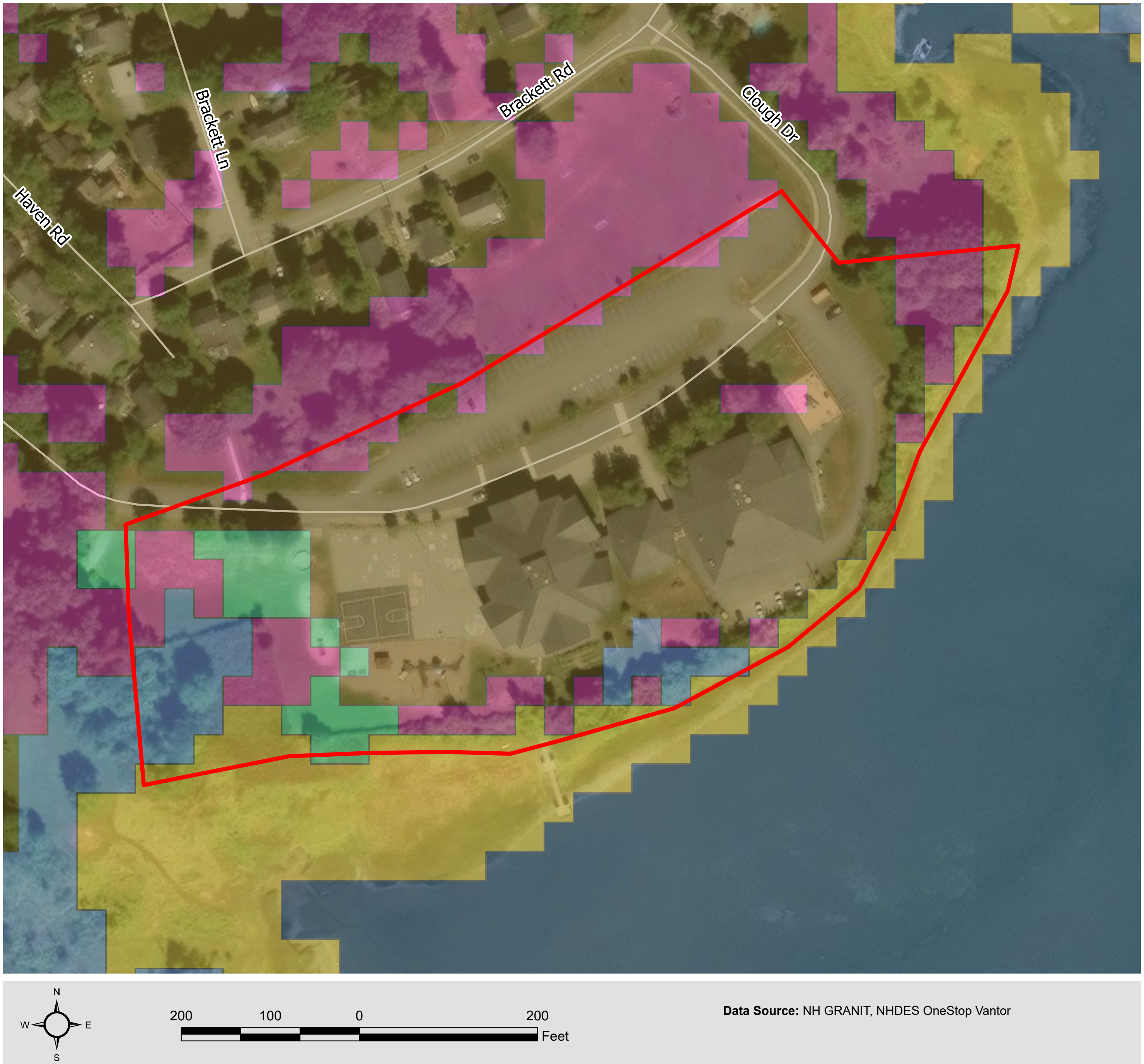
FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:34 PM **Opened:** 11/19/2025 12:35 PM



Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Habitat Land Cover
- Alpine
- Appalachian oak-pine
- Cliff and Talus
- Coastal island
- Developed Impervious
- Developed or Barren land
- Dune
- Floodplain forest
- Grassland
- Hemlock-hardwood-pine
- High-elevation spruce-fir
- Lowland spruce-fir
- Northern hardwood-conifer
- Northern swamp
- Open water
- Peatland
- Pine barren
- Rocky ridge
- Salt marsh
- Sand/Gravel
- Temperate swamp
- Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 1:02 PM Opened: 11/19/2025 1:03 PM

Map by NH DES OneStop Data Mapper_PRA

11/19/2025, 12:50:13 PM

ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:02 PM **Opened:** 11/19/2025 1:03 PM

Legend

Investigation Area

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

- ArcGIS World Geocoding Service
- City/Town
- Parcels
- Prime Wetlands
- Prime Wetlands with 100ft Buffer
- NH 2021 2022 6in RGB
- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 0.02 0.04 0.07 mi

0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

APPENDIX A

ACOE Data Forms

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region** See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp: 9/30/2027*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: Little Harbor School City/County: Portsmouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Wetland

Investigator(s): Devin herrick, CWS Section, Township, Range: ____

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066306° Long: -70.754230° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ___	**Is the Sampled Area within a Wetland?**	**Yes** X **No** ___
Hydric Soil Present?	Yes X No ___		
Wetland Hydrology Present?	Yes X No ___	If yes, optional Wetland Site ID:	____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	X Water-Stained Leaves (B9)
___ High Water Table (A2)	___ Aquatic Fauna (B13)
X Saturation (A3)	___ Marl Deposits (B15)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)
___ Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)
___ Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 10

Wetland Hydrology Present? Yes X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET B Wetland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Fraxinus pennsylvanica*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2. *Frangula alnus*	10	Yes	FAC
3. *Acer rubrum*	5	No	FAC
4.			
5.			
6.			
7.			
	40	=Total Cover	

Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Equisetum sylvaticum*	25	Yes	FACW
2. *Onoclea sensibilis*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	

Woody Vine Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	40	x 3 =	120
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	120 (A)		290 (B)

Prevalence Index = B/A = 2.42

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET B Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/2	100					Loamy/Clayey	
8-16	2.5YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
16-20	2.5YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
X Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
___ Iron Monosulfide (A18)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
___ High Chroma Sands (S11) (**LRR K, L)**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
X Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) (**LRR K, L**)
___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Red Parent Material (F21) **(outside MLRA 145)**
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ________

Depth (inches): ________

Hydric Soil Present? **Yes** X **No** ___

Remarks:

AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region** See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	*OMB Control #: 0710-0024, Exp: 9/30/2027* *Requirement Control Symbol EXEMPT:* *(Authority: AR 335-15, paragraph 5-2a)*

Project/Site: Little Harbor School City/County: Portsmouth Sampling Date: 9/12/2025

Applicant/Owner: City of Portsmouth State: NH Sampling Point: WET B Upland

Investigator(s): Devin herrick, CWS Section, Township, Range: ____

Landform (hillside, terrace, etc.): Marine terraces Local relief (concave, convex, none): None Slope %: 0-5

Subregion (LRR or MLRA): LRR R Lat: 43.066548° Long: -70.754442° Datum: WGS 84

Soil Map Unit Name: Scitico silt loam NWI classification: ____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**	
Hydric Soil Present?	Yes ____	No X	**within a Wetland?**	**Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:	____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	___ Water-Stained Leaves (B9)	
___ High Water Table (A2)	___ Aquatic Fauna (B13)	
___ Saturation (A3)	___ Marl Deposits (B15)	
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)	
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)	
___ Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WET B Upland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	Yes	FAC
2. *Acer platanoides*	15	Yes	UPL
3. *Fraxinus pennsylvanica*	5	No	FACW
4. *Malus prunifolia*	5	No	UPL
5.			
6.			
7.			
	35	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Frangula alnus*	25	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	25	=Total Cover	

Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Potentilla simplex*	10	Yes	FACU
2. *Onoclea sensibilis*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	=Total Cover	

Woody Vine Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celastrus orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	35	x 3 =	105
FACU species	15	x 4 =	60
UPL species	20	x 5 =	100
Column Totals:	80 (A)		285 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WET B Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Sandy	
10-16	10YR 4/3	100					Sandy	
16-20	10YR 4/4	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ________

Depth (inches): ________

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services,at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.**

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

APPENDIX B

Site Photographs

Photo 1: Little Harbor School Playground

Photo 2: PEEP Playground

Photo 3: Portsmouth Harbor/Piscataqua River

Photo 4: Highest Observable Tide Line

Photo 5: Salt Marsh

Photo 6: Non-Tidal Wetland

Photo 7: Ephemeral Stream

APPENDIX C

NHB Datacheck Forms

To: Devin Herrick, Weston & Sampson Engineering
55 Walkers Brook Drive
Reading, MA 01857
herrick.devin@wseinc.com

From: Ecological Review Section
New Hampshire Department of Environmental Services

cc: NHFG Review, David Simmons

Date: 12/04/2025 (valid until 12/04/2026)
Re: DataCheck Review by NHDES Ecological Review Section and NH Fish & Game
Permits: NHDES - Shoreland Standard Permit, NHDES - Wetlands Standard Dredge & Fill

DCT ID: DCT25-3222

Town: Portsmouth
Location: 50 CLOUGH DR

Project Description: The propose project includes the replacement of two playgrounds on the property of the Little Harbor School. All work will occur in uplands. To be completed by the end of 2026.

Next Steps for Applicants:

The New Hampshire Department of Environmental Services (NHDES) Ecological Review Section has reviewed the provided mapped project area against available records of protected species, Exemplary Natural Communities (ENCs), and critical habitat. Based on the project mapping and submitted information it was determined that there are potential impacts. Please carefully read the comments below and consultation instructions on the following pages.

Plant and Exemplary Natural Community Comments: If all work is within existing disturbed areas of the playground footprints, then no ecological review for plants is needed. If work is proposed outside of the existing playground footprints, then please provide proposed plans and representative photos during the growing season of the proposed impact areas (or at the very least without snow cover).

Wildlife and Critical Habitat Comments: An ecological review is needed to further assess potential impacts to protected wildlife and critical habitat. Please refer to the Wildlife Ecological Review Instructions below for guidance on how to submit an ecological review request and information about when an ecological review is required vs recommended.

Plant and Exemplary Natural Community Ecological Review Instructions

Unless otherwise noted, an ecological review is required if plant and/or ENC records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules of a state agency

If a project is not legally required to obtain an ecological review but this letter contains plant and/or ENC records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 217-A.

To request an ecological review for plants and/or ENCs:

1. Email (preferred), mail, or hand-deliver any materials requested in the "Plant and Exemplary Natural Community Comments" section above to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with the plant/ENC ecological review process call 603-271-6261.

Wildlife and Critical Habitat Ecological Review Instructions

Requesting an Ecological Review by NHDES

An ecological review for wildlife will be completed by the NHDES Ecological Review Section if a NHDES permit, authorization, or approval is needed. *If you do not need any NHDES permits, authorizations, or approvals then please see the section regarding NHFG reviews conducted by the NH Fish and Game Department (NHFG) below.*

Unless otherwise noted, an ecological review by NHDES is required if wildlife/critical habitat records are included on this letter and:

a. The project is funded or carried out by a state agency; or
b. Such a review is required pursuant to the administrative rules regarding the permit, approval, or written authorization pursuant to RSA 482-A, RSA 485-A, and RSA 236.

If a project requiring a NHDES permit, authorization, or approval is not legally required to obtain an ecological review, but this letter contains wildlife or critical habitat records, it is recommended to voluntarily proceed with an ecological review in order to ensure that project impacts do not result in a violation of RSA 212-A.

To request an ecological review for wildlife with DES:

1. Email (preferred), mail, or hand-deliver project information following the guidance of Fis1004.03(c) to:

   Department of Environmental Services
   Ecological Review Section
   P.O. Box 95
   29 Hazen Drive
   Concord, New Hampshire 03302-0095
   ecologicalreviews@des.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Ecological Review Request" in the subject line of the request.

For help with wildlife ecological review process call 603-271-0467 or visit the wildlife environmental review page for guideline materials including a suggested checklist of materials to provide for ecological review.

Wildlife and Critical Habitat Review Instructions (continued)

Requesting a Wildlife Review by NHFG

Wildlife reviews to assess potential impacts to protected wildlife and critical habitat for any need outside of NHDES permits, authorizations, and approvals are completed by the New Hampshire Fish and Game Department, Nongame & Endangered Wildlife Program.

To request a wildlife review with NHFG:

1. Email (preferred), mail, or hand-deliver available project information to:

   New Hampshire Fish and Game Department
   Attn. Wildlife Division, Nongame Program
   11 Hazen Drive
   Concord, New Hampshire 03301
   nhfgreview@wildlife.nh.gov

2. Reference the DataCheck Tool identification number (DCT ID) included on the first page of this letter and include "Wildlife Review" in the subject line of the request.

For help with the NHFG wildlife review process call 603-271-2461.

Federal Compliance

This letter does not constitute compliance with the federal Endangered Species Act (ESA). There may be occurrences of federally listed species in New Hampshire that are not included in this letter. For ESA compliance, please visit the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (iPaC) website for an official list of federally listed species that may be present in your project area. If a federal agency is involved in your project through funding, permit or other authorization, coordinate your IPaC results with your point of contact at the agency for further ESA review. If there is no federal agency nexus to your project, and you determine through IPaC, habitat evaluations etc. that a project may cause take of a federally listed species, we recommend coordinating with the USFWS' New England Field Office (newengland@fws.gov or 603-223-2541).

Ecological Review Database records:

The following record(s) may be impacted by the proposed project. Please refer to this list when coordinating.

Plant species	State[1]	Federal	Notes
marsh elder (*Iva frutescens*)	T	--	Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
northern blazing star (*Liatris novae-angliae var. novae-angliae*)*	E	--	Threats to this highly imperilled species are development activities that eliminate its habitat and invasion of its open, grassy habitat by trees and shrubs.

Vertebrate species	State[1]	Federal	Notes
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see above).
Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see above).

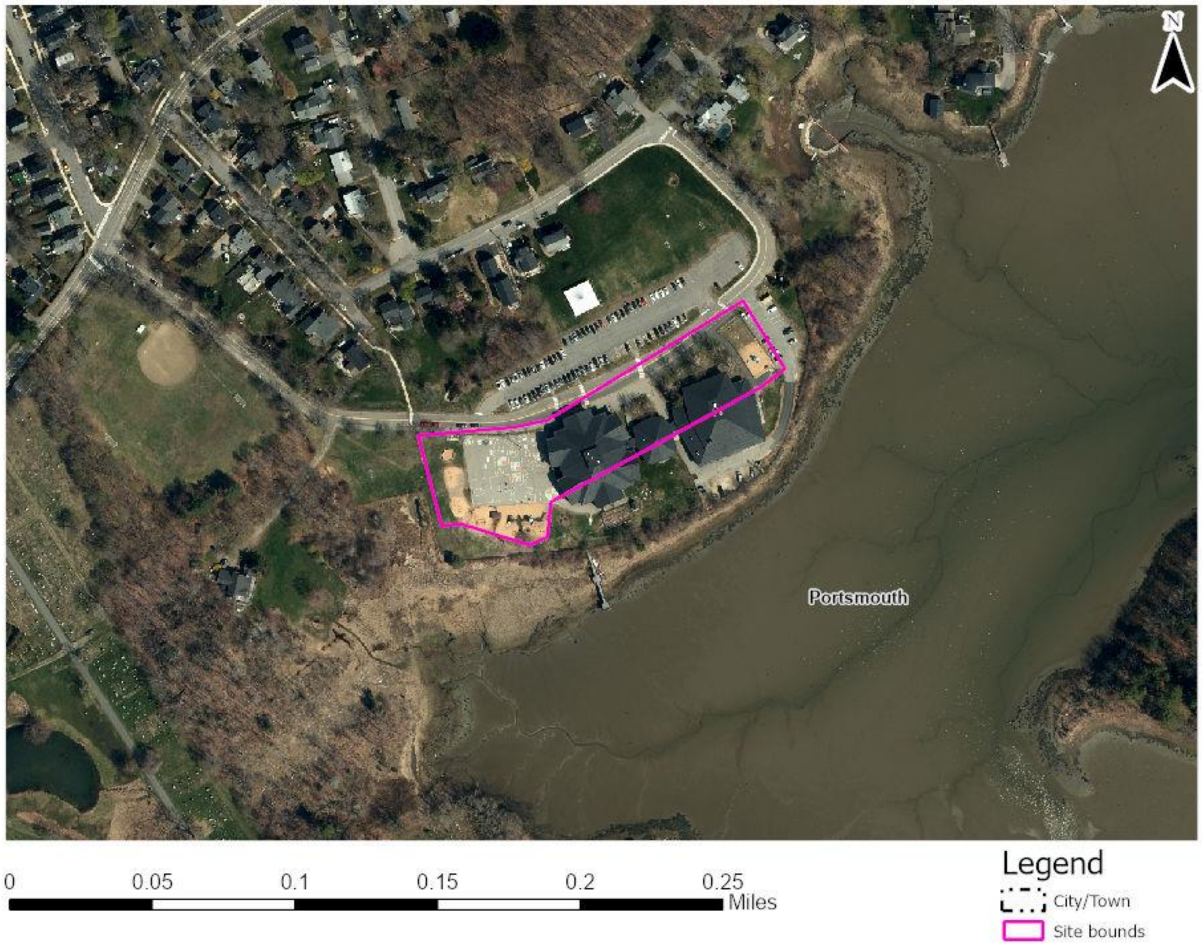
[1]Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.

An asterisk (*) indicates that the most recent report for that occurrence was 25 or more years ago.

Disclaimer:

DataCheck Tool screening only includes documented and verified occurrences of protected species and exemplary natural communities. The list of protected species and habitat on this letter does not guarantee these are the only protected species and habitat present at this location, only that their presence has not been documented and verified by state biologists and ecologists. As many areas have never been surveyed, or have only been surveyed for certain species, surveys are the best way to determine what resources are present on site.

DCT25-3222



N
Portsmouth
0
0.05
0.1
0.15
0.2
0.25
Miles
Legend
City/Town
Site bounds

APPENDIX I

westonandsampson.com

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

Functional Assessment

November 2025

Little Harbor School

50 Clough Street
Portsmouth NH

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

In accordance with Env-Wt 603.04 Coastal Functional Assessment "*(a) For minor or major standard permit applications, the applicant shall submit a CFA report that is based on the data screening information and on-site evaluation required by Env-Wt 603.03"*. The proposed upgrade the Portsmouth Little Harbor Elementary School playgrounds in Portsmouth NH requires the submission of a major impact wetlands permit. As a result, a Certified Wetland Scientist (CWS) from Weston & Sampson completed a functional assessment in order to evaluate how the wetlands on site will be affected by the proposed alteration.

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2.0 SITE DESCRIPTION

The Portsmouth Little Harbor Elementary School is located at 50 Clough Drive, Portsmouth, NH 03801, Tax Map 206 Lot 20. The school is located along the tidal Piscataqua River. An aerial locus map and USGS locus map are attached.

The existing play facilities on the property are broken down into two playgrounds, the first is located on the east side of the school known as the "PEEP Playground" and the second is located on the west side of the school known as the "Little Harbor School Playground". Both playgrounds will be renovated as part of this proposed project.

PEEP Playground

The existing PEEP Playground includes a play structure with additional loose play equipment, a wood chip base and the entire playground is surrounded by a chain link fence. There is also an existing stone retaining wall which separates play area from parking lot which will be retained by the project.

Image 1.1: Google Street Earth Image of the Existing PEEP Playground.

Little Harbor School Playground

The existing Little Harbor School Playground includes a large play structure, monkey bars/climbing structure, a gaga pit, a swing set, a basketball court and associated asphalt play area. There is also a small ephemeral stream which originates from stormwater sheet flow off the existing basketball court. The ephemeral stream dissipates into the grassy play area before reaching the salt marsh

Image 1.2: Google Street Earth Image of the Existing Little Harbor School Playground.

The Piscataqua River and an associated salt marsh are located immediately adjacent to the Little Harbor School. This complex has two wetland classification types based on the Cowardin Classification system:

E2EM1P:

> System **Estuarine (E)** : The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (Rhizophora mangle) and eastern oysters (Crassostrea virginica), are also included in the Estuarine System.

Subsystem **Intertidal (2)** : The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Emergent (EM)** : Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

Subclass **Persistent (1)** : Dominated by species that normally remain standing at least until the beginning of the next growing season. This subclass is found only in the Estuarine and Palustrine systems.

Water Regime **Irregularly Flooded (P)** : Tides flood the substrate less often than daily.

E2US3M:

System **Estuarine (E)** : The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (Rhizophora mangle) and eastern oysters (Crassostrea virginica), are also included in the Estuarine System.

Subsystem **Intertidal (2)** : The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone.

Class **Unconsolidated Shore (US)** : Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and; (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.

Subclass **Mud (3)** : The unconsolidated particles smaller than stones are predominantly silt and clay, although coarser sediments or organic material may be intermixed.

Water Regime **Irregularly Exposed (M)** : Tides expose the substrate less often than daily.

3.0 PROJECT SCOPE

The proposed scope will include the removal of existing playground equipment and installation of new play structures with associated landscape features in each of the two playgrounds on site.

PEEP Playground

The proposed PEEP playground improvements will include a variety of play elements designed for young children and group interaction. Planned equipment includes a play structure for small children, a group seesaw, acorn-shaped seating, and a wooden play bridge that will be level with the poured-in-place surfacing to ensure accessibility. A large sand play area is also proposed to encourage sensory and creative play.

In addition to the play equipment, several landscape and site enhancements are proposed in the PEEP playground to support both functionality and aesthetics. These include new plantings with boulder accents, picnic tables, and new fencing surrounding the play area. Concrete paving within the limits of the play area will serve multiple purposes, including a bag drop, walking paths, and an accessible area for replenishing sand; this space will also accommodate loose play items such as a play kitchen. New asphalt walking paths are proposed in generally the same configuration as existing conditions, with selective reductions in paved area to minimize impervious surfaces within the project limits. The landscape plan also includes the installation of seven new trees and approximately twenty new shrubs and herbaceous native species.

Little Harbor School Playground

The proposed playground equipment improvements include the installation of two new swing sets and a large play structure with a climbing element. The equipment is currently planned to be installed over an engineered wood fiber base; however, the City is exploring the availability of funding to instead utilize a permeable poured-in-place rubber safety surfacing. This alternative would not alter the proposed limits of work. In addition, the existing gaga pit will be relocated to a new location, removing the majority of the structure from the 100-foot wetland buffer where it is currently situated. The relocated gaga pit will be constructed on a concrete foundation and filled with engineered wood fiber.

Proposed landscape and site improvements focus on environmental stewardship, safety, and improved site functionality. Stormwater collection will be formalized through the creation of a rain garden designed to allow student interaction with overland flow while maintaining sheet flow into the adjacent grassy area. The existing asphalt play area, including the basketball court, will be relocated farther from the wetland, resulting in a significant overall reduction in asphalt play surface. A concrete curb will be installed around areas of engineered wood fiber to help contain the material. All existing trees on site will be retained, and additional site amenities will include a new timber guard rail and a bike rack.

New plantings will further enhance the landscape and ecological function of the site. The project includes the installation of nine new trees, with species selected in accordance with the City of Portsmouth Street Tree Manual. A total of 136 new shrubs and herbaceous native plant species will be added throughout the site. The rain garden located within the existing ephemeral stream will also receive additional plantings, including 34 herbaceous species, to support stormwater management and native habitat enhancement.

4.0 METHODOLOGY

Wetlands on site were evaluated using the Army Corps of Engineers Highway Methodology Workbook Supplement, Wetland Functions and Values, A Descriptive Approach (Highway Methodology). The approach outlined in the Highway Methodology includes a qualitative description of the physical characteristics of the wetlands, identifies the functions and values exhibited, and uses "best professional judgement" for the basis of the conclusions.

Within the Highway Methodology "Functions" are defined as:

> *Self-sustaining properties of a wetland ecosystem that exist in the absence of society. Functions result from both living and non-living components of a specific wetland. These include all processes necessary for the self-maintenance of the wetland ecosystem such as primary production and nutrient cycling. Therefore, functions relate to the ecological significance of wetland properties without regard to subjective human values.*

"Values" are defined as:

> *Benefits that derive from either one or more functions and the physical characteristics associated with a wetland. Most wetlands have corresponding societal value. This is recognized in various federal, state, and local wetland legislation that was enacted to protect these resources. The value of a particular wetland function, or combination thereof, is based on human judgment of the worth, merit, quality, or importance attributed to those functions.*

To utilize the Highway Methodology the workbook indicates that the "evaluator first determines if a wetland is suitable for particular functions and values and why. Then a determination is made if any functions and/or values are principal and why. Functions and values can be principal if they are an important physical component of a wetland ecosystem and/or are considered of special value to society, from a local, regional, and/or national perspective".

Within the Highway Methodology guidance document there are 13 functions and values. According to the workbook these functions and values "are considered by the Regulatory Branch for any Section 404 wetland permit (outlined further below in Section 4.0). These are not necessarily the only wetland functions and values possible, nor are they so precisely defined as to be unalterable. However, they do represent the best working "palette" of descriptors which can be used to paint an objective representation of the wetland resources associated with a proposed project".

A list of considerations/qualifiers for each function/value can be found within the Highway Methodology and is attached. Additional data sources including aerial photos, topographic maps, GIS data, and additional remote sensing data sources were utilized during desktop review to obtain information about the considerations/qualifiers. These considerations/qualifiers were utilized to determine the suitability of each function/value and to determine the principal functions/values of the wetland complex on site.

5.0 WETLAND FUNCTIONS AND VALUES ASSESSMENT

In accordance with The Highway Methodology described above, wetland functions and values have been qualitatively evaluated for the wetland complex on site. Notes outlining the aspects of the qualifiers/considerations for each of the 13 functions and values are discussed below (Sections 4.1 through 4.13).

The completed Wetland Function-Value Evaluation Form can be found in Appendix A and a summary of the suitable and principal functions-values for the wetland complex has been presented in the Wetland Functions and Values Summary Table (Section 4.14).

5.1 Groundwater Recharge/Discharge

This function considers the potential for the wetland to serve as a groundwater recharge and/or discharge area. It refers to the fundamental interaction between wetlands and aquifers, where there is potential for the wetland to contribute water to an aquifer (recharge) or to function as a groundwater discharge area.

The wetland complex on site is associated with a single perennial, tidal river called the Piscataqua River. The Piscataqua is 12 miles in length beginning at the confluence of the Salmon Falls River and Cocheco River and terminating in the Atlantic Ocean. According to NHDES One Stop wells do exist downstream of the Piscataqua River on New Castle Island. Soil mapping available for the area indicates that the soils in the proposed work area are composed Urban land-Canton complex and Udorthents, smoothed. Depth to restrictive layer in these soils is more than 80 inches. No piezometer data is available for the area. The Piscataqua River is an impaired water body suggesting lower water quality. The area is surrounded by development and industry which likely contributes to the impairment.

Suitability Conclusion: No. Given the tidal nature of this Piscataqua interaction with wetlands is high but interactions with aquifers is low. Low water quality.

5.2 Floodflow Alteration

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

Area of the Piscataqua and adjacent salt marsh is small relative to its watershed. The Little Harbor School is located in the lower portion of the watershed. Effective flood storage above the proposed limit of work is limited due to extensive residential development and high amount of impervious area. Salt marsh adjacent to the Piscataqua contains hydric soils and is relatively flat. Evidence of variable water levels are present. Flood storage available within slat marsh during storm events. Wetland complex receives overland flow form adjacent uplands, although storage is short term due to tidal cycle.

Suitability Conclusion: Yes. The Piscataqua River does not provide long term attenuation, but it does serve to move floodwaters away from valuable properties. Floodflow Alteration is a principal function of the Piscataqua River and adjacent salt marsh on site.

5.3 Fish and Shellfish Habitat (Marine)

This function considers the effectiveness or importance of seasonal or permanent waterbodies associated with the wetlands in question for fish and shellfish habitat.

Presence of mudflats nearby but not located within proposed work area. Piscataqua river is suitable spawning habitat. Commercially or recreationally important species are present and suitable habitat exists. The Piscataqua supports prey for higher trophic level marine organisms and provides migratory habitat for anadromous fish. The Piscataqua River is Essential Fish Habitat.

Suitability Conclusion: Yes. Although no direct observation of fish or shellfish were made on site, the Piscataqua is Essential Fish Habitat and suitable for many species. Fish and Shellfish Habitat (Marine) is a principal function of the Piscataqua River on site.

5.4 Sediment/Toxicant Retention

This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.

Limited sources of excess sediment upstream including urban roadways. Toxicants in the watershed are present from urban development. Deepwater habitat is present in the Piscataqua but the water has high velocity. Fine grained organic soils are present. Water retention time is short due to high velocities and constant tidal fluctuations. According to NHDES One Stop wells do exist downstream of the Piscataqua River on New Castle Island. River edge is intermittently aerobic due to tidal fluctuations. Dense vegetation present in adjacent salt marsh.

Suitability Conclusion: Yes. The Piscataqua is not heavily vegetated and has high velocity flows. The adjacent salt marsh is vegetated and can provide trapping of sediments but area is small compared to the size of the river.

5.5 Nutrient Removal/Retention/Transformation

This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

The area of the wetland complex is small relative to the contributing watershed based on information available from USGS Stream Stats. Deep water habitat present but with limited opportunities for sediment trapping. Sources of excess nutrients upstream include urban development. Fine grained soils are present. Emergent vegetation is present in the salt marsh. Water moves quickly through the wetland due to tidal cycle. Presence of dense vegetation and thick organic material means plant uptake and/or attenuation in sediment is present

Suitability Conclusion: Yes. Deepwater habitat provides some ability to trap nutrients however this is limited due to high velocity. Presence of dense vegetation and thick organic material means plant uptake and/or attenuation in sediment is present, but area is small compared to the size of the river.

5.6 Production Export

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

Salt marsh vegetation present which can accumulate and cause detritus development. Economically/commercially used fish found within the Piscataqua. Higher trophic level consumers are utilizing the river. Aquatic vegetation present but only a few species. High production levels occurring, however, no visible signs of export (assumes export is attenuated).

<u>Suitability Conclusion:</u> Yes. The Piscataqua River is able to produce food or usable products for humans or other living organisms.

5.7 Sediment/Shoreline Stabilization

This function considers the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.

A small salt marsh borders a large, tidally influenced river and provides shoreline stabilization despite periodic erosive pressures. The marsh exhibits a gentle topographic gradient toward the river, with localized erosion and siltation resulting from high flow velocities, open-water fetch, and recreational boating activity. The river's large watershed supplies upstream sediment and generates channelized flows during storm events. A wetland buffer greater than 10 feet wide parallels the shoreline, which is generally diffuse but includes limited areas of more defined, densely rooted banks. Dense emergent vegetation and low shrubs dominate the marsh, forming an energy-absorbing, resilient plant community that stabilizes sediments during minor flood events and reinforces the shoreline during higher-energy conditions.

<u>Suitability Conclusion:</u> Yes. In the area immediately adjacent to the limit of work, the salt marsh does provide a vegetative buffer which stabilizes sediments during minor flood events and reinforces the shoreline during higher-energy conditions. Sediment/Shoreline Stabilization is a principal function of the salt marsh bordering the Piscataqua River on site.

5.8 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 are considered.

Adjacent urban land use has degraded the upland and cut off overland access to other potential wetlands. Wildlife food sources are present within the Piscataqua. Salt marsh with dense vegetation is present. High degree of species diversity is present within the river. This evaluation methodology is not well suited to looking at aquatic wildlife habitat. Although water quality within the river is poor the Piscataqua still provides valuable aquatic habitat.

<u>Suitability Conclusion:</u> Yes. Despite adjacent development, the Piscataqua River is a crucial aquatic habitat. Wildlife habitat is a principal function of the Piscataqua River on site.

5.9 Recreation

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. Consumptive opportunities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland. Non-consumptive opportunities do not consume or diminish these resources of the wetland.

This portion of the Piscataqua River is associated with the Little Harbor School. Fishing is available from the banks of the river. No hunting is permitting and hiking is not feasible due to urban location, however walking trails are present. The river is a valuable wildlife habitat despite poor water quality. Access to the water is present for boating via school dock however, this dock is closed to the general public. Watercourse is wide enough for powered and non-powered boating. Off road parking is available at the school however access to the school dock is not publicly available.

<u>Suitability Conclusion:</u> Yes. Publicly accessible park space with plentiful opportunities for recreation.

5.10 Educational/Scientific Value

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

NHB report indicates that rare species/habitats have potential to be present on site or nearby. The adjacent urban development has caused disturbance to the Piscataqua River. The river is valuable wildlife habitat. Off road parking is available however dock access is not publicly available. Direct access to a perennial stream is present. Site is currently used for educational activities associated with the school.

<u>Suitability Conclusion:</u> Yes. Presence of school in close proximity to the wetland complex provides valuable educational value. Educational/Scientific Value is a principal function of the Piscataqua River on site.

5.11 Uniqueness/Heritage

This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values. These may include archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, its relative importance as a typical wetland class for this geographic location. These functions are clearly valuable wetland attributes relative to aspects of public health, recreation, and habitat diversity.

Dominated by deep and shallow marsh communities with areas of scrub-shrub transition, the salt marsh adjacent to the school exhibits a high degree of interspersion between emergent vegetation and open water, creating diverse habitat structure and visual interest. A well-vegetated stream corridor extends along both sides of the tidal channel, providing ecological connectivity and bank stability while supporting wildlife movement. Multiple wetland classes—including salt marsh and open water—are visible from surrounding uplands and primary viewing locations, where more than 200 feet of stream and over half an acre of open water can be observed. The wetland appears unpolluted and largely undisturbed, offering expansive views and frequent opportunities for wildlife observation. Its proximity to the school, with direct and safe access to the river, suitable off-road parking for buses, and absence of known safety hazards making it a strong potential educational site. NHB report indicates that rare species/habitats have potential to be present on site or nearby.

Suitability Conclusion: Yes. Educational and recreational opportunities, and an unpolluted, visually accessible landscape. Uniqueness/Heritage is a principal function of the Piscataqua River on site.

5.12 Visual Quality/Aesthetics

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

Only perennial stream present on site. Highly developed upland contrast with views of the river

Suitability Conclusion: Yes. Perennial stream provides contrast to development. Adjacent upland development prevents principal function for visual quality/aesthetics.

5.13 Endangered Species Habitat

This function considers the suitability of the wetland or associated watersheds to support rare, threatened, or endangered species.

NHB report indicates that rare species/habitats have potential to be present on site or nearby.

Suitability Conclusion: Yes. NHB report indicates that rare species/habitats have potential to be present on site or nearby.

5.14 Conclusion

The following table provides a summary of the suitable and principal functions of the wetlands delineated on the Site.

Table 1. Wetland Functions and Values Summary	
Functions and Values	**Wetland Complex**
Groundwater Recharge/Discharge	N
Floodflow Alteration	S, P
Fish and Shellfish Habitat	S, P
Sediment/Toxicant Retention	S
Nutrient Removal	S
Production Export	S
Sediment/Shoreline Stabilization	S, P
Wildlife Habitat	S, P
Recreation	S
Education/Scientific Value	S, P
Uniqueness/Heritage	S, P
Visual Quality/Aesthetics	S
Endangered Species Habitat	S

Legend:

S = Suitable Function/Value

P = Principal Function/Value

N = Not Suitable

Based on the functional assessment provided, the suitable functions/values of the Piscataqua River on site include Floodflow Alteration, Fish and Shellfish Habitat, Sediment/Toxicant Retention, Nutrient Removal, Production Export, Sediment/Shoreline Stabilization, Wildlife Habitat, Recreation, Educational/Scientific Value, Uniqueness/Heritage, Visual Quality/Aesthetics, and Endangered Species Habitat. The principal functions/values of the Piscataqua River on site include Floodflow Alteration, Fish and Shellfish Habitat, Sediment/Shoreline Stabilization, Wildlife Habitat, Recreation, Educational/Scientific Value, and Uniqueness/Heritage.

5.15 Proposed Project Impact on Functions/Values

The proposed project will not have any impact on the functions/values of the adjacent salt marsh and Piscataqua River. The proposed project is located in the same footprint as the existing playgrounds and will pull impervious area further from the adjacent wetlands.

6.0 REFERENCES

Cowardin, 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Publication Number FWS/OBS-79/31; Cowardin, L.M., Carter, V., Golet, F.C., and LaRoe, E.T., 1979.

NEHSTC, 1998. "Field Indicators for Identifying Hydric Soils in New England (2nd version)", New England Hydric Soils Technical Committee; New England Interstate Water Pollution Control Commission. Wilmington, MA; 1998.

USACE, 1993. The Highway Methodology Workbook; U.S. Army Corps of Engineers, New England Division. 28pp (NAEEP-360-1-30). 1993.

USACE, 1999. The Highway Methodology Workbook Supplement; U.S. Army Corps of Engineers, New England Division. 32pp (NAEEP-360-1-30a). September 1999.

APPENDIX A

Wetland Function-Value Evaluation Form

Wetland Function-Value Evaluation Form

Total area of wetland 12 linear miles Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? No

Adjacent land use School and Residential Distance to nearest roadway or other development On Site

Dominant wetland systems present E2EM1P, E2US3M Contiguous undeveloped buffer zone present None

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Lower

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland Complex
Latitude 43.066345° Longitude -70.753125°
Prepared by: DKH Date 11/21/2025
Wetland Impact:
Type Previously Developed TBZ Area 27,032 SF

Evaluation based on:
Office X Field X
Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	N	1,2,7,15		Wetland associated with tidal watercourse. Wells downstream. Water quality low.
Floodflow Alteration	Y	3,4,5,6,7,8,9,10,11,12,13,14,18	X	Piscataqua River and adjacent salt marsh do provide short term storage for water during storm events.
Fish and Shellfish Habitat	Y	1,2,3,4,5,6	X	Commercially or recreationally important species are present and suitable habitat exists.
Sediment/Toxicant Retention	Y	2,3,4,6,7,8,10,15,16		Perennial river with high velocities and tidal fluctuations. Vegetation present in salt marsh.
Nutrient Removal	Y	2,3,4,5,7,8,9,10		Deepwater habitat with upstream nutrient sources. Plant uptake and/or attenuation in sediment is present
Production Export	Y	1,3,4,5,6,10,12,14		Economically/commercially used fish found within the Piscataqua. Higher trophic level consumers are utilizing the river.
Sediment/Shoreline Stabilization	Y	1,2,3,4,6,7,8,9,10,11,13,15	X	The salt marsh does provide a vegetative buffer. High velocity flows are present.
Wildlife Habitat	Y	3,8,9,11,13,19,21	X	Although water quality within the river is poor the Piscataqua still provides valuable aquatic habitat.
Recreation	Y	2,5,7,8,9,10,12		Good watercourse for boating and fishing however access to the school dock is not publicly available.
Educational/Scientific Value	Y	1,2,3,5,8,9,10,11,14,16	X	Site is currently used for educational activities associated with the school. Dock not publicly available.
Uniqueness/Heritage	Y	2,5,6,7,8,9,10,11,12,13,14,16,17,19,22,24,27	X	Unique presence of school with opportunities for interaction with wetland. Highly aesthetic views of the waterfront.
Visual Quality/Aesthetics	Y	1,2,3,6,7,8,10,11,12		Perennial stream provides contrast to development. Adjacent upland development prevents principal function for visual quality/aesthetics.
ES Endangered Species Habitat	Y	1,2		NHB report indicates that rare species/habitats have potential to be present on site or nearby.
Other				

Notes:

* Refer to backup list of numbered considerations.

APPENDIX B

Highway Methodology Considerations/Qualifiers

Appendix A

Wetland evaluation supporting documentation; Reproducible forms.

Below is an example list of considerations that was used for a New Hampshire highway project. Considerations are flexible, based on best professional judgment and interdisciplinary team consensus. This example provides a comprehensive base, however, and may only need slight modifications for use in other projects.

GROUNDWATER RECHARGE/DISCHARGE— This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.

CONSIDERATIONS/QUALIFIERS

1. Public or private wells occur downstream of the wetland.
2. Potential exists for public or private wells downstream of the wetland.
3. Wetland is underlain by stratified drift.
4. Gravel or sandy soils present in or adjacent to the wetland.
5. Fragipan does not occur in the wetland.
6. Fragipan, impervious soils, or bedrock does occur in the wetland.
7. Wetland is associated with a perennial or intermittent watercourse.
8. Signs of groundwater recharge are present or piezometer data demonstrates recharge.
9. Wetland is associated with a watercourse but lacks a defined outlet or contains a constricted outlet.
10. Wetland contains only an outlet, no inlet.
11. Groundwater quality of stratified drift aquifer within or downstream of wetland meets drinking water standards.
12. Quality of water associated with the wetland is high.
13. Signs of groundwater discharge are present (e.g., springs).
14. Water temperature suggests it is a discharge site.
15. Wetland shows signs of variable water levels.
16. Piezometer data demonstrates discharge.
17. Other

FLOODFLOW ALTERATION (Storage & Desynchronization) — This function considers the effectiveness of the wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of floodwaters. It adds to the stability of the wetland ecological system or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.

CONSIDERATIONS/QUALIFIERS

1. Area of this wetland is large relative to its watershed.
2. Wetland occurs in the upper portions of its watershed.
3. Effective flood storage is small or non-existent upslope of or above the wetland.
4. Wetland watershed contains a high percent of impervious surfaces.
5. Wetland contains hydric soils which are able to absorb and detain water.
6. Wetland exists in a relatively flat area that has flood storage potential.
7. Wetland has an intermittent outlet, ponded water, or signs are present of variable water level.
8. During flood events, this wetland can retain higher volumes of water than under normal or average rainfall conditions.
9. Wetland receives and retains overland or sheet flow runoff from surrounding uplands.
10. In the event of a large storm, this wetland may receive and detain excessive flood water from a nearby watercourse.
11. Valuable properties, structures, or resources are located in or near the floodplain downstream from the wetland.
12. The watershed has a history of economic loss due to flooding.
13. This wetland is associated with one or more watercourses.
14. This wetland watercourse is sinuous or diffuse.
15. This wetland outlet is constricted.
16. Channel flow velocity is affected by this wetland.
17. Land uses downstream are protected by this wetland.
18. This wetland contains a high density of vegetation.
19. Other

FISH AND SHELLFISH HABITAT (FRESHWATER) — This function considers the effectiveness of seasonal or permanent watercourses associated with the wetland in question for fish and shellfish habitat.

CONSIDERATIONS/QUALIFIERS

1. Forest land dominant in the watershed above this wetland.
2. Abundance of cover objects present.

STOP HERE IF THIS WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

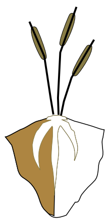
3. Size of this wetland is able to support large fish/shellfish populations.
4. Wetland is part of a larger, contiguous watercourse.
5. Wetland has sufficient size and depth in open water areas so as not to freeze solid and retain some open water during winter.
6. Stream width (bank to bank) is more than 50 feet.
7. Quality of the watercourse associated with this wetland is able to support healthy fish/shellfish populations.
8. Streamside vegetation provides shade for the watercourse.
9. Spawning areas are present (submerged vegetation or gravel beds).
10. Food is available to fish/shellfish populations within this wetland.
11. Barrier(s) to anadromous fish (such as dams, including beaver dams, waterfalls, road crossing) are absent from the stream reach associated with this wetland.
12. Evidence of fish is present.
13. Wetland is stocked with fish.
14. The watercourse is persistent.
15. Man-made streams are absent.
16. Water velocities are not too excessive for fish usage.
17. Defined stream channel is present.
18. Other

Although the above example refers to freshwater wetlands, it can also be adapted for marine ecosystems. The following is an example provided by the National Marine Fisheries Service (NMFS) of an adaptation for the fish and shellfish function.

FISH AND SHELLFISH HABITAT (MARINE) — This function considers the effectiveness of wetlands, embayments, tidal flats, vegetated shallows, and other environments in supporting marine resources such as fish, shellfish, marine mammals, and sea turtles.

CONSIDERATIONS/QUALIFIERS

1. Special aquatic sites (tidal marsh, mud flats, eelgrass beds) are present.
2. Suitable spawning habitat is present at the site or in the area.
3. Commercially or recreationally important species are present or suitable habitat exists.
4. The wetland/waterway supports prey for higher trophic level marine organisms.
5. The waterway provides migratory habitat for anadromous fish.
6. Essential fish habitat, as defined by the 1996 amendments to the Magnuson-Stevens Fishery & Conservation Act, is present (consultation with NMFS may be necessary).
7. Other



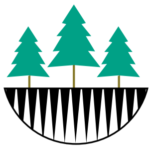
SEDIMENT/TOXICANT/PATHOGEN RETENTION — This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.

CONSIDERATIONS/QUALIFIERS

1. Potential sources of excess sediment are in the watershed above the wetland.
2. Potential or known sources of toxicants are in the watershed above the wetland.
3. Opportunity for sediment trapping by slow moving water or deepwater habitat are present in this wetland.
4. Fine grained mineral or organic soils are present.
5. Long duration water retention time is present in this wetland.
6. Public or private water sources occur downstream.
7. The wetland edge is broad and intermittently aerobic.
8. The wetland is known to have existed for more than 50 years.
9. Drainage ditches have not been constructed in the wetland.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

10. Wetland is associated with an intermittent or perennial stream or a lake.
11. Channelized flows have visible velocity decreases in the wetland.
12. Effective floodwater storage in wetland is occurring. Areas of impounded open water are present.
13. No indicators of erosive forces are present. No high water velocities are present.
14. Diffuse water flows are present in the wetland.
15. Wetland has a high degree of water and vegetation interspersion.
16. Dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation by dense vegetation is present.
17. Other



NUTRIENT REMOVAL/RETENTION/TRANSFORMATION — This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

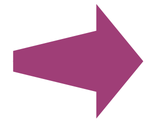
CONSIDERATIONS/QUALIFIERS

1. Wetland is large relative to the size of its watershed.
2. Deep water or open water habitat exists.
3. Overall potential for sediment trapping exists in the wetland.

4. Potential sources of excess nutrients are present in the watershed above the wetland.
5. Wetland saturated for most of the season. Ponded water is present in the wetland.
6. Deep organic/sediment deposits are present.
7. Slowly drained fine grained mineral or organic soils are present.
8. Dense vegetation is present.
9. Emergent vegetation and/or dense woody stems are dominant.
10. Opportunity for nutrient attenuation exists.
11. Vegetation diversity/abundance sufficient to utilize nutrients.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

12. Waterflow through this wetland is diffuse.
13. Water retention/detention time in this wetland is increased by constricted outlet or thick vegetation.
14. Water moves slowly through this wetland.
15. Other



PRODUCTION EXPORT (Nutrient) — This function evaluates the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

CONSIDERATIONS/QUALIFIERS

1. Wildlife food sources grow within this wetland.
2. Detritus development is present within this wetland
3. Economically or commercially used products found in this wetland.
4. Evidence of wildlife use found within this wetland.
5. Higher trophic level consumers are utilizing this wetland.
6. Fish or shellfish develop or occur in this wetland.
7. High vegetation density is present.
8. Wetland exhibits high degree of plant community structure/species diversity.
9. High aquatic vegetative diversity/abundance is present.
10. Nutrients exported in wetland watercourses (permanent outlet present).
11. “Flushing” of relatively large amounts of organic plant material occurs from this wetland.
12. Wetland contains flowering plants that are used by nectar-gathering insects.
13. Indications of export are present.
14. High production levels occurring, however, no visible signs of export (assumes export is attenuated).
15. Other

SEDIMENT/SHORELINE STABILIZATION — This function considers the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.

CONSIDERATIONS/QUALIFIERS

1. Indications of erosion or siltation are present.
2. Topographical gradient is present in wetland.
3. Potential sediment sources are present up-slope.
4. Potential sediment sources are present upstream.
5. No distinct shoreline or bank is evident between the waterbody and the wetland or upland.
6. A distinct step between the open waterbody or stream and the adjacent land exists (i.e., sharp bank) with dense roots throughout.
7. Wide wetland (>10’) borders watercourse, lake, or pond.
8. High flow velocities in the wetland.
9. The watershed is of sufficient size to produce channelized flow.
10. Open water fetch is present.
11. Boating activity is present.
12. Dense vegetation is bordering watercourse, lake, or pond.
13. High percentage of energy-absorbing emergents and/or shrubs border a watercourse, lake, or pond.
14. Vegetation is comprised of large trees and shrubs that withstand major flood events or erosive incidents and stabilize the shoreline on a large scale (feet).
15. Vegetation is comprised of a dense resilient herbaceous layer that stabilizes sediments and the shoreline on a small scale (inches) during minor flood events or potentially erosive events.
16. Other

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. Species lists of observed and potential animals should be included in the wetland assessment report.[1]

CONSIDERATIONS/QUALIFIERS

1. Wetland is not degraded by human activity.
2. Water quality of the watercourse, pond, or lake associated with this wetland meets or exceeds Class A or B standards.
3. Wetland is not fragmented by development.
4. Upland surrounding this wetland is undeveloped.
5. More than 40% of this wetland edge is bordered by upland wildlife habitat (e.g., brushland, woodland, active farmland, or idle land) at least 500 feet in width.
6. Wetland is contiguous with other wetland systems connected by a watercourse or lake.
7. Wildlife overland access to other wetlands is present.
8. Wildlife food sources are within this wetland or are nearby.
9. Wetland exhibits a high degree of interspersion of vegetation classes and/or open water.
10. Two or more islands or inclusions of upland within the wetland are present.
11. Dominant wetland class includes deep or shallow marsh or wooded swamp.
12. More than three acres of shallow permanent open water (less than 6.6 feet deep), including streams in or adjacent to wetland, are present.
13. Density of the wetland vegetation is high.
14. Wetland exhibits a high degree of plant species diversity.
15. Wetland exhibits a high degree of diversity in plant community structure (e.g., tree/shrub/vine/grasses/mosses)
16. Plant/animal indicator species are present. (List species for project)
17. Animal signs observed (tracks, scats, nesting areas, etc.)
18. Seasonal uses vary for wildlife and wetland appears to support varied population diversity/abundance during different seasons.
19. Wetland contains or has potential to contain a high population of insects.
20. Wetland contains or has potential to contain large amphibian populations.
21. Wetland has a high avian utilization or its potential.
22. Indications of less disturbance-tolerant species are present.
23. Signs of wildlife habitat enhancement are present (birdhouses, nesting boxes, food sources, etc.).
24. Other

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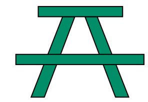
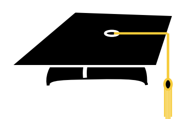
[1]In March 1995, a rapid wildlife habitat assessment method was completed by a University of Massachusetts research team with funding and oversight provided by the New England Transportation Consortium. The method is called WEThings (wetland habitat indicators for non-game species). It produces a list of potential wetland-dependent mammal, reptile, and amphibian species that may be present in the wetland. The output is based on observable habitat characteristics documented on the field data form. This method may be used to generate the wildlife species list recommended as backup information to the wetland evaluation form and to augment the considerations. Use of this method should first be coordinated with the Corps project manager. A computer program is also available to expedite this process.



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. Consumptive opportunities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland. Non-consumptive opportunities do not consume or diminish these resources of the wetland.

CONSIDERATIONS/QUALIFIERS

1. Wetland is part of a recreation area, park, forest, or refuge.
2. Fishing is available within or from the wetland.
3. Hunting is permitted in the wetland.
4. Hiking occurs or has potential to occur within the wetland.
5. Wetland is a valuable wildlife habitat.
6. The watercourse, pond, or lake associated with the wetland is unpolluted.
7. High visual/aesthetic quality of this potential recreation site.
8. Access to water is available at this potential recreation site for boating, canoeing, or fishing.
9. The watercourse associated with this wetland is wide and deep enough to accommodate canoeing and/or non-powered boating.
10. Off-road public parking available at the potential recreation site.
11. Accessibility and travel ease is present at this site.
12. The wetland is within a short drive or safe walk from highly populated public and private areas.
13. Other



EDUCATIONAL/SCIENTIFIC VALUE — This value considers the suitability of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

CONSIDERATIONS/QUALIFIERS

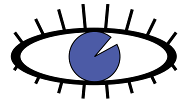
1. Wetland contains or is known to contain threatened, rare, or endangered species.
2. Little or no disturbance is occurring in this wetland.
3. Potential educational site contains a diversity of wetland classes which are accessible or potentially accessible.
4. Potential educational site is undisturbed and natural.
5. Wetland is considered to be a valuable wildlife habitat.
6. Wetland is located within a nature preserve or wildlife management area.
7. Signs of wildlife habitat enhancement present (bird houses, nesting boxes, food sources, etc.).
8. Off-road parking at potential educational site suitable for school bus access in or near wetland.
9. Potential educational site is within safe walking distance or a short drive to schools.
10. Potential educational site is within safe walking distance to other plant communities.
11. Direct access to perennial stream at potential educational site is available.
12. Direct access to pond or lake at potential educational site is available.
13. No known safety hazards exist within the potential educational site.
14. Public access to the potential educational site is controlled.
15. Handicap accessibility is available.
16. Site is currently used for educational or scientific purposes.
17. Other

UNIQUENESS/HERITAGE — This value considers the effectiveness of the wetland or its associated waterbodies to provide certain special values. These may include archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, its relative importance as a typical wetland class for this geographic location. These functions are clearly valuable wetland attributes relative to aspects of public health, recreation, and habitat diversity.

CONSIDERATIONS/QUALIFIERS

1. Upland surrounding wetland is primarily urban.
2. Upland surrounding wetland is developing rapidly.
3. More than 3 acres of shallow permanent open water (less than 6.6 feet deep), including streams, occur in wetlands.
4. Three or more wetland classes are present.
5. Deep and/or shallow marsh or wooded swamp dominate.
6. High degree of interspersion of vegetation and/or open water occur in this wetland.
7. Well-vegetated stream corridor (15 feet on each side of the stream) occurs in this wetland.
8. Potential educational site is within a short drive or a safe walk from schools.
9. Off-road parking at potential educational site is suitable for school buses.
10. No known safety hazards exist within this potential educational site.
11. Direct access to perennial stream or lake exists at potential educational site.
12. Two or more wetland classes are visible from primary viewing locations.
13. Low-growing wetlands (marshes, scrub-shrub, bogs, open water) are visible from primary viewing locations.
14. Half an acre of open water or 200 feet of stream is visible from the primary viewing locations.
15. Large area of wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
16. General appearance of the wetland visible from primary viewing locations is unpolluted and/or undisturbed.
17. Overall view of the wetland is available from the surrounding upland.
18. Quality of the water associated with the wetland is high.
19. Opportunities for wildlife observations are available.
20. Historical buildings are found within the wetland.
21. Presence of pond or pond site and remains of a dam occur within the wetland.
22. Wetland is within 50 yards of the nearest perennial watercourse.
23. Visible stone or earthen foundations, berms, dams, standing structures, or associated features occur within the wetland.
24. Wetland contains critical habitat for a state- or federally-listed threatened or endangered species.
25. Wetland is known to be a study site for scientific research.
26. Wetland is a natural landmark or recognized by the state natural heritage inventory authority as an exemplary natural community.
27. Wetland has local significance because it serves several functional values.
28. Wetland has local significance because it has biological, geological, or other features that are locally rare or unique.
29. Wetland is known to contain an important archaeological site.
30. Wetland is hydrologically connected to a state or federally designated scenic river.
31. Wetland is located in an area experiencing a high wetland loss rate.
32. Other

VISUAL QUALITY/AESTHETICS — This value considers the visual and aesthetic quality or usefulness of the wetland.



CONSIDERATIONS/QUALIFIERS

1. Multiple wetland classes are visible from primary viewing locations.
2. Emergent marsh and/or open water are visible from primary viewing locations.
3. A diversity of vegetative species is visible from primary viewing locations.
4. Wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
5. Land use surrounding the wetland is undeveloped as seen from primary viewing locations.
6. Visible surrounding land use form contrasts with wetland.
7. Wetland views absent of trash, debris, and signs of disturbance.
8. Wetland is considered to be a valuable wildlife habitat.
9. Wetland is easily accessed.
10. Low noise level at primary viewing locations.
11. Unpleasant odors absent at primary viewing locations.
12. Relatively unobstructed sight line exists through wetland.
13. Other

ENDANGERED SPECIES HABITAT — This value considers the suitability of the wetland to support threatened or endangered species.

ES

CONSIDERATIONS/QUALIFIERS

1. Wetland contains or is known to contain threatened or endangered species.
2. Wetland contains critical habitat for a state or federally listed threatened or endangered species.

APPENDIX C

Supporting Maps and Figures

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:04 PM **Opened:** 12/22/2025 5:35 AM

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200 100 0 200
Feet

Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Points
- Salt Marsh
- Investigation Area
- Highest Observable Tide Reference Line
- Coastal Wetland
- Ephemeral Stream - Center Line

National Wetlands Inventory Plus

Wetland Type

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- NH DOT Roads
- NH Parcels

FIGURE 1

Little Harbor School
Portsmouth NH

Wetlands Field Map

Weston & Sampson

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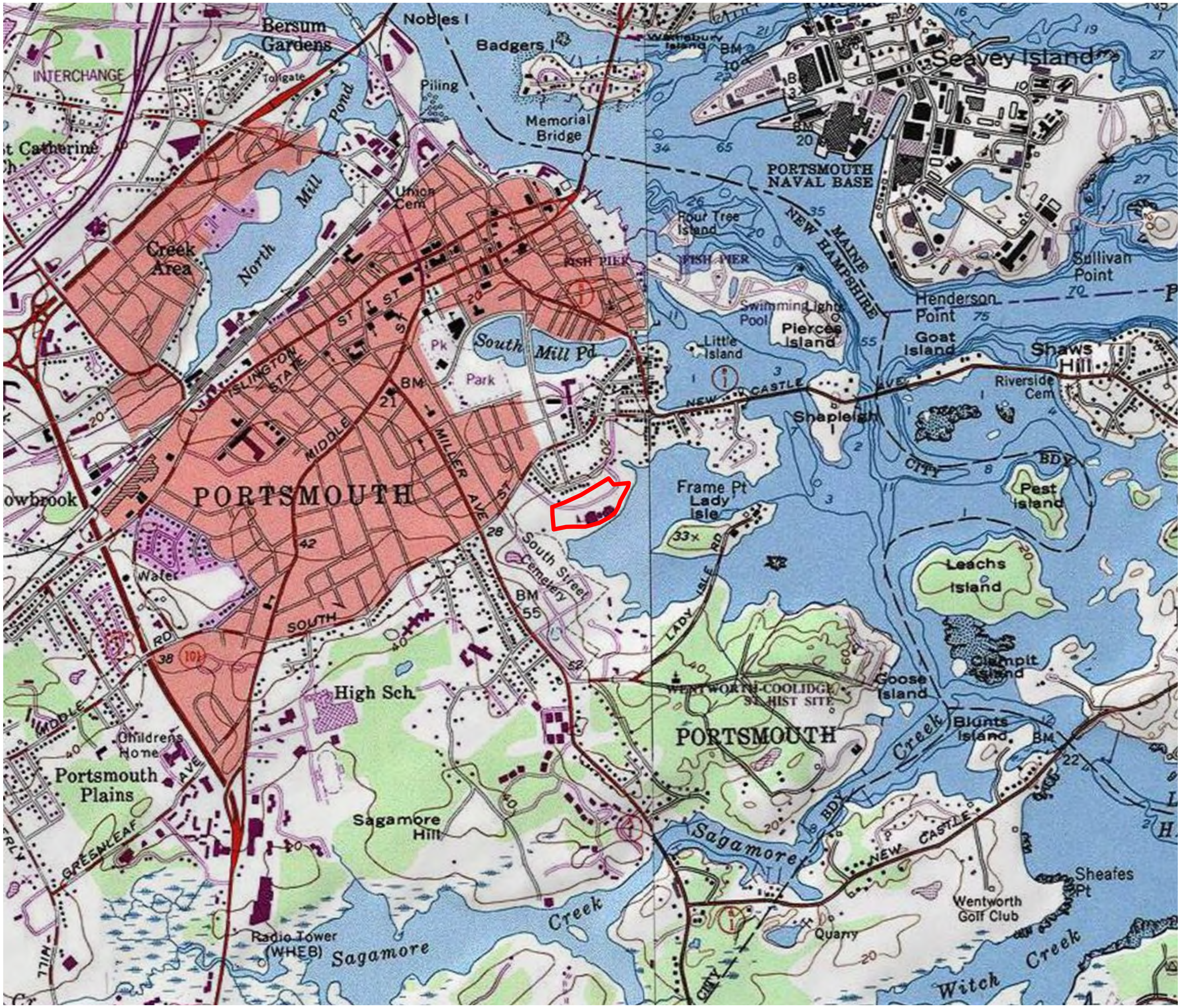

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1,200 600 0 1,200
Feet

Data Source: NH GRANIT, NHDES OneStop Copyright:© 2013 National Geographic Society, i-cubed, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Legend

Investigation Area

FIGURE 2

Little Harbor School
Portsmouth NH

USGS Locus Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 12:30 PM **Opened:** 11/19/2025 12:31 PM

Data Source: NH GRANIT, NHDES OneStop, FEMA Microsoft, Vantor

Legend

- Investigation Area
- National Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- NH DOT Roads

FIGURE 3

Little Harbor School
Portsmouth NH

FEMA Map

Weston & Sampson

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Data Source: NH GRANIT, NHDES OneStop Microsoft, Vantor

Legend

- Investigation Area
- Designated Rivers 24K
- Designated River Corridor
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.1

Little Harbor School
Portsmouth NH

Designated River Map

Weston & Sampson

Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Highest Ranked Wildlife Habitat
- 1 Highest Ranked Habitat in New Hampshire
- 2 Highest Ranked Habitat in Biological Region
- 3 Supporting Landscapes
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

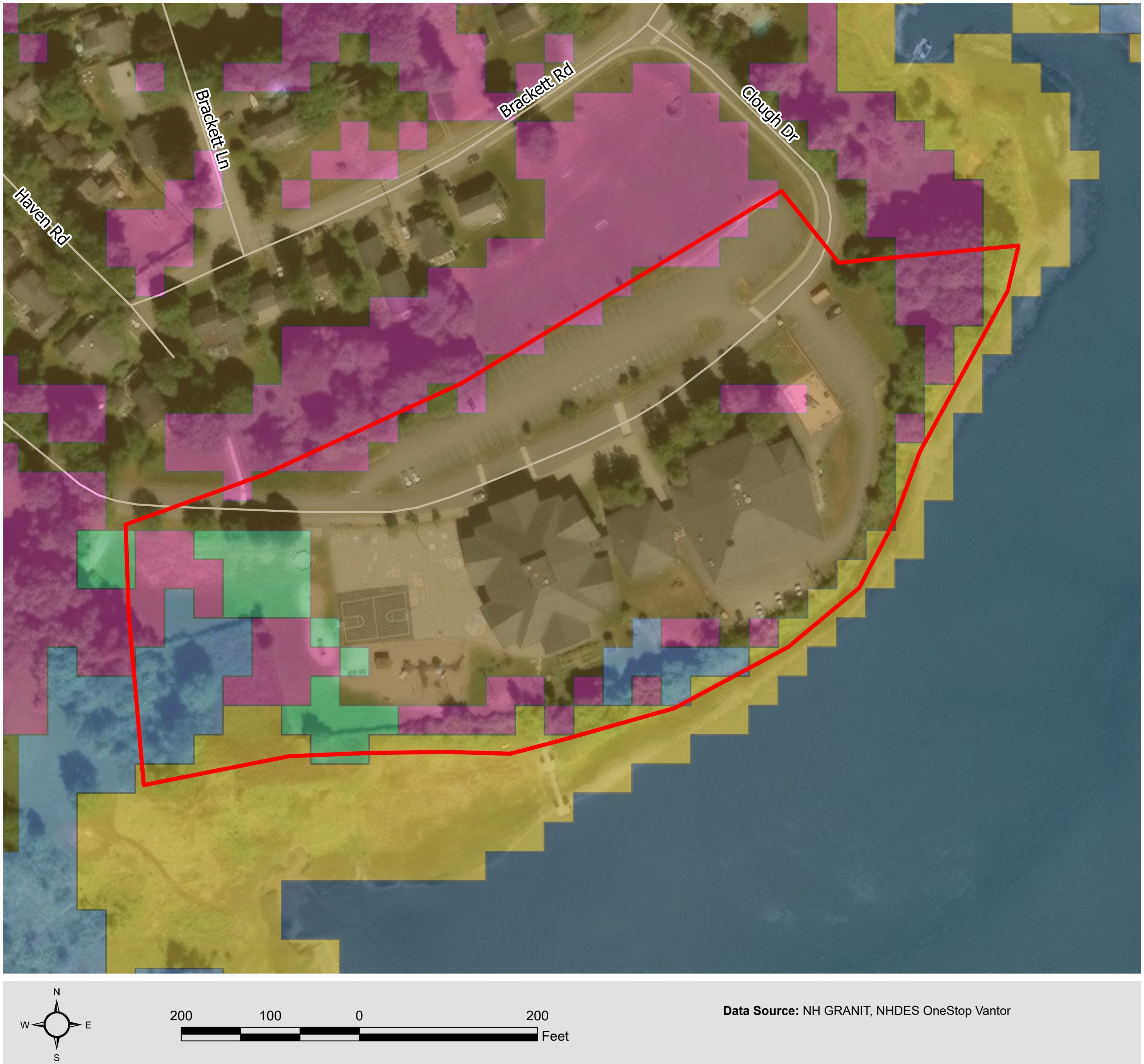
FIGURE 4.2

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Highest Rank Habitat Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx User: Herrick.Devin Saved: 11/19/2025 12:34 PM Opened: 11/19/2025 12:35 PM



Data Source: NH GRANIT, NHDES OneStop Vantor

Legend

- Investigation Area
- NH Wildlife Action Plan 2020 - Habitat Land Cover
  - Alpine
  - Appalachian oak-pine
  - Cliff and Talus
  - Coastal island
  - Developed Impervious
  - Developed or Barren land
  - Dune
  - Floodplain forest
  - Grassland
  - Hemlock-hardwood-pine
  - High-elevation spruce-fir
  - Lowland spruce-fir
  - Northern hardwood-conifer
  - Northern swamp
  - Open water
  - Peatland
  - Pine barren
  - Rocky ridge
  - Salt marsh
  - Sand/Gravel
  - Temperate swamp
  - Wet meadow/shrub wetland
- NH DOT Roads
- NH Parcels
- New Hampshire Political Boundaries

FIGURE 4.3

Little Harbor School
Portsmouth NH

Wildlife Action Plan
Habitat Land Cover Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:02 PM **Opened:** 11/19/2025 1:03 PM

Legend

Investigation Area

Map by NH DES OneStop Data Mapper_PRA

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ArcGIS World Geocoding Service
City/Town
Parcels
Flood Plain Wetlands Adjacent to Tier 3 Streams
Tidal Wetlands
Brackish Marsh
High Marsh, J. gerardii
High Marsh, S.patens / D.spicata
Low Marsh
Mudflat
Phragmites australis
Recently Flooded Forest
Short form S. alterniflora
Terrestrial border
NH 2021 2022 6in RGB
Red: Band_1
Green: Band_2
Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

FIGURE 4.4

Little Harbor School
Portsmouth NH

Priority Resource Area Map

Weston & Sampson

Path: \\wse03.local\WSE\Depts\Water\Staff\DKB\1_Current Projects\Portsmouth NH Little Harbor\GIS\ArcPro\Little Harbor School\Little Harbor School.aprx **User:** Herrick.Devin **Saved:** 11/19/2025 1:02 PM **Opened:** 11/19/2025 1:03 PM

Map by NH DES OneStop Data Mapper_Prime Wetlands

11/19/2025, 12:53:14 PM

- ArcGIS World Geocoding Service
- City/Town
- Parcels
- Prime Wetlands
- Prime Wetlands with 100ft Buffer
- NH 2021 2022 6in RGB
- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, NHDRA, Axiomatic, Inc.

N W E S

200 100 0 200 Feet

Data Source: NH GRANIT, NHDES OneStop, FEMA

Legend

Investigation Area

FIGURE 4.5

Little Harbor School
Portsmouth NH

Priority Resource Area Map
Prime Wetlands

Weston & Sampson

Map Scale: 1:6,360 if printed on A landscape (11" x 8.5") sheet.

N

0 50 100 200 300 Meters

0 300 600 1200 1800 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Scitico silt loam, 0 to 5 percent slopes	5.2	3.0%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	5.9	3.4%
299	Udorthents, smoothed	22.4	13.0%
597	Westbrook mucky peat, 0 to 2 percent slopes, very frequently flooded	1.3	0.7%
799	Urban land-Canton complex, 3 to 15 percent slopes	89.2	51.9%
W	Water	47.9	27.9%
Totals for Area of Interest		**171.9**	**100.0%**

APPENDIX J

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Bonded Rubber Outdoor Surfacing Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Routine Monthly Maintenance

Sweep, vacuum, blow, or hose off entire surface to remove any loose debris such as sand, dirt, leaves, tree sap, chewing gum, bird droppings, scuff marks, etc. Repeat as needed.

A pressure washer may be used in accordance with the equipment recommendations and technical guidelines as stated in this document. Please contact bonded rubber manufacturer for complete technical guidelines and equipment recommendations regarding pressure washers.

FlexGround – FlexBond Bonded Rubber
2140 East Cedar Street
Tempe, Arizona 85281
602-954-0000
info@flexground.com

2. Isolated Stains

On heavily stained isolated spots, while surface is still damp from hosing, apply a sufficient amount for adequate coverage of full strength all-purpose cleaner; using a hand-held spray bottle, scrub thoroughly with a 10" medium basine bristle scrub brush. Repeat as needed on extremely tough stains.

3. General Area Cleaning

While surface is still damp from hosing, apply a mixture of full strength all purpose cleaner and water using a garden pump sprayer to a small area; be sure to follow directions for use. Scrub using the basine 10" medium bristle scrub brush. Repeat as needed. Once the entire surface area has been cleaned, rinse thoroughly using a garden hose with nozzle attachment.

4. Inspection & Maintenance

1. Perform cleaning during early morning or late afternoon so that your cleaner will have time to react without evaporating.
2. Area to be cleaned must be slightly damp prior to applying cleansing solution.
3. Clean only a small area at a time making sure it is thoroughly scrubbed to eliminate the possibility of dirty spots and/or streaking caused by areas missed while scrubbing.
4. It shall be at the City of Portsmouth's discretion whether to remove stains on a less-than-annual basis. The City acknowledges that a stain may become more difficult or even impossible to remove if not addressed immediately. This procedure provides no guarantee of stain removal.
5. Surfacing Integrity and Environmental Protection: The bonded rubber surfacing

shall be routinely inspected for signs of wear, delamination, cracking, or material loss. The Owner shall promptly remove and properly dispose of any loose rubber fragments or particles observed on or adjacent to the playground surface to prevent migration into planted areas, drainage systems, or nearby waterways. Areas exhibiting separation, tearing, or excessive wear shall be repaired or replaced in accordance with the surfacing manufacturer's recommendations as soon as practicable to maintain a continuous, intact surface. Temporary patching or containment measures shall be implemented immediately where exposed edges or damaged areas are observed. Cleaning, sweeping, or rinsing operations shall be performed in a manner that prevents debris or rubber particles from entering storm drains, rain gardens, or wetland buffer areas. Accumulated material shall be collected and disposed of off-site in accordance with local regulations. Ongoing inspection and maintenance of the bonded rubber surface is required to minimize environmental impacts. Responsibility for monitoring, maintenance, and repair following installation rests with the Owner.

5. Recommended Equipment
    1. Broom, Wet/Dry Shop Vac or Blower
    2. Garden hose with spray nozzle
    3. One 1/2 gallon garden pump sprayer
    4. Pressure washer recommended (1500 PSI maximum)
    5. Simple Green® All-Purpose Cleaner (Outdoor Formula)
        a. Non-toxic/biodegradable
        b. No bleach or chlorine
    6. Disposable rags
    7. Disposable gloves
    8. Cleaning & rinsing buckets
    9. 10" medium bristle scrub brush

For any questions about this inspection & maintenance plan, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Engineered Wood Fiber (EWF) Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Purpose

This maintenance plan establishes procedures for the inspection, upkeep, and replacement of Engineered Wood Fiber (EWF) playground surfacing at school district playgrounds. The goal is to ensure safe play conditions, proper impact attenuation, effective drainage, and long-term performance of the playground surface. All maintenance activities shall be performed in accordance with manufacturer recommendations and applicable safety standards.

2. General Maintenance Requirements

Engineered Wood Fiber is a natural material that will settle and shift over time due to weather conditions and playground use. Regular inspection and maintenance are required to maintain proper surface depth, levelness, and drainage, particularly in high-use areas.

3. Routine Inspections and Maintenance

3.1 Weekly Inspections

- Inspect all playground surfacing weekly, with particular attention to high-traffic areas such as beneath swings, slide exits, and climbing equipment.
- Identify areas where EWF has been displaced, compacted, or worn thin.
- Redistribute material as needed to maintain uniform coverage and prevent exposed subsurface areas.
- Remove foreign objects, including fallen branches, toys, debris, or other materials that may become embedded in the surfacing and create potential hazards.
- Use rakes or shovels to move material from low-traffic areas to worn areas as needed.

3.2 Surface Leveling

- Rake the EWF regularly to maintain a level surface and the manufacturer's recommended depth.
- Level surfacing is essential to ensure consistent impact protection throughout the playground.
- Wear mats installed in high-use areas may reduce the frequency of raking; however, transitions between wear mats and surrounding EWF shall remain flush and even.

3.3 Minimum Surfacing Depth and Maintenance Responsibility

- Engineered Wood Fiber (EWF) playground surfacing shall be installed at a minimum loose depth sufficient to achieve a compacted depth of twelve inches (12") throughout all playground use zones to comply with applicable playground safety standards and required critical fall height performance. Contractor shall account for settlement and compaction during installation and shall not leave areas below the specified compacted depth at the time of Substantial Completion.

- Compliance with playground safety standards is dependent on ongoing inspection and maintenance of surfacing depth. Following acceptance of the work, maintaining the required minimum twelve-inch (12") depth shall be the responsibility of the Owner in accordance with the Engineered Wood Fiber Maintenance Plan. Designer and Contractor do not guarantee long-term impact attenuation performance where maintenance procedures are not followed.

4. Entrances and Containment Edges

- At playground entrances and along containment borders, maintain the EWF surface so it remains within ¼ inch of the top of the border or adjacent surface.
- Promptly address material displacement in these areas to prevent material loss and uneven conditions.

5. Surface Depth Verification and Restoration

5.1 Depth Measurement

- In the highest use areas and around equipment footings, periodically excavate to the subsurface or drainage layer to measure EWF depth.
- Ensure the surfacing depth meets or exceeds the required depth for the fall height of the playground equipment or the manufacturer's original recommended depth, whichever is greater.
- Add EWF as necessary, then level, moisten, and compact the material to restore proper performance.

5.2 Depth Monitoring

- Markings on equipment supports or containment borders are recommended to assist maintenance staff in visually confirming that required surface depth is being maintained over time.

6. Drainage and Performance Monitoring

- Inspect the playground surface regularly to ensure there is no standing water.
- Verify that the subsurface drainage system is functioning properly, as adequate drainage is critical to the longevity and effectiveness of EWF surfacing.
- Address drainage issues promptly to prevent premature material breakdown.

7. Periodic Top-Off and Material Management

- Depending on climate, drainage conditions, and frequency of use, EWF surfacing may require topping off with new material approximately every two (2) to five (5) years.

- To evaluate the need for additional material, rake the surface evenly and measure depth at multiple locations, focusing on high-traffic areas.
- If average depth is less than the recommended requirement, additional EWF shall be added to restore the surface to proper thickness.

8. Full Replacement Considerations

- Determine the number of inches the surfacing is below the required depth to calculate the amount of new material needed.
- In conditions where EWF remains consistently saturated or waterlogged, partial or complete removal and replacement of the material may be required.
- As a natural wood fiber product, EWF will gradually decompose over time. Once decomposition reduces impact attenuation performance, the material must be replaced to maintain safe playground conditions.

9. Questions, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

Rain Garden Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Rain Garden Information

Rain Gardens are designed to remove pollutants from stormwater runoff and reduce runoff volume through infiltration. Maintenance is required and is extremely important. Sediment and debris must be removed regularly to maintain correct rain garden function.

This document serves as guidance to developing an inspection and maintenance plan.

2. Rain Garden Inspection & Maintenance

The City of Portsmouth or their designee is responsible for completing inspections and conducting maintenance.

At a minimum, rain gardens must be inspected in the spring and fall of each year. It is highly recommended that rain gardens are inspected bi-weekly during the standard maintenance check. Personnel should be aware of the maintenance plan. It is recommended to consult with the designer and builder to understand the inspection and maintenance needs.

This Maintenance Plan for the location listed above is submitted by the City of Portsmouth to comply with the City's Stormwater Management Code Requirements. Inspection and maintenance records are required to be kept on file for five (5) years and submitted to the City by October 1st of each year. This plan will be attached to the required recorded maintenance agreement.

Vegetation Replacement Requirement: All planted material within the rain garden shall be maintained in a healthy and viable condition to preserve stormwater treatment function and design intent. The Owner shall replace any shrubs, perennials, or other vegetation that becomes dead, diseased, removed, or significantly damaged as soon as practicable and with species of similar size, type, and function as shown on the approved planting plan. Replacement planting shall be performed in accordance with the original design intent to maintain required plant density, coverage, and stormwater performance.

3. Inspection & Maintenance Checklist (Ideally bi-weekly)

	Clean Rain Garden. Remove any sediment, trash and debris.
	Remove any dead vegetation, trim live vegetation if needed and remove weeds.
	Repair inlet erosion/damage. Inspect bottom of the garden and remove any sediment.
	Loosen, aerate or replace soils to ensure water infiltrates, must infiltrate within 48 hours.
	Paved surfaces draining to garden swept and kept free of sediment and debris.
	Wood mulch replaced or added to keep 3" depth.

	Replace dead plants/vegetation. Water as needed.
	Erosion will be repaired.
	Photos taken.

For any questions about this inspection & maintenance plan, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

78 LONDONDERRY TPK UNIT D5
HOOKSETT, NH 03106
PHONE: (603) 715-5453
EMAIL: INFO@FIREFLYSPORTSTESTING.COM
WEBSITE: WWW.FIREFLYSPORTSTESTING.COM

Laboratory Test Report

Liberty Tire Recycling Infill Samples (10-20 GR, 10-20BM (Truck Tire), 10-20WM (Car Tire))

Job No.	100305/10481
Client Information	Liberty Tire Recycling 600 River Ave, 3rd Floor Pittsburgh, PA 15212
Outsource Laboratory Information	Eurofins MTS Consumer Product Testing US, Inc. 349 Lenox Street Norwood, MA 02062
Test Method	EN 71-3 Migration of Certain Elements ASTM F3188 Extractable Hazardous Metals in Synthetic Turf Infill Materials
Sample Arrival Date	2/24/2025
Test Date(s)	2/24/2025-3/11/2025
Report Date	4/10/2025
Report Status	Final

Prepared by *Adam Kalil*
Laboratory Manager

Checked by *Megan Illsley*
Laboratory Director

Melos GmbH
Granules
Cable Compounds
Customer Solutions

Bismarckstraße 4 - 10
D-49324 Melle
Fon +49 54 22 . 94 47-0
Fax +49 54 22 . 59 81
info@melos-gmbh.com
www.melos-gmbh.com

Declaration

2/27/2024

Melos® EPDM-Granules

Concerning the following substances or substance classes

asbestos
cadmium
(hydro)chlorofluorocarbons (H)CFCs
lead
mercury
phthalates
per- and polyfluoroalkyl substances PFAS
polycyclic aromatic hydrocarbons PAH

we declare:

The above mentioned substances are not intentionally used by Melos GmbH in the named products. Although these products are not routinely tested for it´s presence based on product composition knowledge these substance are not expected to be present. However, the fact that this substances are not intentionally used does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process. We assure you that, to our knowledge, this has no health-related or regulatory consequences.

This declaration applies only to the delivered compounds and may not be extended to end products by:

- Any ulterior modification due to the addition of any other substances not in conformity with the related declaration.

- An improper use of the compound or end product

If you need further information please do not hesitate to contact me.

Best regards.

Melos GmbH
i.A. Dr. Rüdiger Czeranka

APT

sportgroup

THE SURFACE SPECIALISTS

APT Advanced Polymer Tech Corp.
109 Conica Lane
Evans City, PA 16033 USA
(724) 452-1330
Fax. (724) 452-1703

advpolytech.com
info@advpolytech.com

To Whom It May Concern:

This letter is in response to the question of toxic or hazardous materials, like halogen, CFC's, phthalates, polycyclic aromatic hydrocarbons, PFAS, chlorine, cadmium, mercury, lead, zinc and asbestos in our base, aromatic, and aliphatic binders. The QUALIPUR components that we manufacture and that are used in poured in place and safety surfacing are not made with any of the above-mentioned materials; therefore, none exceeds the limits set forth by the EPA. Should you have any other questions or concerns, please feel free to contact us.

Regards,

Dr. Frank Lucarelli, PhD.
Head Chemist
Advanced Polymer Technology

TEST REPORT

CLIENT:

Company:	No Fault LLC	**Report Number:**	79982A
Address:	766 S. Gifford Ave #1	**Lab Test Number:**	3185-3048-01
	San Bernardino, CA 92408	**Test Completion Date:**	3/11/2020
		Report Date:	3/20/2020
Requested By:	Rafael Alzaga	**Page:**	1 of 1

TEST MATERIAL:

Material Type:	Safety Surfacing					**Date Received:**	3/2/2020	
Material Condition:	**EXCELLENT:**	**XXX**	**GOOD:**		**POOR:**		**REJECTED:**	
Material ID:	No Fault Safety Surfacing - EPDM (Representative to all EPDM Safety Surfacing up to 6.5" overall thickness)							
PIP System:	6.5" PIP (nominal 0.5" EPDM Top Coat + 6.0" Buffing)							

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following...			
Standard:	ASTM F1551	**Test Method:**	Standard Test Methods for Comprehensive Characterization of Synthetic Turf Playing Surfaces and Materials: Suffix-DIN 18-035, Part 6: Water Permeability of Synthetic Turf Systems and Permeable Bases

SAMPLING PLAN:

Sampling Date:	**3/9/2020**

- Specimen sampling is performed in the sampling department at TSI.
- The sampling size of specimens is determined by the test method requirements.
- In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager.
- All samples are subjected to the outside environmental conditions of temperature and relative humidly.
- Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested

PROCEDURE:

This test method determines the rainfall drainage capacity (permeability) of the above surfacing material. Test data values represent drainage rates for the pour in place surface only.

An 18" X 18" section of the PIP was received for testing. Within this area, the permeability tube was positioned onto the top cap layer of the surfacing. The tube was sealed to the top cap surface by means of hot waxing, providing vertical (eliminating horizontal) drainage during the test. Water was then pumped into the tube faster than could exit, creating a column of water above the 6" scribed markings inside the permeability tube. The water source was shut off, allowing the accumulated water level to recede. When the water level receded to the upper scribed mark, a stopwatch was activated and timed the receding level until it reached the bottom scribed mark (a total of 6") The flow time of receding 6" was recorded in seconds. The recorded data was then entered into computations using the formula contained in the test method to determine rainfall capacity in inches/hour. This procedure was repeated a total of 4 times, where, the first pass was for conditioning with passes 2,3,4 used for averaging.

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
None

TEST DATA:

Pass #	time (seconds)	gal/min/yd²	Rainfall Capacity (inches/hour)
1 (Conditioning)	N/A	N/A	N/A
2	4.7	429.8	1318.6
3	4.5	448.9	1377.2
4	4.5	448.9	1377.2
Average	4.6	442.5	1357.1

Notes: The above average rainfall capacity indicates that this surfacing is very porous and provides sufficient vertical drainage during significant rainfalls. This data does not take into account the percolation properties of an underlying sub base on which the pour in place might be installed over.

Uncertainty:

We undertake all assignments for our clients on a best effort basis. Our findings and judgments are based on the information to us using the latest test methods available.

TSI can only ensure the test results for the specific items tested.

Unless otherwise noted in the deviations sections of this report, all tests performed are in compliance with stated test method.

Test Report Approval:

Digitally signed by Erle Miles DN: cn=Erle Miles, o=Testing Services Inc., ou, email=tsioffice@optilink.us, c=US Date: 2020.03.20 13:20:41 -04'00'

Erle Miles, III, Lab Director, Testing Services (TSI) LLC

817 Showalter Ave
Dalton, GA 30722
(706) 226-1400
tsioffice@optilink.us

surfaces

No Fault Safety Surface

COMPACTED STONE Sub-Base Requirements

1. ***DEPTH***
4" minimum thickness - to be determined by local soil conditions.

2. ***SLOPE***
Stone elevation shall maintain slope to drains or toward low end. *****Stone Base must exhibit positive drainage in all directions (vertical and horizontal.*****

3. ***COMPACTION***
Density requirement is 95% compaction with final condition of stone as level and stable so as not to shift when traveled on or during surface installation process. *A compaction test is required and must be submitted to No Fault LLC prior to installation.*

4. ***POROSITY***
Stone base course shall maintain porosity for direct (vertical and horizontal) drainage. Care must be taken to avoid excessive fines or fillers that can decrease vertical porosity.

5. ***ENCLOSURE***
Stone base course shall be surrounded by a retaining curb.
Example #1: For a 2" system, top-of-curb elevation shall be 2" above top-of-compacted stone elevation. ***NOTE:*** As the No Fault Safety Surface depth changes, so shall the difference between top of curb and top of compacted stone.
Example #2: If the No Fault Safety Surface is to cover the retaining curb, the compacted stone base shall be flush/even with the top of the curb.

6. ***DRAINAGE***
Subsurface drainage is recommended under and around a stone base. Perforated pipe or similar system is acceptable. *******Positive drainage in all areas is required.*******

7. ***STONE SELECTION***
(It is critical that the use of different stone sizes described below is strictly adhered to). Stone shall be uniformly mixed in an approving pug-mill or on a mixing table or by other mechanical means (such as quarry blending operations) prior to placement on the sub-grade. Test samples will be taken after mixing, and the material shall conform to specified requirements prior to placement on the sub-grade. The material shall be premixed with water during mixing operations if necessary for proper blending.

8. ***STONE GRADATION***

U.S. Sieve	Percent Passing
1"	100
3/4"	90 - 100
No. 4	35 - 60
No. 30	10 - 30
No. 200	2 - 9

NOTE: Although No Fault LLC shall advise owner and/or prime contractor if a deficiency in work-by-others is discovered, No Fault accepts no responsibility for work-by-others. It is the owner and/or prime contractor's responsibility to ensure the accuracy of work not executed by No Fault LLC. Prime Contractor and Owner agree to release No Fault LLC from responsibility to repair defects that are the result of defects in the base/subgrade.

No Fault Safety Surface

COMPACTED STONE Sub-Base Requirements

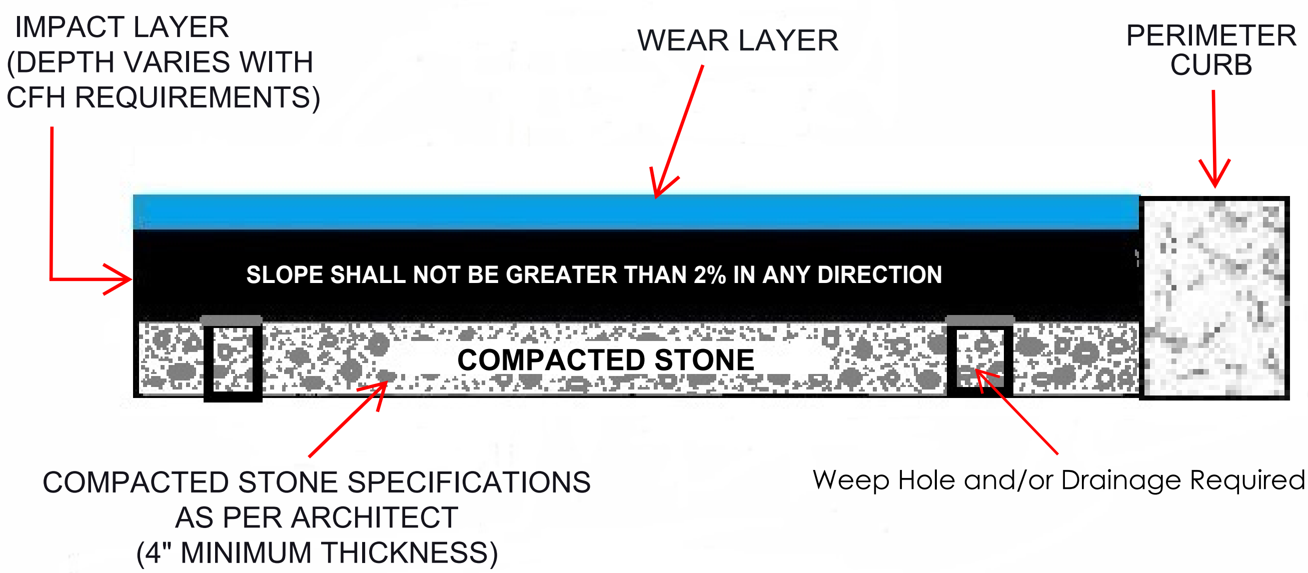
Description:

Minus 1" Screened Millings are made by processing milled asphalt from road building projects through a 1 inch screen. The resulting 1" and smaller product is ideal for constructing a sub-base for playground surfaces when properly prepared with 95% compaction.

Description:

Minus 1" Crusher Run Limestone is produced by crushing blasted Limestone and reducing everything to 1 inch and smaller. The result is a highly compactable subbase that is ideal for constructing a sub-base for playground surfaces with 95% compaction as recommended. Its gray color is visually distinct. Crusher Run Limestone is readily available in all areas. Therefore the cost of importing it to your job makes it a little more costly than gravel products.

NO FAULT SAFETY SURFACE
FLUSH TO BORDER WITH STONE BASE



****DRAWING NOT TO SCALE****

NOTE:

Industry Standard for border is 6" to 8"; however 4" to 8" is acceptable. Positive drainage recommended.

DISCLAIMER:

- *NFLLC reserves the right to modify these edge details at anytime. It is the responsibility of the owner/architect/general contractor to verify the validity of these details.*
- *NFLLC does not recommend installing a compacted stone sub base without a perimeter curb for containment of the stone.*
- *NFLLC will not provide warranty coverage for failure of the STONE BASE caused by poor perimeter containment. PIP surface with a rolled edge that terminates into the sod is susceptible to erosion and lawn maintenance damage.*
- *NFLLC will not provide warranty coverage for the PIP failure due to damage caused by lawn maintenance and/or raveled edge due to erosion.*

NF surfaces

NO FAULT LLC
6750 Exchequer Dr.
Baton Rouge, LA 70809
www.nofault.com

CERTIFICATE of COMPLIANCE

Premier Materials is concerned with the health and safety of all its employees and customers. Keeping this in mind, Premier Materials intentionally sources raw materials that are safe during the manufacturing process and for the customer's long-term application. As the playground surfacing rubber crumb is being made, the raw materials are all bound together in a fully vulcanized elastomeric network, ensuring that the finished product will not leach out any chemicals or pigments under normal environmental conditions.

This certificate therefore confirms compliance with Maryland House Bill 1147, Chapter 488, by stating that playground surfacing materials sold by Premier Materials do not contain **Lead** in amounts more than 90 ppm, and that no **PFAS** (per- and polyfluoroalkyl substances) were intentionally added in the manufacture of the product.

These statements have been confirmed by third-party testing for several regulations, as follows:

- **REACH** Candidate List of SVHC or RoHS 3 (EU Directive 2015/863), which includes items such as VOCs, PAHs, and heavy metals such as Lead, Cadmium, Arsenic, and Mercury.
- **PFAS** – while it is not feasible to test for all the more than 15,000 PFAS chemicals, representative samples were tested for the 30 most common PFAS, and the results were "Not Detected".
- **PAHs** - while it is not feasible to test for all the more than 10,000 PAH chemicals, representative samples were tested for the top 20 PAHs for the EPA, CA Prop-65, REACH Annex XVII, & German ZEK 01.4-08 lists, and the sum of the average values was less than 20 mg/kg.

Ecore will continue to follow the applicable regulations, monitor any changes in the industry, and continue periodic analytical testing to assure the safety of the finished products.

Wanda M. Welch

Wanda M. Welch
Research & Development Manager
Ecore International, Inc.

21-May-24

3 Generations Surfacing Corp
188 Elizabeth Street
Westbury, NY 11590
(516) 850-2387
office@3gsurfacing.com

Warranty

Our Bonded Rubber is warranted for 5 years with Aromatic Binder and 10 years with Aliphatic Binder, starting from the date it is installed.

If it happens to shrink, creating a gap between joints of more than 1/4 inch, we will reinstall or replace the material.

Our measurements shall be performed in an ambient temperature of 72 degrees Fahrenheit + 5 degrees Fahrenheit.

The foregoing warranty shall continue for a period of (based on specifications) years(s) commencing with the date of completion of the above stated system. In order to mitigate any warranty defects the owner, within the warranty period, must provide 3 Generations Surfacing Corp with written notice of any such defects within 30 days of discovery.

The foregoing warranty does not cover defects of damage caused by: (1) structural or design defects; (2) misuse, vandalism, civil disobedience, acts of war; (3) acts of God, including lightning, hurricanes, tornados, earthquakes, fumes, floods, chemical fumes or foreign substances in the atmosphere or by other unusual natural occurrences. The obligations contained hereinto not cover any material used on the system which was not supplied by 3 Generations Surfacing Corp unless specifically identified above.

Jose R Hdez N

Jose Ramon Hernandez Nevarez,
President

MIDWEST ELASTOMERS INC.

700 Industrial Drive
Wapakoneta, OH 45895

May 14th, 2025

No Fault Surfaces
6750 Exchequer Drive
Baton Rogue, LA 70809

To Whom It May Concern,

"This letter is in response to the question of toxic or hazardous materials, like halogen, CFC's, phthalates, polycyclic aromatic hydrocarbons, PFAS, chlorine, cadmium, mercury, lead, zinc and asbestos in rubber products. The rubber components that we manufacture and that are used in poured in place and safety surfacing are not made with any of the abovementioned materials; therefore, none exceeds the limits set forth by the EPA.
Should you have any other questions or concerns, please feel free to contact us."

Hannah Morman

Sales Manager – Sports Surfacing Division eurofins | Modern Testing Services

TEST REPORT

LAB LOCATION: Norwood, MA USA
DATE IN: February 26, 2025

REPORT NUMBER: 67425-020119
DATE OUT: March 10, 2025
REVISION DATE: April 10, 2025

To:	Firefly Sports Testing		
Contact:	Adam Kalil		
Address:	78 Londonderry turnpike Hooksett, NH 03106 United States		
Tel:	6037155453	**Fax:**	/
E-mail:	contact@fireflysportstesting.com		
Copy To:	/		

OVERALL RATING

SATISFACTORY	X
UNSATISFACTORY	
Subject to Client's Approval	

NOTE: RATING IS BASED ON TESTING LAB RESULTS. FINAL ACCEPTANCE OR REJECTION IS PER CLIENT ONLY.

Sample Information			
Product Description:	100305-10-20 GR, 100305-10-20BM (Truck Tire), 100305-10-20WM (Car Tire)		
Item/ Style Number:	202502080-1, 202502080-2, 202502080-3		
Purchase Order Number:	200011356	**No. of Sample Submitted:**	3
Lot/Batch/Tracking Info:	-	**Date of Manufacture:**	-
Country of Origin:	-	**Country of Destination:**	-
Vendor/ Agent:	-	**Manufacturer:**	-

Testing Status								
☐	**Pre-production**	☒	**Production**	☐	**Retest**	☐	**Previous Report No.:**	
Other/ Comments:								

For and on behalf of
Eurofins MTS Consumer Product Testing US, LLC (Norwood, MA)

John R. Gerringer

John Gerringer, Analytical Director

Eurofins MTS' smart screening approach is a restricted substance pre-screening method that effectively ensures compliance for any countries that do not require mandatory certification test reports based on a specified test method. Any positive detection results from the screening test will trigger individual tests to be performed according to the preferred test method of the country that restricts the detected substance. For any countries that require mandatory certification test reports based on a specified test method, individual tests will be performed according to the specified test methods to ensure compliance.

Sample Photo:

Testing Result Summary				
Test Property	SAT PASS	UNSAT FAIL	Subject to Client's Approval	COMMENTS
EN 71-3 Soluble Heavy Metals Content	X			See Test Results Below
ASTM F3188-16 Extractable Hazardous Metals	X			See Test Results Below

COMPONENT BREAKDOWN LIST:

Test Item(s)	Component Description
A	**Infill Samples**
A1	Green and Black Encapsulated Rubber Granules
A2	Black Crumb Rubber Granules
A3	Black Crumb Rubber Granules

Migration of Certain Elements – EN 71-3:2019+A1:2021

Category III: Scraped-off materials

Extractable Elements	**Result (mg/kg)**			**Migration Limit (mg/kg)**
Test Item	A1	A2	A3	-
Mass of Trace Amount (mg)	NA	NA	NA	-
Aluminum (Al)	<10	<10	<10	28130
Antimony (Sb)	<50	<50	<50	560
Arsenic (As)	<10	<20	<10	47
Barium (Ba)	<10	<10	<10	18750
Boron (B)	NA	NA	NA	15000
Cadmium (Cd)	<5	<5	<5	17
Chromium (III) (Cr III)	<10	<10	<10	460
Chromium (VI) (Cr VI)	<0.15	<0.15	<0.15	0.2
Cobalt (Co)	<60	<10	<10	130
Copper (Cu)	<80	<80	<80	7700
Lead (Pb)	<10	<40	<10	160
Manganese (Mn)	<10	<10	<10	15000
Mercury (Hg)	<10	<10	<10	94
Nickel (Ni)	<10	<10	<10	930
Selenium (Se)	<10	<10	<10	460
Strontium (Sr)	<10	<10	<10	56000
Tin (Sn)	<0.8	<0.8	<0.8	180000
Organic Tin	<3	<3	<3	12
Zinc (Zn)	<10	15348	7227	46000
Conclusion	**PASS**	**PASS**	**PASS**	-

Method: EN 71-3:2019+A1:2021. The heavy metals content was determined by Inductively Coupled Plasma Mass Spectrophotometer (ICP-MS).
For samples of migrated chromium content lower than migration limit of Chromium (VI), no speciation test for Chromium (III) and chromium (VI) were conducted. The results were derived from that of total chromium.
For samples of migrated tin content calculated as tributyl tin lower than migration limit of organic tin, no organic tin test was conducted. The results were derived from that of Tin.

Remark: 1. The material categories of tested item(s) are classified as below per clause 4.1 of this standard.

Category III: Scraped-off materials
Coatings of paints, varnishes, lacquers, printing inks, polymers, foams and similar coatings
Polymeric and similar materials, including laminates, whether textile reinforced or not, but excluding other textiles
Paper and paper board
Textiles, whether natural or synthetic
Glass, ceramic, metallic materials
Other materials whether mass coloured or not (e.g. wood, fibre board, hard board, bone and leather)

2. Result(s) of organic tin reported was / were the sum of Methyltin (MeT), Butyltin (BuT), Dibutyltin (DBT), Tributyltin (TBT), Tetrabutyltin (TeBT), Monooctyltin (MOT), Di-n-octyltin (DOT), Di-n-propyltin (DProT), Diphenyltin (DPhT) and Triphenyltin (TPhT) expressed as TBT.
3. The accessibility of the submitted sample is verified according to EN71-1 before and after abuse.

Note: mg/kg = milligram per kilogram
mg = milligram
"<" = less than
NA = Not applicable

ASTM 3188-16 Extractable Hazardous Metals in Synthetic Turf Infill Materials

Test Item	Result – Soluble Heavy Metals (mg/kg)								Conclusion
	Sb	As	Ba	Cd	Cr	Pb	Hg	Se	
A1	<10	<10	<10	<10	<10	<10	<10	<10	PASS
A2	<10	<10	<10	<10	<10	<10	<10	<10	PASS
A3	<10	<10	<10	<10	<10	<10	<10	<10	PASS
Limits	60	25	1000	75	60	90	60	500	-

Sb = Antimony, As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Hg = Mercury, Se = Selenium

Method: ASTM 3188-16 The heavy metals content was determined by Inductively Coupled Argon Plasma Spectrometer / Inductively Coupled Plasma Mass Spectrometer.

Note: mg/kg = milligram per kilogram
mg = milligram
"<" = less than
NA = Not applicable

****End of Test Report****

NOTE:

If there is question or concern regarding the above results, please contact the lab person below:

Technical question & concern:
John Gerringer
Director - Analytical
Phone: 508-638-1793
John.Gerringer@cpt.Eurofinsus.com

APPENDIX K

Env-Wt 313.05 Processing of Related Wetlands and Shoreland Permit Applications.

(a) *For the projects listed in (d), below, that require both an EXP or standard permit under RSA 482-A and a shoreland permit under RSA 483-B, the applicant may file the individual permit applications for the project concurrently, with a written request to process the applications together.*

Per Env-Wt 313.05 Weston & Sampson Engineers, Inc. on behalf of the City of Portsmouth are requesting concurrent processing for the Wetlands and Shoreland submissions for the proposed Little Harbor School Playground Renovations project.

APPENDIX L

SEE ATTACHED FULL SIZE PLANS

ATTACHMENT 5

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Bonded Rubber Outdoor Surfacing Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Routine Monthly Maintenance

Sweep, vacuum, blow, or hose off entire surface to remove any loose debris such as sand, dirt, leaves, tree sap, chewing gum, bird droppings, scuff marks, etc. Repeat as needed.

A pressure washer may be used in accordance with the equipment recommendations and technical guidelines as stated in this document. Please contact bonded rubber manufacturer for complete technical guidelines and equipment recommendations regarding pressure washers.

FlexGround – FlexBond Bonded Rubber
2140 East Cedar Street
Tempe, Arizona 85281
602-954-0000
info@flexground.com

2. Isolated Stains

On heavily stained isolated spots, while surface is still damp from hosing, apply a sufficient amount for adequate coverage of full strength all-purpose cleaner; using a hand-held spray bottle, scrub thoroughly with a 10" medium basine bristle scrub brush. Repeat as needed on extremely tough stains.

3. General Area Cleaning

While surface is still damp from hosing, apply a mixture of full strength all purpose cleaner and water using a garden pump sprayer to a small area; be sure to follow directions for use. Scrub using the basine 10" medium bristle scrub brush. Repeat as needed. Once the entire surface area has been cleaned, rinse thoroughly using a garden hose with nozzle attachment.

4. Inspection & Maintenance

1. Perform cleaning during early morning or late afternoon so that your cleaner will have time to react without evaporating.
2. Area to be cleaned must be slightly damp prior to applying cleansing solution.
3. Clean only a small area at a time making sure it is thoroughly scrubbed to eliminate the possibility of dirty spots and/or streaking caused by areas missed while scrubbing.
4. It shall be at the City of Portsmouth's discretion whether to remove stains on a less-than-annual basis. The City acknowledges that a stain may become more difficult or even impossible to remove if not addressed immediately. This procedure provides no guarantee of stain removal.
5. Surfacing Integrity and Environmental Protection: The bonded rubber surfacing

shall be routinely inspected for signs of wear, delamination, cracking, or material loss. The Owner shall promptly remove and properly dispose of any loose rubber fragments or particles observed on or adjacent to the playground surface to prevent migration into planted areas, drainage systems, or nearby waterways. Areas exhibiting separation, tearing, or excessive wear shall be repaired or replaced in accordance with the surfacing manufacturer's recommendations as soon as practicable to maintain a continuous, intact surface. Temporary patching or containment measures shall be implemented immediately where exposed edges or damaged areas are observed. Cleaning, sweeping, or rinsing operations shall be performed in a manner that prevents debris or rubber particles from entering storm drains, rain gardens, or wetland buffer areas. Accumulated material shall be collected and disposed of off-site in accordance with local regulations. Ongoing inspection and maintenance of the bonded rubber surface is required to minimize environmental impacts. Responsibility for monitoring, maintenance, and repair following installation rests with the Owner.

5. Recommended Equipment
    1. Broom, Wet/Dry Shop Vac or Blower
    2. Garden hose with spray nozzle
    3. One 1/2 gallon garden pump sprayer
    4. Pressure washer recommended (1500 PSI maximum)
    5. Simple Green® All-Purpose Cleaner (Outdoor Formula)
        a. Non-toxic/biodegradable
        b. No bleach or chlorine
    6. Disposable rags
    7. Disposable gloves
    8. Cleaning & rinsing buckets
    9. 10" medium bristle scrub brush

For any questions about this inspection & maintenance plan, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

1 Washington Street, 10th Floor | Boston, MA 02108
Tel: 617.412.4480

Engineered Wood Fiber (EWF) Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Purpose

This maintenance plan establishes procedures for the inspection, upkeep, and replacement of Engineered Wood Fiber (EWF) playground surfacing at school district playgrounds. The goal is to ensure safe play conditions, proper impact attenuation, effective drainage, and long-term performance of the playground surface. All maintenance activities shall be performed in accordance with manufacturer recommendations and applicable safety standards.

2. General Maintenance Requirements

Engineered Wood Fiber is a natural material that will settle and shift over time due to weather conditions and playground use. Regular inspection and maintenance are required to maintain proper surface depth, levelness, and drainage, particularly in high-use areas.

3. Routine Inspections and Maintenance

3.1 Weekly Inspections

- Inspect all playground surfacing weekly, with particular attention to high-traffic areas such as beneath swings, slide exits, and climbing equipment.
- Identify areas where EWF has been displaced, compacted, or worn thin.
- Redistribute material as needed to maintain uniform coverage and prevent exposed subsurface areas.
- Remove foreign objects, including fallen branches, toys, debris, or other materials that may become embedded in the surfacing and create potential hazards.
- Use rakes or shovels to move material from low-traffic areas to worn areas as needed.

3.2 Surface Leveling

- Rake the EWF regularly to maintain a level surface and the manufacturer's recommended depth.
- Level surfacing is essential to ensure consistent impact protection throughout the playground.
- Wear mats installed in high-use areas may reduce the frequency of raking; however, transitions between wear mats and surrounding EWF shall remain flush and even.

3.3 Minimum Surfacing Depth and Maintenance Responsibility

- Engineered Wood Fiber (EWF) playground surfacing shall be installed at a minimum loose depth sufficient to achieve a compacted depth of twelve inches (12") throughout all playground use zones to comply with applicable playground safety standards and required critical fall height performance. Contractor shall account for settlement and compaction during installation and shall not leave areas below the specified compacted depth at the time of Substantial Completion.

- Compliance with playground safety standards is dependent on ongoing inspection and maintenance of surfacing depth. Following acceptance of the work, maintaining the required minimum twelve-inch (12") depth shall be the responsibility of the Owner in accordance with the Engineered Wood Fiber Maintenance Plan. Designer and Contractor do not guarantee long-term impact attenuation performance where maintenance procedures are not followed.

4. Entrances and Containment Edges

- At playground entrances and along containment borders, maintain the EWF surface so it remains within ¼ inch of the top of the border or adjacent surface.
- Promptly address material displacement in these areas to prevent material loss and uneven conditions.

5. Surface Depth Verification and Restoration

5.1 Depth Measurement

- In the highest use areas and around equipment footings, periodically excavate to the subsurface or drainage layer to measure EWF depth.
- Ensure the surfacing depth meets or exceeds the required depth for the fall height of the playground equipment or the manufacturer's original recommended depth, whichever is greater.
- Add EWF as necessary, then level, moisten, and compact the material to restore proper performance.

5.2 Depth Monitoring

- Markings on equipment supports or containment borders are recommended to assist maintenance staff in visually confirming that required surface depth is being maintained over time.

6. Drainage and Performance Monitoring

- Inspect the playground surface regularly to ensure there is no standing water.
- Verify that the subsurface drainage system is functioning properly, as adequate drainage is critical to the longevity and effectiveness of EWF surfacing.
- Address drainage issues promptly to prevent premature material breakdown.

7. Periodic Top-Off and Material Management

- Depending on climate, drainage conditions, and frequency of use, EWF surfacing may require topping off with new material approximately every two (2) to five (5) years.

- To evaluate the need for additional material, rake the surface evenly and measure depth at multiple locations, focusing on high-traffic areas.
- If average depth is less than the recommended requirement, additional EWF shall be added to restore the surface to proper thickness.

8. Full Replacement Considerations

- Determine the number of inches the surfacing is below the required depth to calculate the amount of new material needed.
- In conditions where EWF remains consistently saturated or waterlogged, partial or complete removal and replacement of the material may be required.
- As a natural wood fiber product, EWF will gradually decompose over time. Once decomposition reduces impact attenuation performance, the material must be replaced to maintain safe playground conditions.

9. Questions, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

Rain Garden Maintenance Plan

Little Harbour School & The Portsmouth Early Education Program Playgrounds

1. Rain Garden Information

Rain Gardens are designed to remove pollutants from stormwater runoff and reduce runoff volume through infiltration. **Maintenance is required** and is extremely important. Sediment and debris must be removed regularly to maintain correct rain garden function.

This document serves as guidance to developing an inspection and maintenance plan.

2. Rain Garden Inspection & Maintenance

The City of Portsmouth or their designee is responsible for completing inspections and conducting maintenance.

At a minimum, rain gardens must be inspected in the **spring** and **fall** of each year. It is highly recommended that rain gardens are inspected bi-weekly during the standard maintenance check. Personnel should be aware of the maintenance plan. It is recommended to consult with the designer and builder to understand the inspection and maintenance needs.

This Maintenance Plan for the location listed above is submitted by the City of Portsmouth to comply with the City's Stormwater Management Code Requirements. Inspection and maintenance records are required to be kept on file for five (5) years and submitted to the City by October 1st of each year. This plan will be attached to the required recorded maintenance agreement.

Vegetation Replacement Requirement: All planted material within the rain garden shall be maintained in a healthy and viable condition to preserve stormwater treatment function and design intent. The Owner shall replace any shrubs, perennials, or other vegetation that becomes dead, diseased, removed, or significantly damaged as soon as practicable and with species of similar size, type, and function as shown on the approved planting plan. Replacement planting shall be performed in accordance with the original design intent to maintain required plant density, coverage, and stormwater performance.

3. Inspection & Maintenance Checklist (Ideally bi-weekly)

	Clean Rain Garden. Remove any sediment, trash and debris.
	Remove any dead vegetation, trim live vegetation if needed and remove weeds.
	Repair inlet erosion/damage. Inspect bottom of the garden and remove any sediment.
	Loosen, aerate or replace soils to ensure water infiltrates, must infiltrate within 48 hours.
	Paved surfaces draining to garden swept and kept free of sediment and debris.
	Wood mulch replaced or added to keep 3” depth.

	Replace dead plants/vegetation. Water as needed.
	Erosion will be repaired.
	Photos taken.

For any questions about this inspection & maintenance plan, please contact:

Weston & Sampson Engineers
1 Washington Street, 10th Floor
Boston, MA 02108
617-412-4480

78 LONDONDERRY TPK UNIT D5
HOOKSETT, NH 03106
PHONE: (603) 715-5453
EMAIL: INFO@FIREFLYSPORTSTESTING.COM
WEBSITE: WWW.FIREFLYSPORTSTESTING.COM

Laboratory Test Report

Liberty Tire Recycling Infill Samples (10-20 GR, 10-20BM (Truck Tire), 10-20WM (Car Tire))

Job No.	100305/10481
Client Information	Liberty Tire Recycling 600 River Ave, 3rd Floor Pittsburgh, PA 15212
Outsource Laboratory Information	Eurofins MTS Consumer Product Testing US, Inc. 349 Lenox Street Norwood, MA 02062
Test Method	EN 71-3 Migration of Certain Elements ASTM F3188 Extractable Hazardous Metals in Synthetic Turf Infill Materials
Sample Arrival Date	2/24/2025
Test Date(s)	2/24/2025-3/11/2025
Report Date	4/10/2025
Report Status	Final

Prepared by *Adam Kalil*
Laboratory Manager

Checked by *Megan Illsley*
Laboratory Director

Notes:
1. This report has been prepared by Firefly Sports Testing with all reasonable skill, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.
2. This report is confidential to the Client and Firefly Sports Testing accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final."

melos

Melos GmbH
Granules
Cable Compounds
Customer Solutions

Bismarckstraße 4 - 10
D-49324 Melle
Fon +49 54 22 . 94 47-0
Fax +49 54 22 . 59 81
info@melos-gmbh.com
www.melos-gmbh.com

Declaration

2/27/2024

Melos® EPDM-Granules

Concerning the following substances or substance classes

asbestos
cadmium
(hydro)chlorofluorocarbons (H)CFCs
lead
mercury
phthalates
per- and polyfluoroalkyl substances PFAS
polycyclic aromatic hydrocarbons PAH

we declare:

The above mentioned substances are not intentionally used by Melos GmbH in the named products. Although these products are not routinely tested for it´s presence based on product composition knowledge these substance are not expected to be present. However, the fact that this substances are not intentionally used does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process. We assure you that, to our knowledge, this has no health-related or regulatory consequences.

This declaration applies only to the delivered compounds and may not be extended to end products by:

- Any ulterior modification due to the addition of any other substances not in conformity with the related declaration.

- An improper use of the compound or end product

If you need further information please do not hesitate to contact me.

Best regards.

Melos GmbH
i.A. Dr. Rüdiger Czeranka

APT

sportgroup
THE SURFACE SPECIALISTS

APT Advanced Polymer Tech Corp.
109 Conica Lane
Evans City, PA 16033 USA
(724) 452-1330
Fax. (724) 452-1703

advpolytech.com
info@advpolytech.com

To Whom It May Concern:

This letter is in response to the question of toxic or hazardous materials, like halogen, CFC's, phthalates, polycyclic aromatic hydrocarbons, PFAS, chlorine, cadmium, mercury, lead, zinc and asbestos in our base, aromatic, and aliphatic binders. The QUALIPUR components that we manufacture and that are used in poured in place and safety surfacing are not made with any of the above-mentioned materials; therefore, none exceeds the limits set forth by the EPA. Should you have any other questions or concerns, please feel free to contact us.

Regards,

Dr. Frank Lucarelli, PhD.
Head Chemist
Advanced Polymer Technology

TEST REPORT

CLIENT:

Company:	No Fault LLC	**Report Number:**	79982A
Address:	766 S. Gifford Ave #1	**Lab Test Number:**	3185-3048-01
	San Bernardino, CA 92408	**Test Completion Date:**	3/11/2020
		Report Date:	3/20/2020
Requested By:	Rafael Alzaga	**Page:**	1 of 1

TEST MATERIAL:

Material Type:	Safety Surfacing						**Date Received:**	3/2/2020
Material Condition:	**EXCELLENT:**	**XXX**	**GOOD:**		**POOR:**		**REJECTED:**	
Material ID:	No Fault Safety Surfacing - EPDM (Representative to all EPDM Safety Surfacing up to 6.5" overall thickness)							
PIP System:	6.5" PIP (nominal 0.5" EPDM Top Coat + 6.0" Buffing)							

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following…			
Standard:	ASTM F1551	**Test Method:**	Standard Test Methods for Comprehensive Characterization of Synthetic Turf Playing Surfaces and Materials: Suffix-DIN 18-035, Part 6: Water Permeability of Synthetic Turf Systems and Permeable Bases

SAMPLING PLAN:

Sampling Date:	**3/9/2020**

- Specimen sampling is performed in the sampling department at TSI.
- The sampling size of specimens is determined by the test method requirements.
- In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager.
- All samples are subjected to the outside environmental conditions of temperature and relative humidly.
- Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested

PROCEDURE:

This test method determines the rainfall drainage capacity (permeability) of the above surfacing material. Test data values represent drainage rates for the pour in place surface only.

An 18" X 18" section of the PIP was received for testing. Within this area, the permeability tube was positioned onto the top cap layer of the surfacing. The tube was sealed to the top cap surface by means of hot waxing, providing vertical (eliminating horizontal) drainage during the test. Water was then pumped into the tube faster than could exit, creating a column of water above the 6" scribed markings inside the permeability tube. The water source was shut off, allowing the accumulated water level to recede. When the water level receded to the upper scribed mark, a stopwatch was activated and timed the receding level until it reached the bottom scribed mark (a total of 6") The flow time of receding 6" was recorded in seconds. The recorded data was then entered into computations using the formula contained in the test method to determine rainfall capacity in inches/hour. This procedure was repeated a total of 4 times, where, the first pass was for conditioning with passes 2,3,4 used for averaging.

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
None

TEST DATA:

Pass #	time (seconds)	gal/min/yd²	Rainfall Capacity (inches/hour)
1 (Conditioning)	N/A	N/A	N/A
2	4.7	429.8	1318.6
3	4.5	448.9	1377.2
4	4.5	448.9	1377.2
Average	4.6	442.5	1357.1

Notes: The above average rainfall capacity indicates that this surfacing is very porous and provides sufficient vertical drainage during significant rainfalls. This data does not take into account the percolation properties of an underlying sub base on which the pour in place might be installed over.

Uncertainty:

We undertake all assignments for our clients on a best effort basis. Our findings and judgments are based on the information to us using the latest test methods available.

TSI can only ensure the test results for the specific items tested.

Unless otherwise noted in the deviations sections of this report, all tests performed are in compliance with stated test method.

Test Report Approval:

Digitally signed by Erle Miles DN: cn=Erle Miles, o=Testing Services Inc., ou, email=tsioffice@optilink.us, c=US Date: 2020.03.20 13:20:41 -04'00'

Erle Miles, III, Lab Director, Testing Services (TSI) LLC

817 Showalter Ave
Dalton, GA 30722
(706) 226-1400
tsioffice@optilink.us

No Fault Safety Surface

COMPACTED STONE Sub-Base Requirements

1. ***DEPTH***
   4" minimum thickness - to be determined by local soil conditions.

2. ***SLOPE***
   Stone elevation shall maintain slope to drains or toward low end. *****Stone Base must exhibit positive drainage in all directions (vertical and horizontal.*****

3. ***COMPACTION***
   Density requirement is 95% compaction with final condition of stone as level and stable so as not to shift when traveled on or during surface installation process. *A compaction test is required and must be submitted to No Fault LLC prior to installation.*

4. ***POROSITY***
   Stone base course shall maintain porosity for direct (vertical and horizontal) drainage. Care must be taken to avoid excessive fines or fillers that can decrease vertical porosity.

5. ***ENCLOSURE***
   Stone base course shall be surrounded by a retaining curb.
   Example #1: For a 2” system, top-of-curb elevation shall be 2" above top-of-compacted stone elevation. ***NOTE:*** As the No Fault Safety Surface depth changes, so shall the difference between top of curb and top of compacted stone.
   Example #2: If the No Fault Safety Surface is to cover the retaining curb, the compacted stone base shall be flush/even with the top of the curb.

6. ***DRAINAGE***
   Subsurface drainage is recommended under and around a stone base. Perforated pipe or similar system is acceptable. *****Positive drainage in all areas is required.*****

7. ***STONE SELECTION***
   (It is critical that the use of different stone sizes described below is strictly adhered to). Stone shall be uniformly mixed in an approving pug-mill or on a mixing table or by other mechanical means (such as quarry blending operations) prior to placement on the sub-grade. Test samples will be taken after mixing, and the material shall conform to specified requirements prior to placement on the sub-grade. The material shall be premixed with water during mixing operations if necessary for proper blending.

8. ***STONE GRADATION***

U.S. Sieve	Percent Passing
1"	100
3/4"	90 - 100
No. 4	35 - 60
No. 30	10 - 30
No. 200	2 - 9

NOTE: Although No Fault LLC shall advise owner and/or prime contractor if a deficiency in work-by-others is discovered, No Fault accepts no responsibility for work-by-others. It is the owner and/or prime contractor's responsibility to ensure the accuracy of work not executed by No Fault LLC. Prime Contractor and Owner agree to release No Fault LLC from responsibility to repair defects that are the result of defects in the base/subgrade.

No Fault, LLC ▪ 6750 Exchequer Drive ▪ Baton Rouge LA 70809 ▪ 800-232-7766
www.nofault.com

No Fault Safety Surface

COMPACTED STONE Sub-Base Requirements

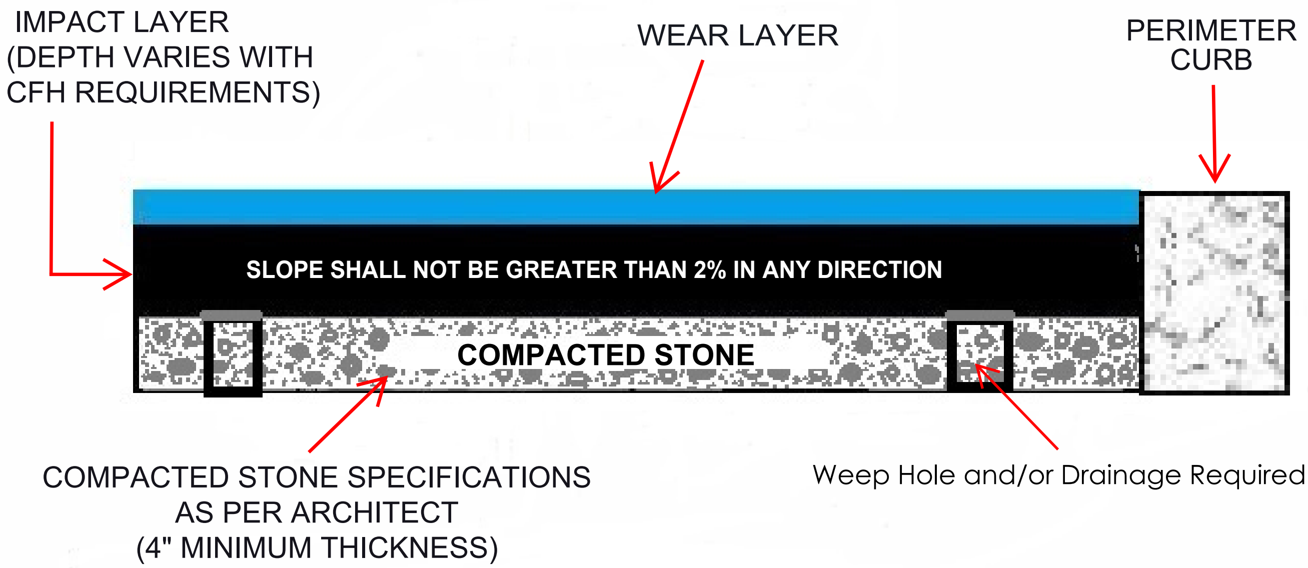
Description:

Minus 1" Screened Millings are made by processing milled asphalt from road building projects through a 1 inch screen. The resulting 1" and smaller product is ideal for constructing a sub-base for playground surfaces when properly prepared with 95% compaction.

Description:

Minus 1" Crusher Run Limestone is produced by crushing blasted Limestone and reducing everything to 1 inch and smaller. The result is a highly compactable subbase that is ideal for constructing a sub-base for playground surfaces with 95% compaction as recommended. Its gray color is visually distinct. Crusher Run Limestone is readily available in all areas. Therefore the cost of importing it to your job makes it a little more costly than gravel products.

NO FAULT SAFETY SURFACE
FLUSH TO BORDER WITH STONE BASE



****DRAWING NOT TO SCALE****

NOTE:

Industry Standard for border is 6" to 8"; however 4" to 8" is acceptable.
Positive drainage recommended.

DISCLAIMER:

- *NFLLC reserves the right to modify these edge details at anytime. It is the responsibility of the owner/architect/general contractor to verify the validity of these details.*
- *NFLLC does not recommend installing a compacted stone sub base without a perimeter curb for containment of the stone.*
- *NFLLC will not provide warranty coverage for failure of the STONE BASE caused by poor perimeter containment. PIP surface with a rolled edge that terminates into the sod is susceptible to erosion and lawn maintenance damage.*
- *NFLLC will not provide warranty coverage for the PIP failure due to damage caused by lawn maintenance and/or raveled edge due to erosion.*

surfaces

NO FAULT LLC
6750 Exchequer Dr.
Baton Rouge, LA 70809
www.nofault.com

CERTIFICATE of COMPLIANCE

Premier Materials is concerned with the health and safety of all its employees and customers. Keeping this in mind, Premier Materials intentionally sources raw materials that are safe during the manufacturing process and for the customer's long-term application. As the playground surfacing rubber crumb is being made, the raw materials are all bound together in a fully vulcanized elastomeric network, ensuring that the finished product will not leach out any chemicals or pigments under normal environmental conditions.

This certificate therefore confirms compliance with Maryland House Bill 1147, Chapter 488, by stating that playground surfacing materials sold by Premier Materials do not contain **Lead** in amounts more than 90 ppm, and that no **PFAS** (per- and polyfluoroalkyl substances) were intentionally added in the manufacture of the product.

These statements have been confirmed by third-party testing for several regulations, as follows:

- **REACH** Candidate List of SVHC or RoHS 3 (EU Directive 2015/863), which includes items such as VOCs, PAHs, and heavy metals such as Lead, Cadmium, Arsenic, and Mercury.
- **PFAS** – while it is not feasible to test for all the more than 15,000 PFAS chemicals, representative samples were tested for the 30 most common PFAS, and the results were "Not Detected".
- **PAHs** - while it is not feasible to test for all the more than 10,000 PAH chemicals, representative samples were tested for the top 20 PAHs for the EPA, CA Prop-65, REACH Annex XVII, & German ZEK 01.4-08 lists, and the sum of the average values was less than 20 mg/kg.

Ecore will continue to follow the applicable regulations, monitor any changes in the industry, and continue periodic analytical testing to assure the safety of the finished products.

Wanda M. Welch

Wanda M. Welch
Research & Development Manager
Ecore International, Inc.

21-May-24

3 Generations Surfacing Corp
188 Elizabeth Street
Westbury, NY 11590
(516) 850-2387
office@3gsurfacing.com

Warranty

Our Bonded Rubber is warranted for 5 years with Aromatic Binder and 10 years with Aliphatic Binder, starting from the date it is installed.

If it happens to shrink, creating a gap between joints of more than 1/4 inch, we will reinstall or replace the material.

Our measurements shall be performed in an ambient temperature of 72 degrees Fahrenheit + 5 degrees Fahrenheit.

The foregoing warranty shall continue for a period of (based on specifications) years(s) commencing with the date of completion of the above stated system. In order to mitigate any warranty defects the owner, within the warranty period, must provide 3 Generations Surfacing Corp with written notice of any such defects within 30 days of discovery.

The foregoing warranty does not cover defects of damage caused by: (1) structural or design defects; (2) misuse, vandalism, civil disobedience, acts of war; (3) acts of God, including lightning, hurricanes, tornados, earthquakes, fumes, floods, chemical fumes or foreign substances in the atmosphere or by other unusual natural occurrences. The obligations contained hereinto not cover any material used on the system which was not supplied by 3 Generations Surfacing Corp unless specifically identified above.

Jose R Hdez N

Jose Ramon Hernandez Nevarez,
President

MIDWEST ELASTOMERS INC.

700 Industrial Drive
Wapakoneta, OH 45895

May 14th, 2025

No Fault Surfaces
6750 Exchequer Drive
Baton Rogue, LA 70809

To Whom It May Concern,

"This letter is in response to the question of toxic or hazardous materials, like halogen, CFC's, phthalates, polycyclic aromatic hydrocarbons, PFAS, chlorine, cadmium, mercury, lead, zinc and asbestos in rubber products. The rubber components that we manufacture and that are used in poured in place and safety surfacing are not made with any of the abovementioned materials; therefore, none exceeds the limits set forth by the EPA.
Should you have any other questions or concerns, please feel free to contact us."

Hannah Morman

Sales Manager – Sports Surfacing Division eurofins | Modern Testing Services

TEST REPORT

LAB LOCATION: Norwood, MA USA
DATE IN: February 26, 2025

REPORT NUMBER: 67425-020119
DATE OUT: March 10, 2025
REVISION DATE: April 10, 2025

To:	Firefly Sports Testing
Contact:	Adam Kalil
Address:	78 Londonderry turnpike Hooksett, NH 03106 United States
Tel:	6037155453 **Fax:** /
E-mail:	contact@fireflysportstesting.com
Copy To:	/

OVERALL RATING

SATISFACTORY	X
UNSATISFACTORY	
Subject to Client's Approval	

NOTE: RATING IS BASED ON TESTING LAB RESULTS. FINAL ACCEPTANCE OR REJECTION IS PER CLIENT ONLY.

Sample Information			
Product Description:	100305-10-20 GR, 100305-10-20BM (Truck Tire), 100305-10-20WM (Car Tire)		
Item/ Style Number:	202502080-1, 202502080-2, 202502080-3		
Purchase Order Number:	200011356	**No. of Sample Submitted:**	3
Lot/Batch/Tracking Info:	-	**Date of Manufacture:**	-
Country of Origin:	-	**Country of Destination:**	-
Vendor/ Agent:	-	**Manufacturer:**	-

Testing Status

☐	**Pre-production**	☒	**Production**	☐	**Retest**	☐	**Previous Report No.:**	

Other/ Comments:

For and on behalf of
Eurofins MTS Consumer Product Testing US, LLC (Norwood, MA)

John R. Gerringer

John Gerringer, Analytical Director

Eurofins MTS' smart screening approach is a restricted substance pre-screening method that effectively ensures compliance for any countries that do not require mandatory certification test reports based on a specified test method. Any positive detection results from the screening test will trigger individual tests to be performed according to the preferred test method of the country that restricts the detected substance. For any countries that require mandatory certification test reports based on a specified test method, individual tests will be performed according to the specified test methods to ensure compliance.

Sample Photo:

Testing Result Summary				
Test Property	**SAT** **PASS**	**UNSAT** **FAIL**	**Subject to Client's Approval**	**COMMENTS**
EN 71-3 Soluble Heavy Metals Content	**X**			**See Test Results Below**
ASTM F3188-16 Extractable Hazardous Metals	**X**			**See Test Results Below**

COMPONENT BREAKDOWN LIST:

Test Item(s)	Component Description
A	**Infill Samples**
A1	Green and Black Encapsulated Rubber Granules
A2	Black Crumb Rubber Granules
A3	Black Crumb Rubber Granules

Migration of Certain Elements – EN 71-3:2019+A1:2021

Category III: Scraped-off materials

Extractable Elements	Result (mg/kg)			Migration Limit (mg/kg)
Test Item	A1	A2	A3	-
Mass of Trace Amount (mg)	NA	NA	NA	-
Aluminum (Al)	<10	<10	<10	28130
Antimony (Sb)	<50	<50	<50	560
Arsenic (As)	<10	<20	<10	47
Barium (Ba)	<10	<10	<10	18750
Boron (B)	NA	NA	NA	15000
Cadmium (Cd)	<5	<5	<5	17
Chromium (III) (Cr III)	<10	<10	<10	460
Chromium (VI) (Cr VI)	<0.15	<0.15	<0.15	0.2
Cobalt (Co)	<60	<10	<10	130
Copper (Cu)	<80	<80	<80	7700
Lead (Pb)	<10	<40	<10	160
Manganese (Mn)	<10	<10	<10	15000
Mercury (Hg)	<10	<10	<10	94
Nickel (Ni)	<10	<10	<10	930
Selenium (Se)	<10	<10	<10	460
Strontium (Sr)	<10	<10	<10	56000
Tin (Sn)	<0.8	<0.8	<0.8	180000
Organic Tin	<3	<3	<3	12
Zinc (Zn)	<10	15348	7227	46000
Conclusion	**PASS**	**PASS**	**PASS**	-

Method: EN 71-3:2019+A1:2021. The heavy metals content was determined by Inductively Coupled Plasma Mass Spectrophotometer (ICP-MS).
For samples of migrated chromium content lower than migration limit of Chromium (VI), no speciation test for Chromium (III) and chromium (VI) were conducted. The results were derived from that of total chromium.
For samples of migrated tin content calculated as tributyl tin lower than migration limit of organic tin, no organic tin test was conducted. The results were derived from that of Tin.

Remark: 1. The material categories of tested item(s) are classified as below per clause 4.1 of this standard.

Category III: Scraped-off materials
Coatings of paints, varnishes, lacquers, printing inks, polymers, foams and similar coatings
Polymeric and similar materials, including laminates, whether textile reinforced or not, but excluding other textiles
Paper and paper board
Textiles, whether natural or synthetic
Glass, ceramic, metallic materials
Other materials whether mass coloured or not (e.g. wood, fibre board, hard board, bone and leather)

2. Result(s) of organic tin reported was / were the sum of Methyltin (MeT), Butyltin (BuT), Dibutyltin (DBT), Tributyltin (TBT), Tetrabutyltin (TeBT), Monooctyltin (MOT), Di-n-octyltin (DOT), Di-n-propyltin (DProT), Diphenyltin (DPhT) and Triphenyltin (TPhT) expressed as TBT.
3. The accessibility of the submitted sample is verified according to EN71-1 before and after abuse.

Note: mg/kg = milligram per kilogram
mg = milligram
"<" = less than
NA = Not applicable

ASTM 3188-16 Extractable Hazardous Metals in Synthetic Turf Infill Materials

Test Item	Result – Soluble Heavy Metals (mg/kg)								Conclusion
	Sb	As	Ba	Cd	Cr	Pb	Hg	Se	
A1	<10	<10	<10	<10	<10	<10	<10	<10	PASS
A2	<10	<10	<10	<10	<10	<10	<10	<10	PASS
A3	<10	<10	<10	<10	<10	<10	<10	<10	PASS
Limits	60	25	1000	75	60	90	60	500	-

Sb = Antimony, As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Hg = Mercury, Se = Selenium

Method: ASTM 3188-16 The heavy metals content was determined by Inductively Coupled Argon Plasma Spectrometer / Inductively Coupled Plasma Mass Spectrometer.

Note: mg/kg = milligram per kilogram
mg = milligram
"<" = less than
NA = Not applicable

****End of Test Report****

NOTE:

If there is question or concern regarding the above results, please contact the lab person below:

Technical question & concern:
John Gerringer
Director - Analytical
Phone: 508-638-1793
John.Gerringer@cpt.Eurofinsus.com

ATTACHMENT 6

CITY OF PORTSMOUTH
Planning & Sustainability Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 610-7216

CONSERVATION COMMISSION

February 18, 2026

City of Portsmouth
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Wetland Conditional Use Permit for property located at 50 Clough Drive, Portsmouth, NH (LU-25-181)

Dear Owner:

The Conservation Commission, at its regularly scheduled meeting of **Wednesday, Feburary 11, 2026**, considered your application for a Wetland Conditional Use Permit for an upgrade to the Portsmouth Little Harbor Elementary School playgrounds to create compliance with universally accessible (UA) standards while incorporating nature-based play.. To renovate and reconstruct the two playground areas at the school, this project proposes a temporary impact of 10,274 s.f. to the wetland buffer area with total proposed final permanent impact of 17,968 s.f. to the wetland buffer area for soil disturbance, asphalt work, landscaping, installation of an ADA-compliant surface, installation of new structures and grading work. This project is proposing landscaping enhancements including 15 new trees, 81 planted shrubs and herbaceous native plant species and 34 herbaceous species within a newly constructed rain garden. This project occurs within the wetland buffer of a prime tidal wetland. Said property is shown on Assessor Map 206, Lot 20 and lies within the Municipal Zone (M). As a result of said consideration, the Commission voted to **recommend approval** of this application to the Planning Board with the following stipulations:.

1. An educational sign shall be installed at the rain garden which aims to educate elementary school children about the purpose of the rain garden.

2. In accordance with Section 10.1018.40 of the Zoning Ordinance, applicant shall permanently install wetland boundary markers, which may be purchased through the City of Portsmouth Planning & Sustainability Department. It is recommended that markers be placed along the 25' vegetative buffer at 50-foot intervals. Final marker locations to be reviewed and approved by the Planning & Sustainability Department.

3. Maintenance for the new playgrounds shall be consistent with Greenfield Certification standards.

4. Regular maintenance for the proposed rain garden shall be included in the existing playground safety checks which occur at a more frequent interval than annual or seasonal maintenance.

5. Applicant shall consider reducing the installation of the rubber bonded surface area within the wetland buffer, especially within areas that it may not be needed such as underneath the

proposed climbing structure on the main playground.

This matter will be placed on the agenda for the Planning Board meeting scheduled for **Thursday, March 26, 2026**. One (1) hard copy of any revised plans and/or exhibits as well as an updated electronic file (in a PDF format) must be filed in the Planning & Sustainability Department and uploaded to the online permit system no later than Wednesday, February 25, 2026.

The minutes and audio recording of this meeting are available by contacting the Planning & Sustainability Department.

Very truly yours,

Samantha Collins, Chair
Conservation Commission

cc:

Ken Linchey, Director of Buildings & Grounds, Portsmouth School Department
Devin Herrick, Technical Specialist, Weston & Sampson

ATTACHMENT 7

LITTLE HARBOUR ELEMENTARY SCHOOL & PORTSMOUTH EARLY EDUCATION PROGRAM (PEEP) PLAYGROUND IMPROVEMENTS

50 CLOUGH DRIVE, PORTSMOUTH, NH 03801

Know what's **below.**
Call before you dig.
www.cbyd.com

OWNER:
CITY OF PORTSMOUTH

1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE 03801

PREPARED FOR:
KEN LINCHEY, CSFS, CSFM

DIRECTOR OF BUILDINGS & GROUNDS
PORTSMOUTH SCHOOL DEPARTMENT
1 JUNKINS AVENUE, SUITE 402
PORTSMOUTH, NH 03801

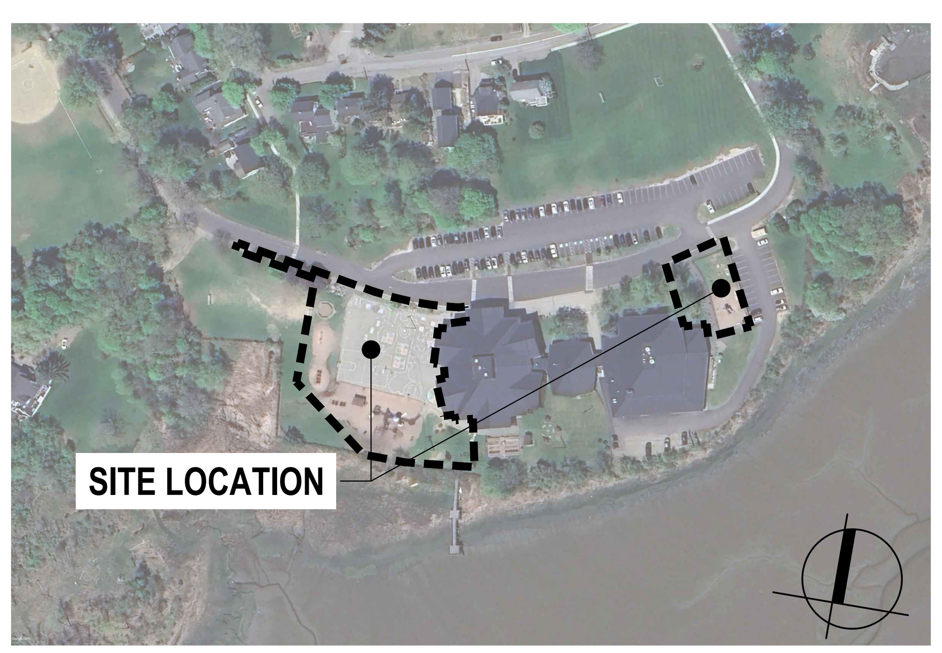
DESIGN TEAM:

LANDSCAPE ARCHITECT/ENGINEER:
WESTON & SAMPSON ENGINEERS, INC.
1 WASHINGTON STREET, 10TH FLOOR
BOSTON, MASSACHUSETTS 02108

SURVEYOR
SURVEY & MAPPING, LLC (SAM)
(DOUCET SURVEY)
102 KENT PLACE
NEWMARKET, NH 03857

PLAYGROUND REPRESENTATIVE A
LANDSCAPE STRUCTURES
M.E. O'BRIEN & SONS, INC.
17 TROTTER DRIVE
MEDWAY, MA 02053

PLAYGROUND REPRESENTATIVE B
PLAYWORLD & BERLINER
ULTIPLAY
43 MAIN STREET
BLACKSTONE, MA 01569



LOCATION MAP
NOT TO SCALE

LITTLE HARBOUR SCHOOL PLAYGROUND

PEEP PLAYGROUND

- FOR ILLUSTRATIVE PURPOSES ONLY RENDERINGS MAY BE OUTDATED -

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION
FEBRUARY 24, 2026

SHEET INDEX

ADD ALTERNATES

ADD ALTERNATE #1: LHS PLAYGROUND - WALL BALL FENCE
PROVIDE AND INSTALL BLACK VINYL-COATED GALVANIZED STEEL CHAIN LINK FENCING AT THE WALL-BALL AREA, INCLUDING ALL POSTS, RAILS, 8' TALL - 4' WIDE ACCESS GATE, TENSION WIRE, FABRIC, FITTINGS, AND CONCRETE FOUNDATIONS. FENCE HEIGHT SHALL BE 10' HT. AS INDICATED ON THE PLANS. INCLUDE ALL LABOR, MATERIALS, AND INCIDENTAL WORK REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.

ADD ALTERNATE #2: LHS PLAYGROUND - BONDED RUBBER SAFETY SURFACING AT LARGE STRUCTURE
PROVIDE AND INSTALL BONDED RUBBER SURFACING UNDER THE LARGE PLAY STRUCTURE IN LIEU OF ENGINEERED WOOD FIBER SURFACING SHOWN IN THE BASE BID. ADD ALTERNATE INCLUDES ALL REQUIRED BASE PREPARATION AND TRANSITIONS, AND SHALL MEET APPLICABLE SAFETY STANDARDS. REMOVE ENGINEERED WOOD FIBER FROM THE BASE BID SCOPE ASSOCIATED WITH THE LARGE PLAY STRUCTURE.

ADD ALTERNATE #3: LHS PLAYGROUND - ENTRY ARCHWAY
PROVIDE AND INSTALL ONE (1) PLAYGROUND ENTRY ARCHWAY, INCLUDING ALL STRUCTURAL MEMBERS, CONNECTIONS, FOOTINGS, HARDWARE, AND INCIDENTALS, IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS AND APPLICABLE CODES. ADD ALTERNATE INCLUDES FOUNDATIONS, SETTING, AND FINAL ALIGNMENT. COORDINATE LOCATION, DIMENSIONS, AND FINISH WITH THE OVERALL PLAYGROUND DESIGN AND ADJACENT SITE IMPROVEMENTS. DESIGN SHOULD BE COORDINATED AND FINALIZED WITH LHS STAFF INPUT

ADD ALTERNATE #4: LHS PLAYGROUND - ENVIRONMENTAL INTERPRETIVE SIGNAGE
PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, FABRICATION, COORDINATION, AND INSTALLATION NECESSARY TO FURNISH AND INSTALL (1) RAIN GARDEN EDUCATIONAL SIGNAGE AS INDICATED ON THE CONTRACT DRAWINGS. WORK SHALL INCLUDE INTERPRETIVE SIGN PANEL(S) WITH APPROVED EDUCATIONAL GRAPHICS, POSTS AND MOUNTING HARDWARE, CONCRETE FOOTINGS AND EXCAVATION, BACKFILL AND SITE RESTORATION, STAINLESS STEEL TAMPER-RESISTANT FASTENERS, AND ALL INCIDENTAL ITEMS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL COORDINATE FINAL ARTWORK AND LAYOUT WITH THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO FABRICATION AND SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR REVIEW. INSTALLATION SHALL BE PERFORMED TO AVOID DISTURBANCE OF PLANTED RAIN GARDEN AREAS AND ADJACENT IMPROVEMENTS, AND SIGNAGE SHALL BE DELIVERED FULLY INSTALLED, PLUMB, SECURE, AND READY FOR USE.

Prepared By

Weston & Sampson Engineers, Inc.
1 Washington Street, 10th Floor
Boston, MA 02108
978.532.1900 800.SAMPSON
www.westonandsampson.com

GENERAL NOTES

1. PROPERTY LINES, SITE SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON THE GROUND SURVEY PERFORMED BY SURVEYING & MAPPING, LLC ON SEPTEMBER 19, 2025 USING NAD 1983 NEW HAMPSHIRE FEET COORDINATE SYSTEM.
2. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
3. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES. CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT (888) 344-7233 NO LESS THAN 72 HOURS, (EXCLUSIVE OF WEEKENDS AND HOLIDAYS), PRIOR TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE CITY OF PORTSMOUTH.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
7. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING. ITEMS ENCOUNTERED IN AREAS OF EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
8. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
9. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
10. ALL WORK SHOWN ON THE PLANS AS BOLD SHALL REPRESENT PROPOSED WORK. THE TERM "PROPOSED (PROP)" INDICATES WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND SALVAGE (R&S)", OR REMOVE, RELOCATE AND SALVAGE, (R,R&S).
11. ALL KNOWN EXISTING STATE, COUNTY AND CITY LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
13. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
14. FILLING OF EXCAVATED AREAS SHALL NOT TAKE PLACE WITHOUT THE PRESENCE OR PERMISSION OF THE OWNER.
15. EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE DRIP LINE OF TREES TO REMAIN. NO GUYS SHALL BE ATTACHED TO ANY TREE TO REMAIN. WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ERECT TEMPORARY BARRIERS FOR THE PROTECTION OF EXISTING TREES DURING CONSTRUCTION.
16. TREES AND SHRUBS WITHIN THE LIMITS OF WORK SHALL BE REMOVED ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT OR AS NOTED ON THE PLANS.
17. NO FILLING SHALL OCCUR AROUND EXISTING TREES TO REMAIN WITHOUT THE APPROVAL OF THE OWNER OR OWNER REPRESENTATIVE.
18. THE CONTRACTOR SHALL REMOVE ALL SURFACE VEGETATION PRIOR TO GRADING THE SITE. TREES AND STUMPS SHALL BE REMOVED AND DISPOSED COMPLETE BY CONTRACTOR. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS (INCLUDING SILT FENCE, STRAW WATTLES, OR SILT SOCKS) SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE PROJECT WHICH COST SHALL BE INCIDENTAL TO THE PROJECT.
19. ALL UNSUITABLE UNCONTAMINATED EXCESS SOIL FROM CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. REMOVAL ACTIVITIES SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST TO THE CITY. SUITABLE SOIL EXCAVATION AS PART OF THE PROJECT MUST MEET ONE OR MORE OF THE MATERIAL REQUIREMENTS SPECIFIED. ON-SITE FILL MATERIALS, WHICH DO NOT CONFORM TO THE SPECIFICATIONS, SHALL NOT BE USED BELOW ANY STRUCTURES. IF THE CONTRACTOR PROPOSES TO USE THE EXISTING FILL ON SITE BELOW PAVEMENT AREAS, HE MUST DEMONSTRATE THAT THE FILL MEETS THE REQUIREMENTS PER THE SPECIFICATIONS. ALL EXCAVATED FILL MATERIAL WHICH DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT NO ADDITIONAL COST.
20. CONTRACTOR IS RESPONSIBLE FOR STAKING CONSTRUCTION BASELINES IN FIELD WITH A NEW HAMPSHIRE REGISTERED PROFESSIONAL LAND SURVEYOR. NO CONSTRUCTION WILL BE PERFORMED WITHOUT THE PROPOSED BASELINES AND LAYOUTS APPROVED BY THE ENGINEER.
21. NO FILL SHALL CONTAIN HAZARDOUS MATERIALS.
22. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AROUND PERIMETER OF WORK AREA (LIMIT OF WORK). FENCE SHALL NOT IMPEDE TRAVEL WAYS.
23. ANY QUANTITIES SHOWN ON PLANS ARE FOR COMPARATIVE BIDDING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT SITE TO VERIFY ALL QUANTITIES AND CONDITIONS PRIOR TO SUBMITTING BID.
24. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. REMOVE ALL SOIL, SEDIMENT, DEBRIS AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.
25. CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE AND IN AREAS APPROVED BY OWNER. ANY OTHER AREAS THAT THE CONTRACTOR MAY WISH TO USE FOR STAGING MUST BE COORDINATED WITH THE OWNER.
26. THE CONTRACTOR SHALL KEEP CLOUGH DRIVE, PARKING LOTS AND WALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
27. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
28. CONTRACTOR SHALL DEWATER AS NECESSARY TO PERFORM THE PROPOSED WORK. CONTRACTOR SHALL BE AWARE OF PERCHED GROUNDWATER.
29. THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION AND AGREED UPON WITH THE LANDSCAPE ARCHITECT.
30. DEEP SUMP CATCH BASINS AND STORMWATER BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND SHALL FOLLOW THE OPERATION AND MAINTENANCE PLAN THEREAFTER.
31. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7 AM TO 6 PM.
32. ANY BOULDERS 3 CY OR SMALLER SHALL BE CONSIDERED UNDOCUMENTED FILL AND SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE CITY.
33. WORK ON SATURDAYS SHALL ONLY BE CONDUCTED IF PRIOR WRITTEN PERMISSION IS PROVIDED BY THE CITY OF PORTSMOUTH.
34. NO TRUCKS LEFT IDLING ON CITY STREETS DURING CONSTRUCTION. CONSTRUCTION TRAFFIC AT NO TIME SHALL IMPEDE FLOW OF RESIDENT TRAFFIC.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PUT INTO PLACE PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION. REFER TO PLANS FOR APPROXIMATE LOCATION OF EROSION AND SEDIMENT CONTROL. REFER TO SPECS AND DETAILS FOR TYPE OF EROSION AND SEDIMENT CONTROL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF ALL CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL MEET ALL OF THE NEW HAMPSHIRE D.E.S. REGULATIONS FOR SEDIMENT AND EROSION CONTROL.
4. EXCAVATED MATERIAL STOCKPILED ON THE SITE SHALL BE SURROUNDED BY A RING OF UNBROKEN SEDIMENT AND EROSION CONTROL FENCE. THE LIMITS OF ALL GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMIT OF CONTRACT SHALL REMAIN TOTALLY UNDISTURBED UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.
5. ALL CATCH BASINS AND DRAIN GRATES WITHIN LIMIT OF CONTRACT SHALL BE PROTECTED WITH SILT SACKS DURING THE ENTIRE DURATION OF CONSTRUCTION.
6. EROSION CONTROL BARRIERS TO BE INSTALLED AT THE TOE OF SLOPES. SEE GRADING & DRAINAGE PLANS, NOTES, DETAILS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY OWNER.
8. ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC/PRIVATE ROADS.

DEMOLITION & SITE PREPARATION NOTES

1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE REMOVE AND SALVAGE (R&S), ALL SITE FEATURES CALLED FOR REMOVAL (REM) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC. TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO ADDITIONAL COST TO THE OWNER.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.
7. 'STRIP AND REMOVE TURF' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH, REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.
8. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. LOAM / TOP SOIL DESIGNATED FOR REUSE AS GENERAL FILL SHALL BE BLENDED WITH SUITABLE BORROW MATERIAL AS SPECIFIED.
11. THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AFTER CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.

LAYOUT & MATERIALS NOTES

1. REFER TO EXISTING CONDITIONS PLANS AND STAMPED SURVEY DRAWINGS FOR SURVEY INFORMATION.
2. COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES OPERATIONS ENCOMPASSED BY THIS CONTRACT. SET, PROTECT AND REPLACE REFERENCE STAKES AS NECESSARY OR AS REQUIRED BY THE OWNER'S REPRESENTATIVE.
3. ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED "BY OTHERS" OR "UNDER SEPARATE CONTRACT".
4. TO FACILITATE LAYOUT OF PROPOSED SITE FEATURES AND FACILITIES, LAYOUT INFORMATION FOR CERTAIN FUTURE WORK, WHICH IS NOT INCLUDED WITHIN THE SCOPE OF THIS CONTRACT HAS BEEN PROVIDED ON THE LAYOUT AND MATERIALS PLAN FOR INFORMATION ONLY. SOME ITEMS ARE "NOT IN CONTRACT" (NIC) AND SHOWN FOR REFERENCE ONLY.
5. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. THE LAYOUT OF ALL NEW PATHWAYS / WALKWAYS AND THE GRADING OF ALL SLOPES AND CROSS SLOPES SHALL CONFORM TO THE NEW HAMPSHIRE RULES AND REGULATIONS FOR HANDICAP ACCESS CMR 521, AND THE AMERICANS WITH DISABILITIES ACT (ADA), TITLE 3. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE REQUIRED.
7. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
8. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS DIRECTED, AT NO ADDITIONAL COST TO THE OWNER. ALL LAYOUT SHALL BE PERFORMED BY A NEW HAMPSHIRE REGISTERED PROFESSIONAL LAND SURVEYOR.
9. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES. ALL BITUMINOUS CONCRETE SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. ALL PATHWAY WIDTHS SHALL BE AS NOTED ON THE LAYOUT AND MATERIALS PLAN.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES.
12. THE DEPTH OF LOAM BORROW FOR ALL PROPOSED LAWN AREAS SHALL BE 6" MINIMUM. ALL DISTURBED AREAS SHALL BE RESTORED WITH LOAM AND SEED UNLESS OTHERWISE NOTED.
13. REFER TO DETAIL DRAWINGS FOR CONSTRUCTION DETAILS.
14. SURVEY CONTROL POINTS AND COORDINATES ARE INDICATED ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OR CREATE HIS OWN PROTECTED CONTROL POINTS FROM THIS INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL LAYOUT POINTS ARE CONSISTENT WITH CONTROL INFORMATION. RESETTING OF DAMAGED OR MISSING LAYOUT MARKERS AS NECESSARY IS AT NO ADDITIONAL COST TO THE OWNER.

GRADING, UTILITIES & DRAINAGE NOTES

1. ALL WORK RELATING TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND/OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORK.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
3. ALL GRADING IS TO BE SMOOTH AND CONTINUOUS WHERE PROPOSED SURFACES MEET EXISTING SURFACES, ELIMINATE ROUGH SPOTS AND ABRUPT GRADE CHANGES AND MEET LINE AND GRADE OF EXISTING CONDITIONS WITH NEW IMPROVEMENTS.
4. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE (1.5% MINIMUM) AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
5. CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
6. THE CROSS SLOPE ON ALL WALKWAYS SHALL BE BETWEEN 1% AND 1.5% (MAX) TO PROVIDE POSITIVE DRAINAGE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.
7. ALL UTILITY GRATES, COVERS OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES. ALL UTILITY GRATES WITHIN PLAYING FIELDS OR INDICATED TO BE "BURIED" SHALL BE 4" BELOW FINISH GRADE AND COVERED WITH FINISH MATERIAL INDICATED ON PLANS.
8. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS, PUBLIC/PRIVATE STREETS AND WORK AREAS. CLEAN BASINS REGULARLY AS NEEDED AND AT THE END OF THE PROJECT.
9. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
10. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
11. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
12. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
13. SEE EARTHWORK SECTION OF SPECIFICATIONS FOR SPECIFIC EXCAVATION AND FILLING PROCEDURES.
14. FOR STRUCTURE REMODELING (REMOD), CONSTRUCTION METHODS SHALL FOLLOW STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS LATEST EDITION.
15. PLAYGROUND AREA SHALL NOT EXCEED 1.9% SLOPE IN ANY DIRECTION.

COMMUNITY BUILD NOTES

1. PLAYGROUND EQUIPMENT AND SAFETY SURFACING ARE INTENDED TO BE INSTALLED BY THE OWNER THROUGH A COMMUNITY BUILD PROCESS UNDER THE SUPERVISION OF A CERTIFIED INSTALLATION FOREMAN OR CREW. PLAYGROUND EQUIPMENT SHALL BE OWNER-FURNISHED. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR INSTALLATION OF PLAY STRUCTURE FOOTINGS. THE CONTRACTOR'S SCOPE IS LIMITED TO PREPARATION OF SUBGRADE AND BASE MATERIALS AT PLAY STRUCTURE LOCATIONS, INCLUDING EXCAVATION TO REQUIRED SUBGRADE ELEVATIONS, PLACEMENT AND COMPACTION OF BASE MATERIALS, AND SITE ACCESS COORDINATION. ALL PLAY STRUCTURE FOOTINGS, SETTING, AND INSTALLATION ABOVE BASE SHALL BE PERFORMED BY THE COMMUNITY BUILD UNDER THE DIRECTION OF A CERTIFIED PLAYGROUND SAFETY INSPECTOR (CPSI) ENGAGED BY THE OWNER.
2. BONDED RUBBER SAFETY SURFACING, WHERE SHOWN, SHALL BE INSTALLED BY COMMUNITY BUILD. ENGINEERED WOOD FIBER SURFACING SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL RECEIVE, STORE, AND PROTECT ALL OWNER-FURNISHED PLAYGROUND MATERIALS ON SITE UNTIL COMMUNITY BUILD INSTALLATION. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR FOOTING INSTALLATION, PLAY STRUCTURE INSTALLATION, OR THE WARRANTY, PERFORMANCE, OR COMPLIANCE OF ANY COMMUNITY BUILD OR OWNER-INSTALLED PLAYGROUND ELEMENTS.
3. THE CONTRACTOR SHALL INCLUDE PRICING IN THEIR BID FOR BOTH (1) PLAY STRUCTURE AND BONDED RUBBER INSTALLATION BY A COMMUNITY BUILD AND (2) PLAY STRUCTURE AND BONDED RUBBER INSTALLATION BY THE CONTRACTOR. PRICING SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, COORDINATION, AND TIME REQUIRED FOR EACH INSTALLATION METHOD. BASE PREPARATION WORK SHALL BE INCLUDED IN BOTH PRICING SCENARIOS.

ABBREVIATIONS

GENERAL

PROP	PROPOSED
ADJ	ADJUST
BIT. CONC.	BITUMINOUS CONCRETE
CEM. CONC.	CEMENT CONCRETE
B	BASELINE
N.T.S.	NOT TO SCALE
BVCL	BLACK VINYL CHAIN LINK
B.M.	BENCH MARK
ABAN	ABANDON
MB	MAIL BOX
GRAN. CURB	GRANITE CURB
EXIST. (OR EX.)	EXISTING
FDN	FOUNDATION
F.L. (OR F)	FLOW LINE
P	PROPERTY LINE
PVMT	PAVEMENT
P.W.W.	PAVED WATERWAY
RC	REINFORCED CONCRETE
REM	REMOVE
REMOD	REMODEL
RET	RETAIN
R.O.W.	RIGHT-OF-WAY
R&S	REMOVE AND SALVAGE
R,R&S	REMOVE, RELOCATE AND SALVAGE
R&D	REMOVE AND DISPOSE
SB	STONE BOUND
NIC	NOT IN CONTRACT
H.C.	HANDICAP
WCR	WHEELCHAIR RAMP
FF	FINISHED FLOOR
HMA	HOT MIX ASPHALT
G.C.	GENERAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
SWEL	SOLID WHITE EDGE LINE
BWLL	BROKEN WHITE LANE LINE
SYEL	SOLID YELLOW EDGE LINE
SB/DH	STONE BOUND/ DRILL HOLE
CLF	CHAIN LINK FENCE
TEMP.	TEMPORARY
TYP.	TYPICAL
EQ	EQUIPMENT
H.C.	HANDICAP
EOP	EDGE OF PAVEMENT
PROT	PROTECT
CTE	CONNECT TO EXISTING
RL	ROOF LEADER
L.O.W.	LIMIT OF WORK
VIF	VERIFY IN FIELD
BVW	BORDERING VEGETATED WETLAND

UTILITIES

GICI	GUTTER INLET W/ CURB INLET
CBCI	CATCH BASIN W/ CURB INLET
CB	CATCH BASIN
C.I.T.	CHANGE IN TYPE
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
CI	CURB INLET
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
DI	DRAIN INLET
GI	GUTTER INLET
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
HYD	HYDRANT
INV. ELEV.	INVERT ELEVATION
UP	UTILITY POLE
SMH	SEWER MANHOLE
WG	WATER GATE
DS	DOWN SPOUT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
DMH	DRAIN MANHOLE
LB	LEACHING BASIN
LG	LEACHING GALLEY
CI	CAST IRON
OCS	OUTLET CONTROL STRUCTURE
OGT	OIL AND GRIT TRAP
VC	VITRIFIED CLAY PIPE
LP	LIGHT POLE
OHW	OVERHEAD WIRE
UPLP	UTILITY POLE WITH LIGHT
SWTU	STORM WATER TREATMENT UNIT
HH	HANDHOLE
GW	GARAGE WASTE
CO	CLEANOUT
LC	LEACHING CHAMBER
GV	GATE VALVE
CU	CONNECTION UNKNOWN

ALIGNMENT/GRADING

BW	BOTTOM OF WALL
BC	BOTTOM OF CURB
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
ELEV	ELEVATION
CC	CENTER OF CURVE
H.P.	HIGH POINT
L.P.	LOW POINT
R	RADIUS OF CURVATURE
STA	STATION
S.S.D.	STOPPING SIGHT DISTANCE
TC	TOP OF CURB
TW	TOP OF WALL

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR
ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson
Weston & Sampson Engineers, Inc.
1 Washington Street, 10th Floor
Boston, MA 02108
617.412.4480 800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

COA:

Seal:

Issued For:
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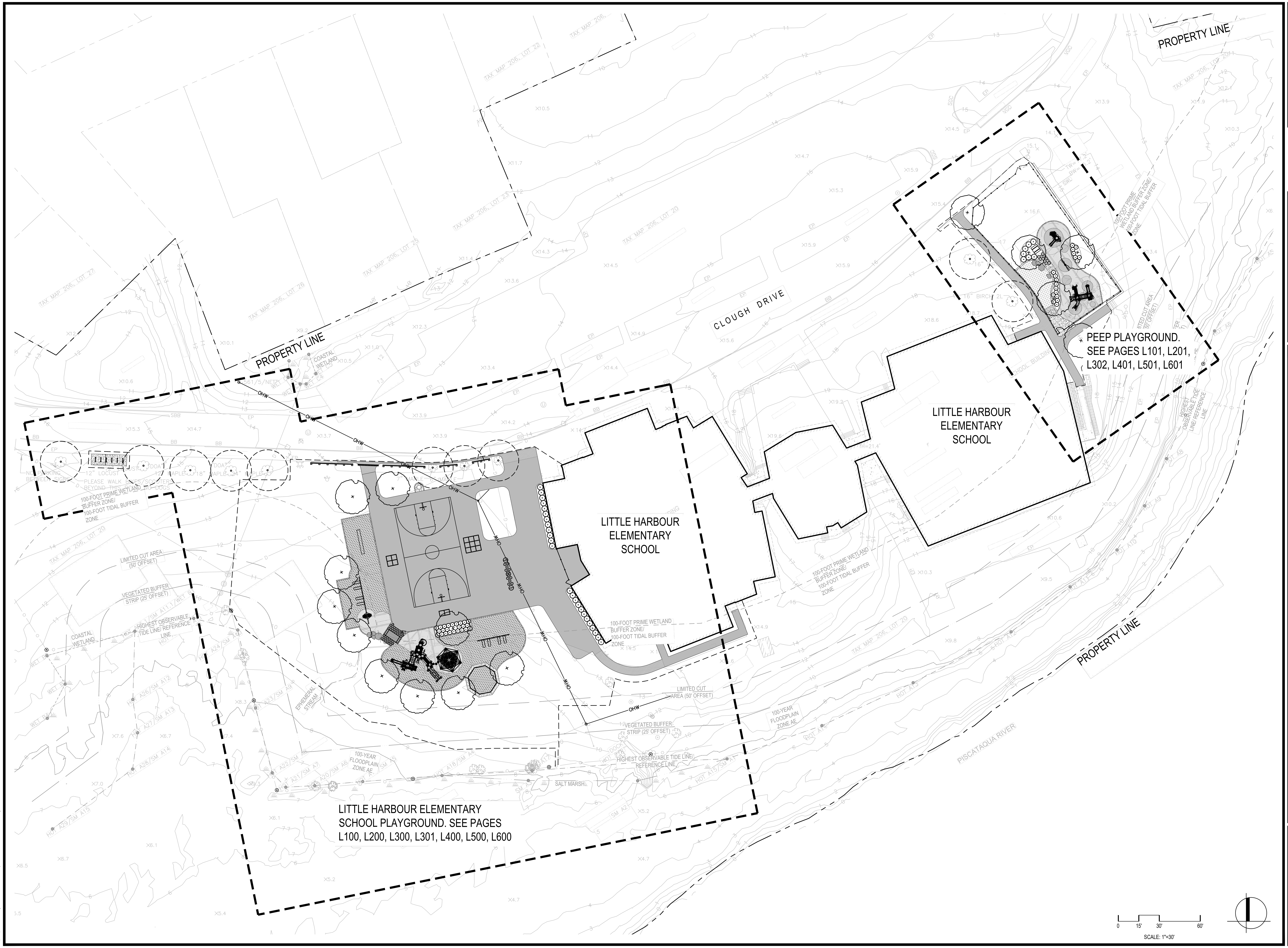
Scale: REFER TO PLAN

Date:	FEBRUARY 24, 2026
Drawn By:	MG, JZ
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
GENERAL NOTES

Sheet Number:
L001



Project:
CITY OF PORTSMOUTH

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50 CLOUGH DRIVE
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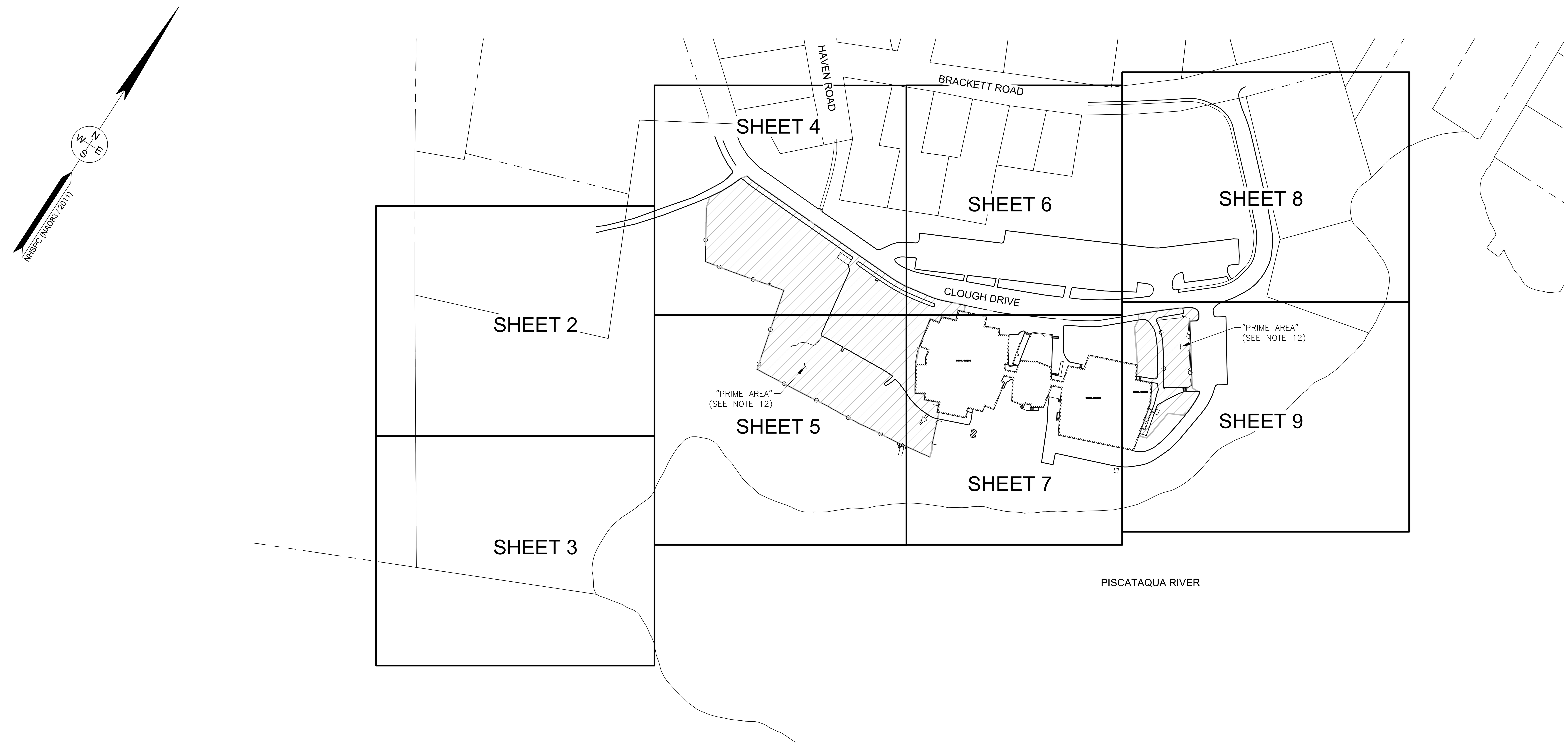
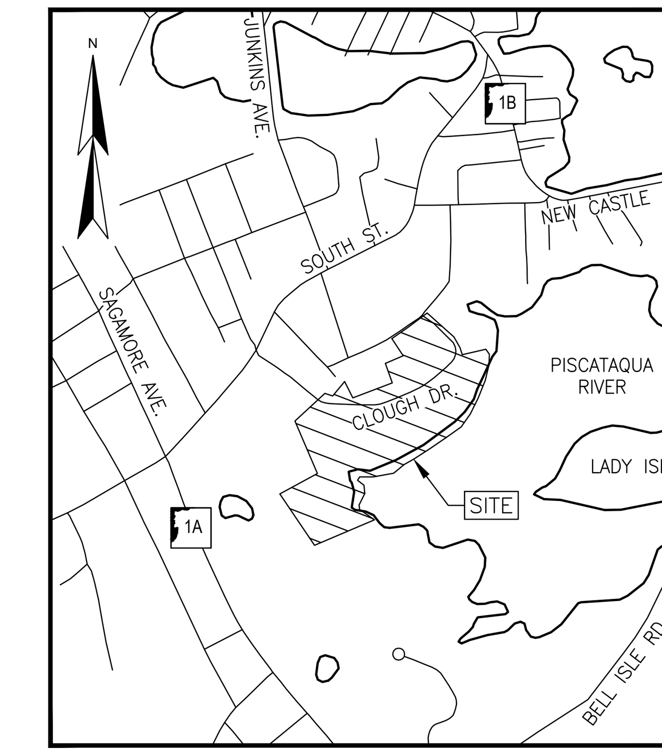
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
INDEX PLAN
LHS & PEEP
PLAYGROUNDS

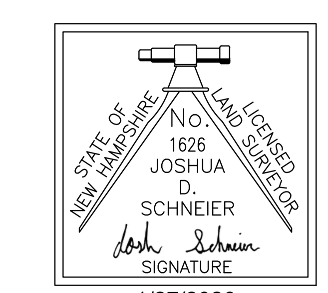
Sheet Number:
L002



KEY MAP
1" = 100'



LOCATION MAP (n.t.s.)



1/27/2026

NOTES:

1. REFERENCE: LITTLE HARBOR SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NEW HAMPSHIRE

2. FIELD SURVEY PERFORMED BY D.J.B. & H.J.R. (SAM LLC) DURING SEPTEMBER 2025 USING A TOTAL STATION AND A SURVEY GRADE GPS WITH A DATA COLLECTOR AND AN AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.

3. HORIZONTAL DATUM BASED ON NAD83(2011) NEW HAMPSHIRE STATE PLANE COORDINATE ZONE (2800) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.

4. VERTICAL DATUM IS BASED ON APPROXIMATE NAVD88(GEOID18) (±.2') DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.

5. WETLAND FLAGS & LINES WERE PROVIDED BY THE CLIENT TO SAM LLC IN A DIGITAL FORMAT, AND SAM LLC DOES NOT CERTIFY THE ACCURACY OF SAID DATA.

6. FLOOD HAZARD ZONE: "AE" & "X", PER FIRM MAP #33015C0259F, DATED 01/29/2021.

7. PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 1' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND SAM LLC WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.

8. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVED PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.

9. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.

10. ALL UNDERGROUND UTILITIES (ELECTRIC, GAS, TEL. WATER, SEWER DRAIN SERVICES) ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.

11. OVERALL PARCEL BOUNDARIES AS SHOWN HEREON ARE BASED ON NH GRANIT GIS DATA AND ARE IN THEIR ORIGINAL LOCATION. THE PARCEL BOUNDARIES HAVE NOT BEEN ADJUSTED TO MATCH FOUND PROPERTY MONUMENTS OR THE EDGE OF RIGHT OF WAY AS DETERMINED BY THE SURVEYOR. THIS IS NOT A BOUNDARY SURVEY OR A STANDARD PROPERTY SURVEY.

12. SAM LLC CONDUCTED A TOPOGRAPHIC SURVEY ONLY WITHIN THE "PRIME AREAS" AS SHOWN HEREON. THE CONTOURS FOR THE SUPPLEMENTAL LIMITS ARE DERIVED FROM PUBLISHED LIDAR DATA (COLLECTED IN 2019/2020) VIA THE NH GRANIT GIS CLEARINGHOUSE.

LEGEND

- APPROXIMATE LOT LINE
- APPROXIMATE ABUTTERS LOT LINE
- 100 MAJOR CONTOUR LINE
- 98 MINOR CONTOUR LINE
- EDGE OF PAVEMENT
- RETAINING WALL
- CHAIN LINK FENCE
- STOCKADE FENCE
- X WIRE FENCE
- HANDRAIL
- OHW OVERHEAD WIRE
- D DRAIN LINE
- G GAS LINE
- EDGE OF DELINEATED WETLAND
- WETLAND AREA
- CONCRETE
- LANDSCAPED AREA
- WOOD CHIPS
- BRICK
- PLAYGROUND EQUIPMENT
- × 100.0 SPOT GRADE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- LIGHT POLE W/ARM
- DRAIN MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- WV WATER GATE VALVE
- WS WATER SHUTOFF VALVE
- MANHOLE
- SIGN
- POST
- DECIDUOUS TREE **10" DIA. OR GREATER**
- DECIDUOUS TREE **LESS THAN 10" DIA.**
- CONIFEROUS SHRUB
- DECIDUOUS BUSH
- MONITORING WELL LOCATION
- **A-1** WETLAND FLAG
- BENCH
- BASKETBALL HOOP
- BB BITUMINOUS BERM
- BW BOTTOM OF WALL ELEVATION
- CONC. CONCRETE
- DIP DUCTILE IRON PIPE
- "DOA" DROP OFF AREA SIGN
- **EP** EDGE OF PAVEMENT
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- PVC POLYVINYL CHLORIDE PIPE
- PT PICNIC TABLE
- RET. WALL RETAINING WALL
- SBB SLOPED BITUMINOUS BERM
- SGC SLOPED GRANITE CURB
- SWL SINGLE WHITE LINE
- TH THRESHOLD ELEVATION
- TW TOP OF WALL ELEVATION
- TYP. TYPICAL
- VGC VERTICAL GRANITE CURB
- (X) INVERT I.D. CONNECTION UNKNOWN
- "PRIME AREA" LIMITS (SEE NOTE 12)

TOPOGRAPHIC PLAN
FOR
WESTON & SAMPSON, INC.
OF
LITTLE HARBOR SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.P.M.	DATE: OCTOBER 3, 2025
CHECKED BY: J.D.S.	DRAWING NO. 9191A
JOB NO. 9191	SHEET 1 OF 9

DOUCET SURVEY | SAM

102 Kent Place, Newmarket, NH 03857 (603) 659-6560
Offices in Bedford & Keene, NH and Kennebunk, ME
Locations Nationwide | http://www.sam.biz

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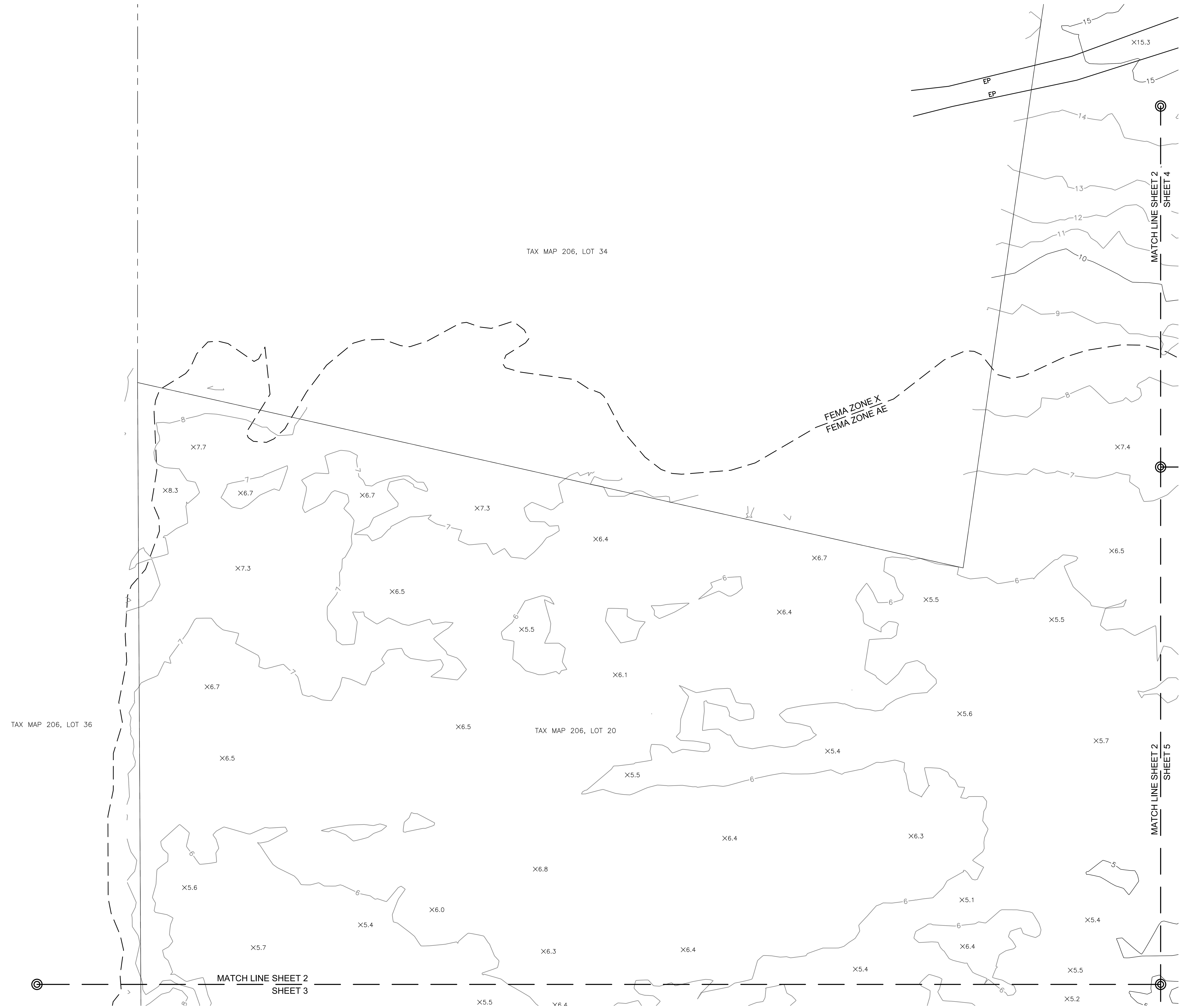

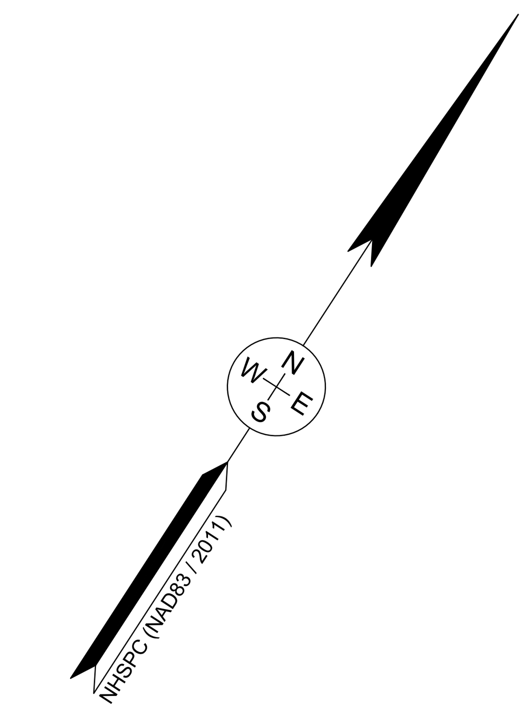

STATE OF NEW HAMPSHIRE
LICENSED LAND SURVEYOR
No. 1626
JOSHUA D. SCHNEIER
Josh Schneier
SIGNATURE

1/27/2026

20 0 20 40
SCALE: 1 INCH = 20 FT.

TOPOGRAPHIC PLAN

FOR
WESTON & SAMPSON, INC.
OF
LITTLE HARBOR SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.P.M.	DATE: OCTOBER 3, 2025
CHECKED BY: J.D.S.	DRAWING NO. 9191A
JOB NO. 9191	SHEET 2 OF 9

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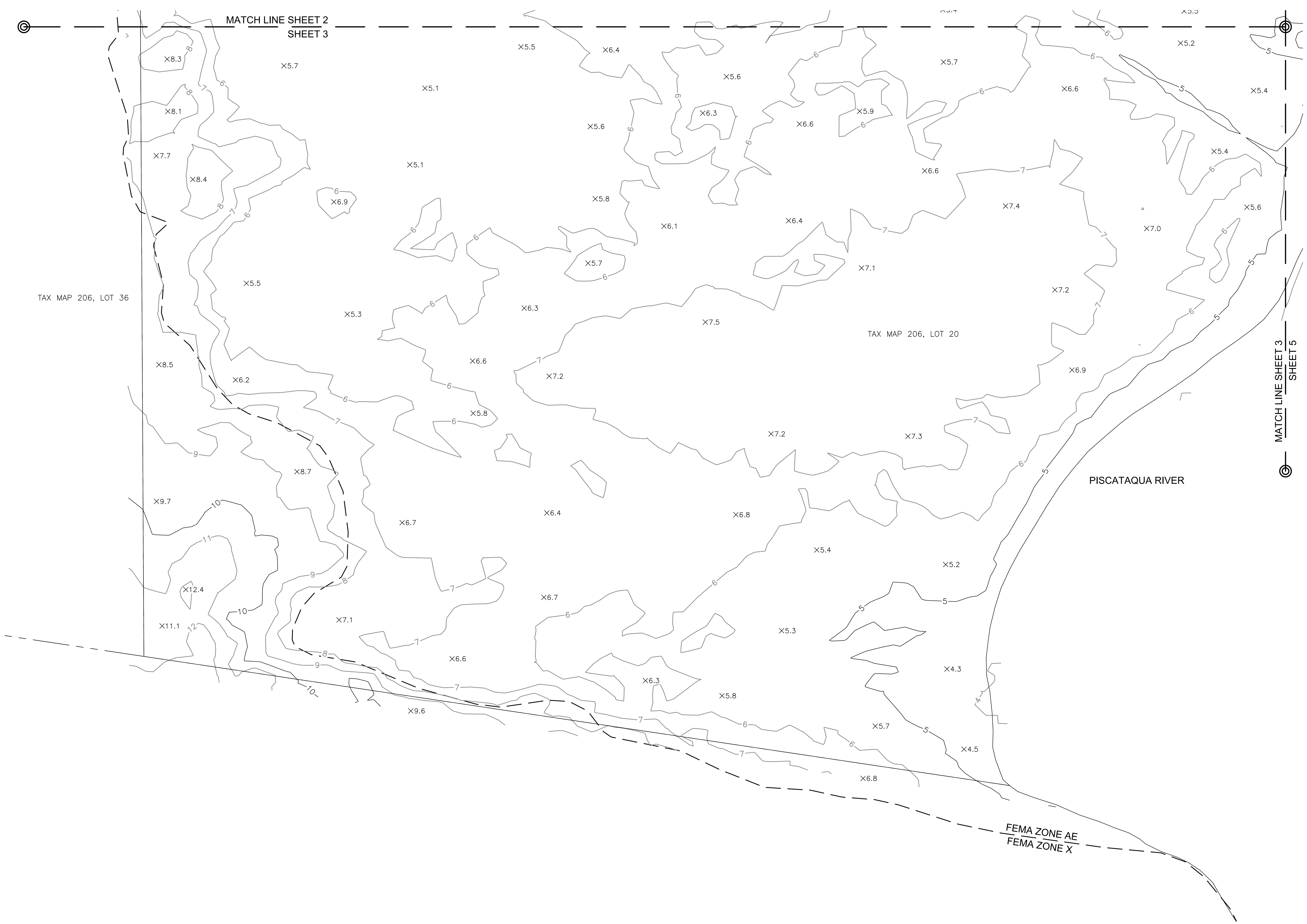
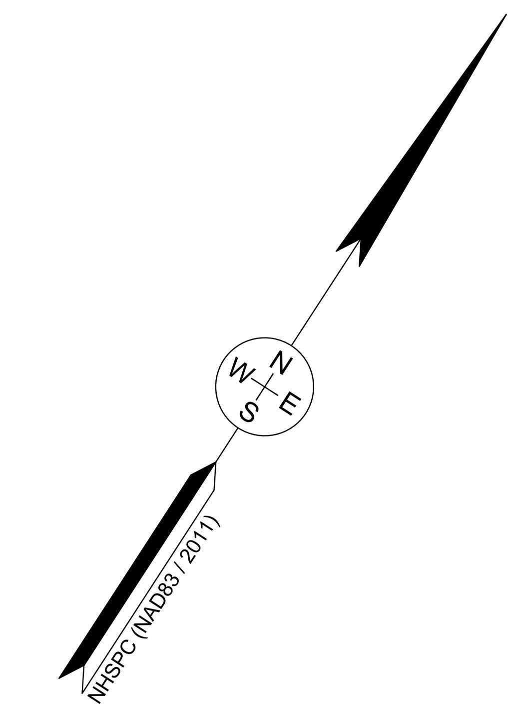
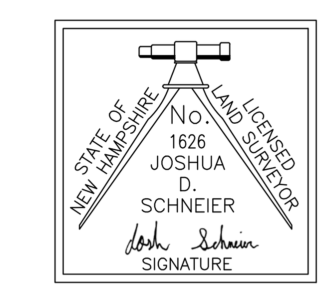
FILE NAME: Y:\PROJECTS\9191 C3d\DWG\9191A Topo.dwg LAYOUT NAME: (2) PLOTTED: Tuesday, January 27, 2026 - 1:28pm







1/27/2026

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SCALE: 1 INCH = 20 FT.

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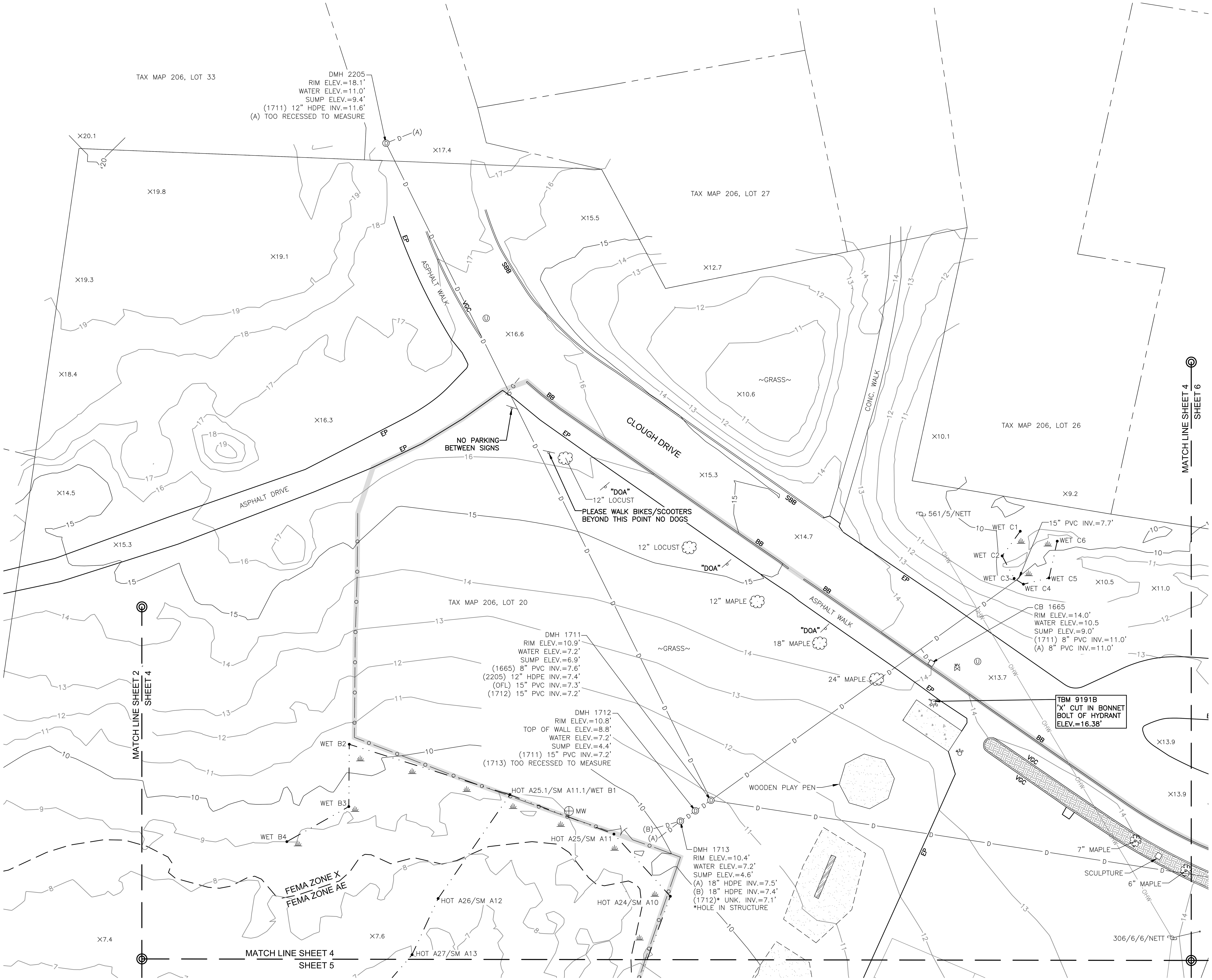

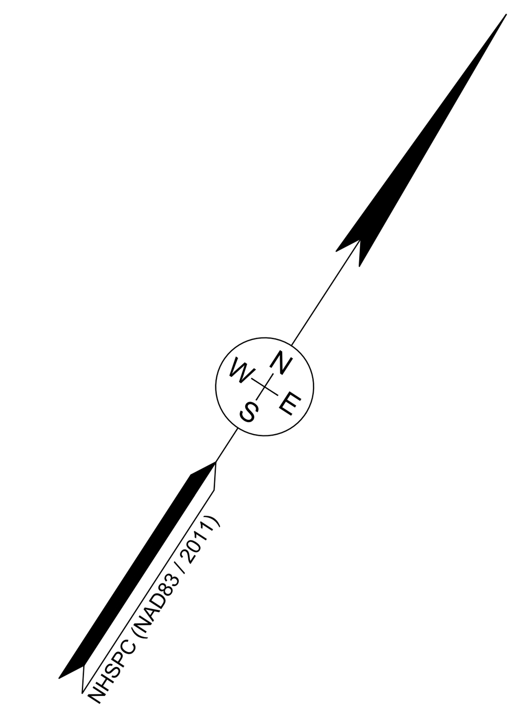

STATE OF NEW HAMPSHIRE
LICENSED LAND SURVEYOR
No. 1626
JOSHUA D. SCHNEIER
SIGNATURE
1/27/2026

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SCALE: 1 INCH = 20 FT.

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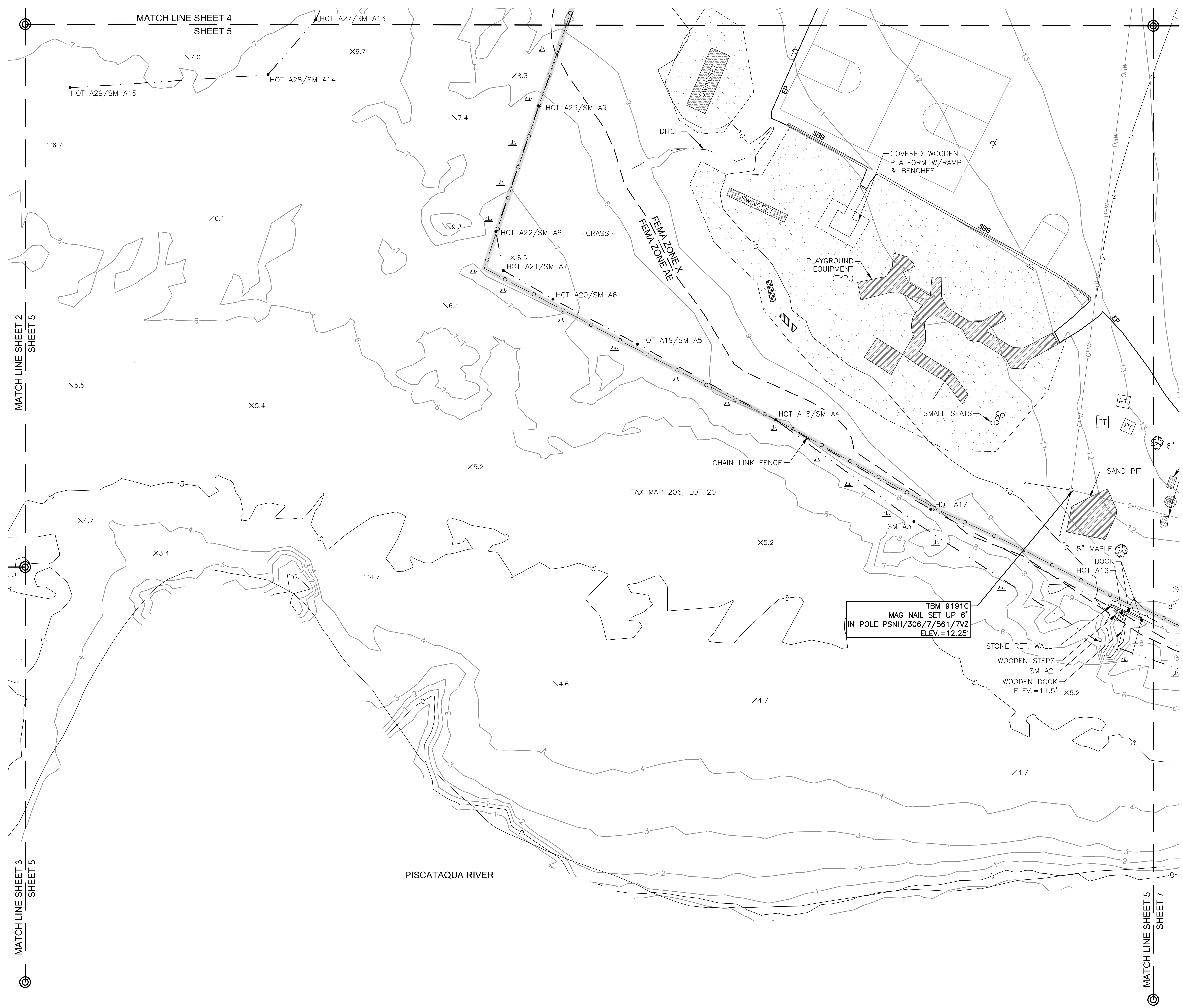

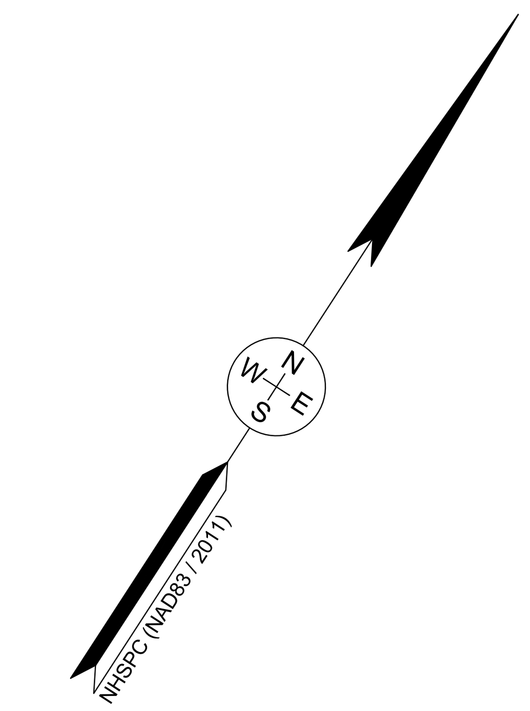

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No. 1626
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LICENSED LAND SURVEYOR
SIGNATURE
1/27/2026

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WESTON & SAMPSON, INC.

OF

LITTLE HARBOR SCHOOL

50 CLOUGH DRIVE

PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

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DOUCET SURVEY | SAM

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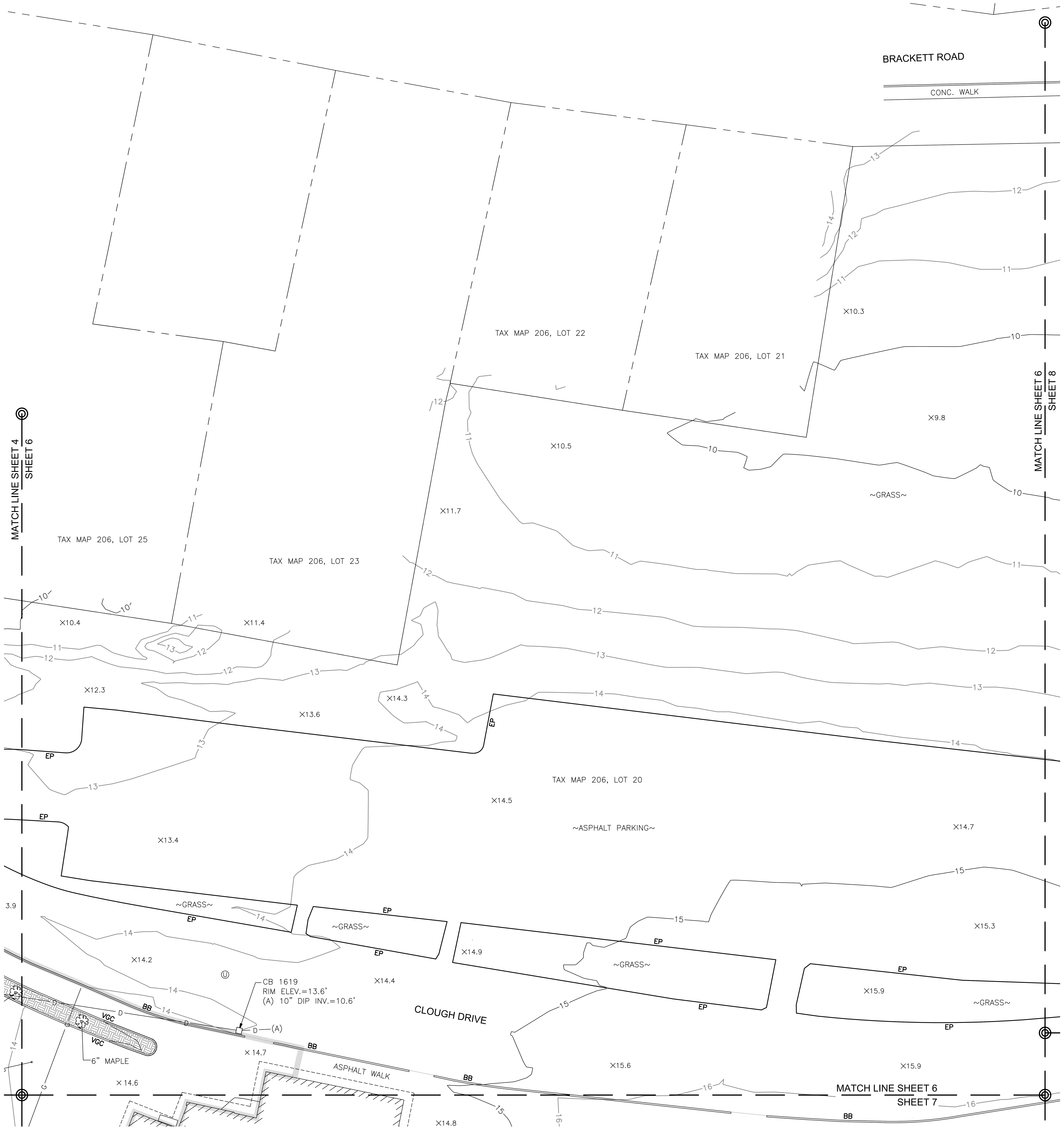

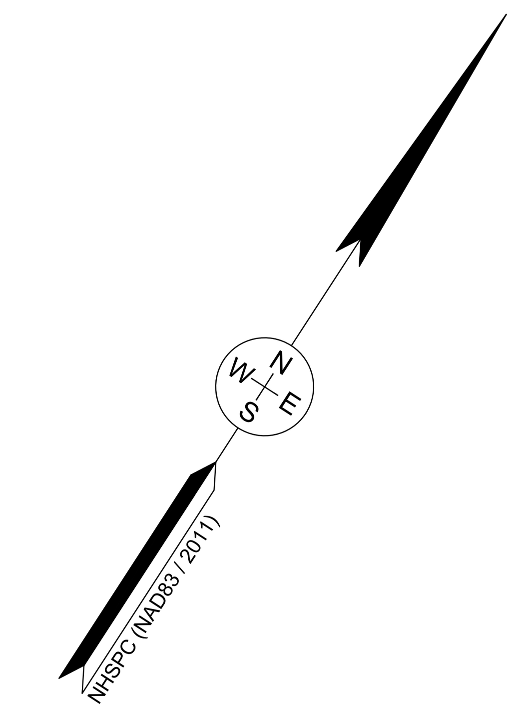

STATE OF NEW HAMPSHIRE
LICENSED LAND SURVEYOR
No. 1626
JOSHUA D. SCHNEIER
SIGNATURE

1/27/2026

20 0 20 40
SCALE: 1 INCH = 20 FT.

TOPOGRAPHIC PLAN

FOR

WESTON & SAMPSON, INC.

OF

LITTLE HARBOR SCHOOL

50 CLOUGH DRIVE

PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.P.M.	DATE: OCTOBER 3, 2025
CHECKED BY: J.D.S.	DRAWING NO. 9191A
JOB NO. 9191	SHEET 6 OF 9

DOUCET SURVEY | SAM

102 Kent Place, Newmarket, NH 03857 (603) 659-6560
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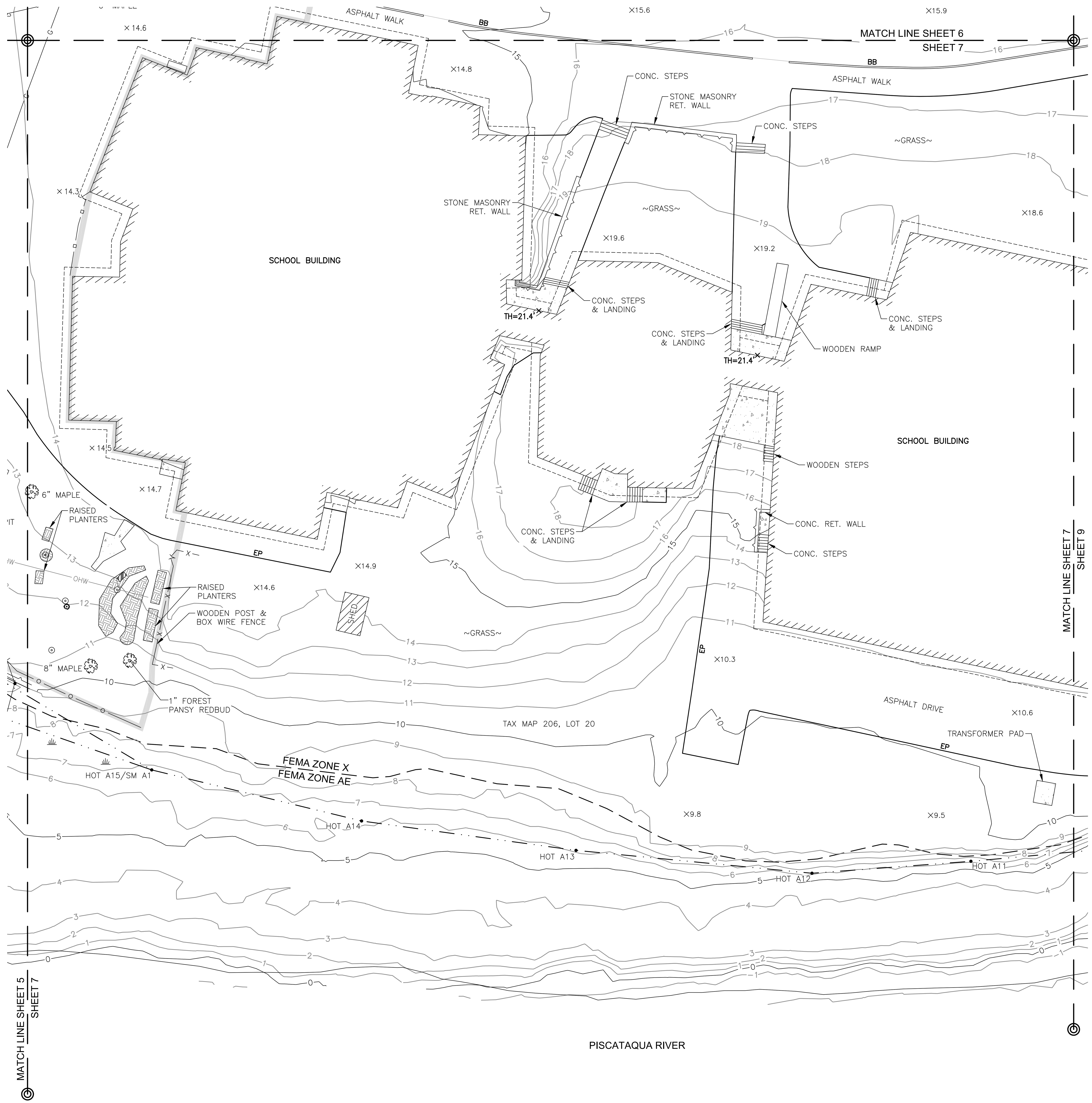

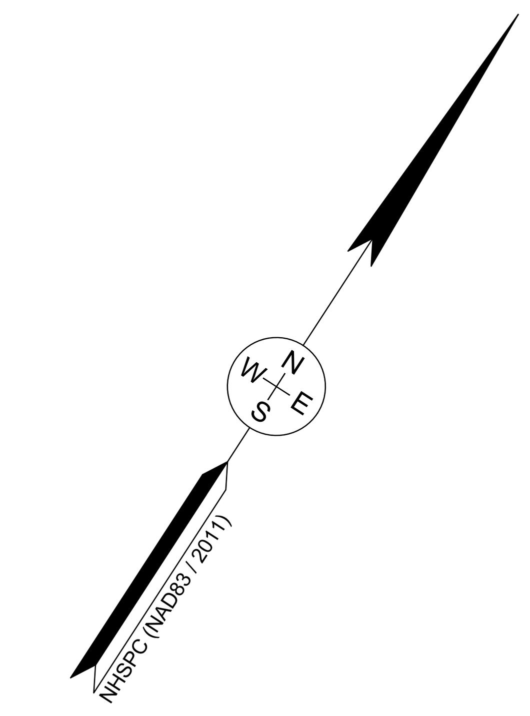

STATE OF NEW HAMPSHIRE
LICENSED LAND SURVEYOR
No. 1626
JOSHUA D. SCHNEIER
SIGNATURE
1/27/2026

20 0 20 40
SCALE: 1 INCH = 20 FT.

TOPOGRAPHIC PLAN
FOR
WESTON & SAMPSON, INC.
OF
LITTLE HARBOR SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY:	C.P.M.	DATE:	OCTOBER 3, 2025
CHECKED BY:	J.D.S.	DRAWING NO.	9191A
JOB NO.	9191	SHEET 7 OF 9	

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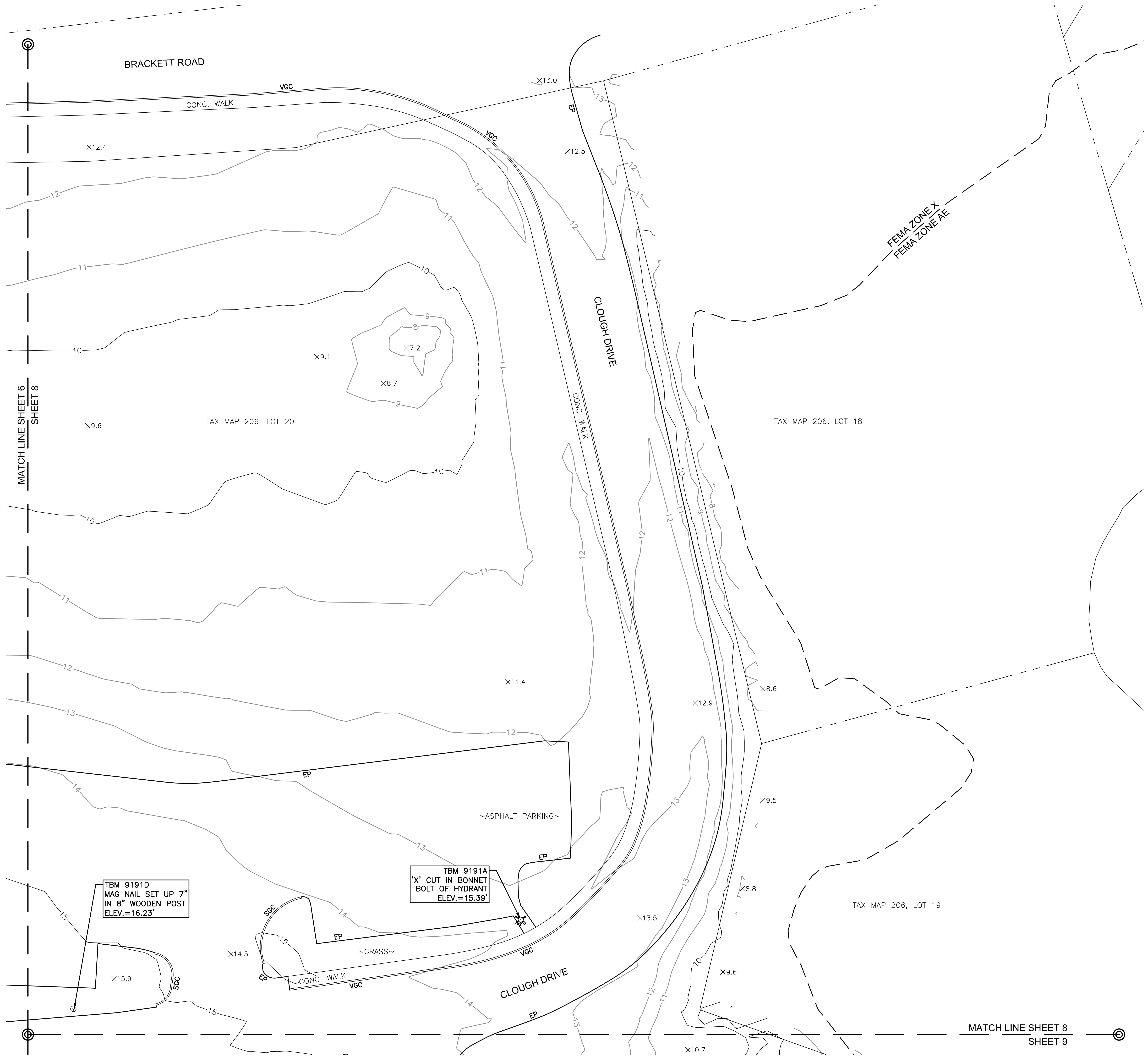

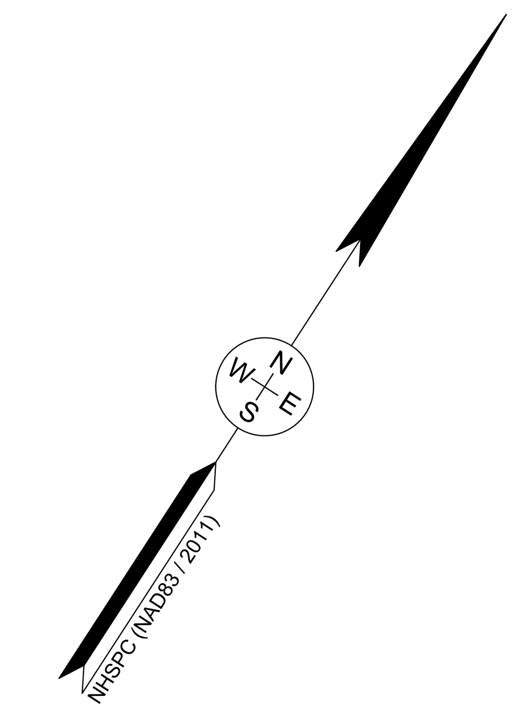

STATE OF NEW HAMPSHIRE
LICENSED LAND SURVEYOR
No. 1626
JOSHUA D. SCHNEIER
SIGNATURE
1/27/2026

20 0 20 40
SCALE: 1 INCH = 20 FT.

TOPOGRAPHIC PLAN
FOR
WESTON & SAMPSON, INC.
OF
LITTLE HARBOR SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.P.M.	DATE: OCTOBER 3, 2025
CHECKED BY: J.D.S.	DRAWING NO. 9191A
JOB NO. 9191	SHEET 8 OF 9

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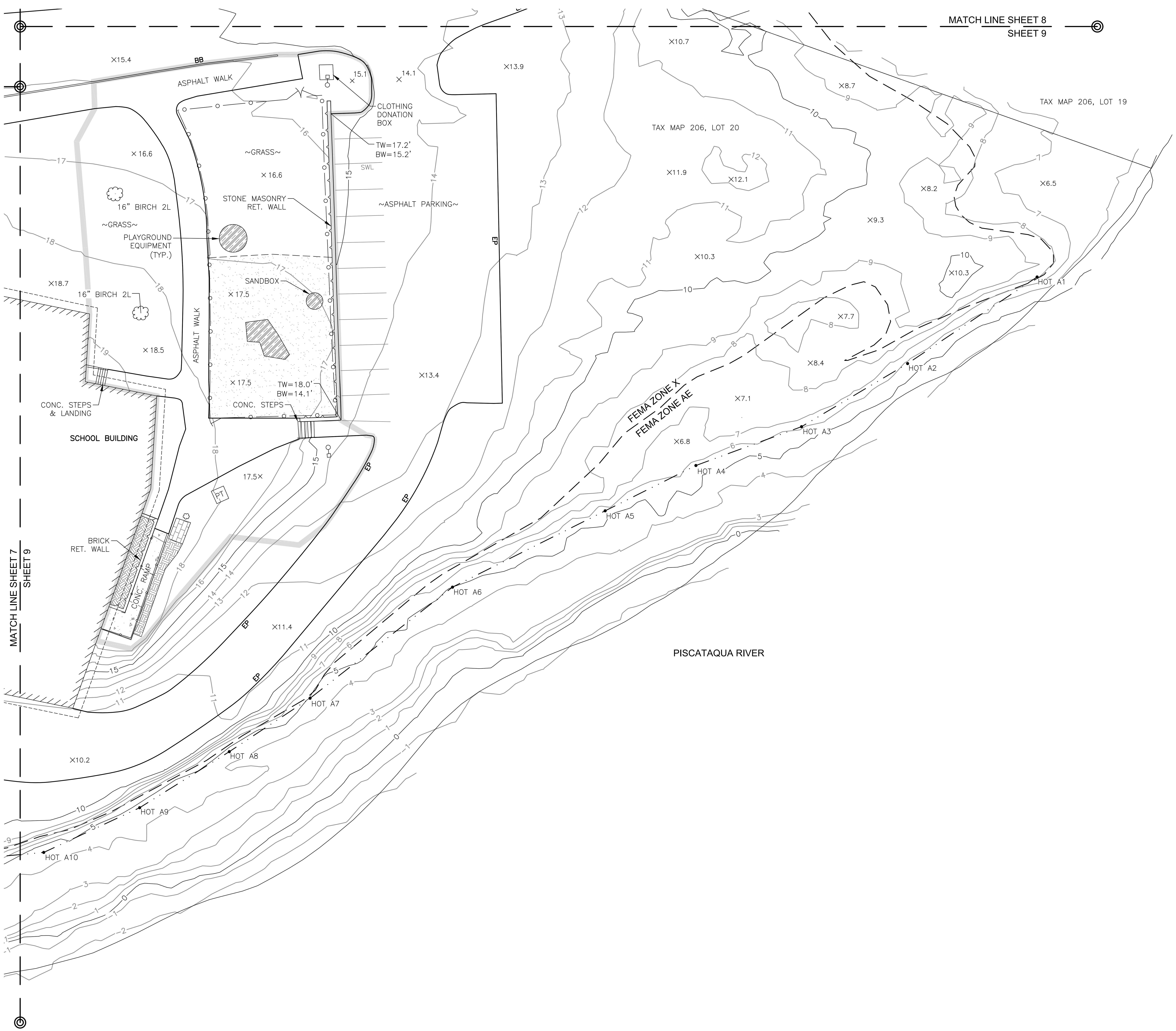

STATE OF NEW HAMPSHIRE
LICENSED LAND SURVEYOR
No. 1626
JOSHUA D. SCHNEIER
SIGNATURE
1/27/2026

NHSPC (NAD83 / 2011)

20 0 20 40
SCALE: 1 INCH = 20 FT.

TOPOGRAPHIC PLAN
FOR
WESTON & SAMPSON, INC.
OF
LITTLE HARBOR SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.P.M.	DATE: OCTOBER 3, 2025
CHECKED BY: J.D.S.	DRAWING NO. 9191A
JOB NO. 9191	SHEET 9 OF 9

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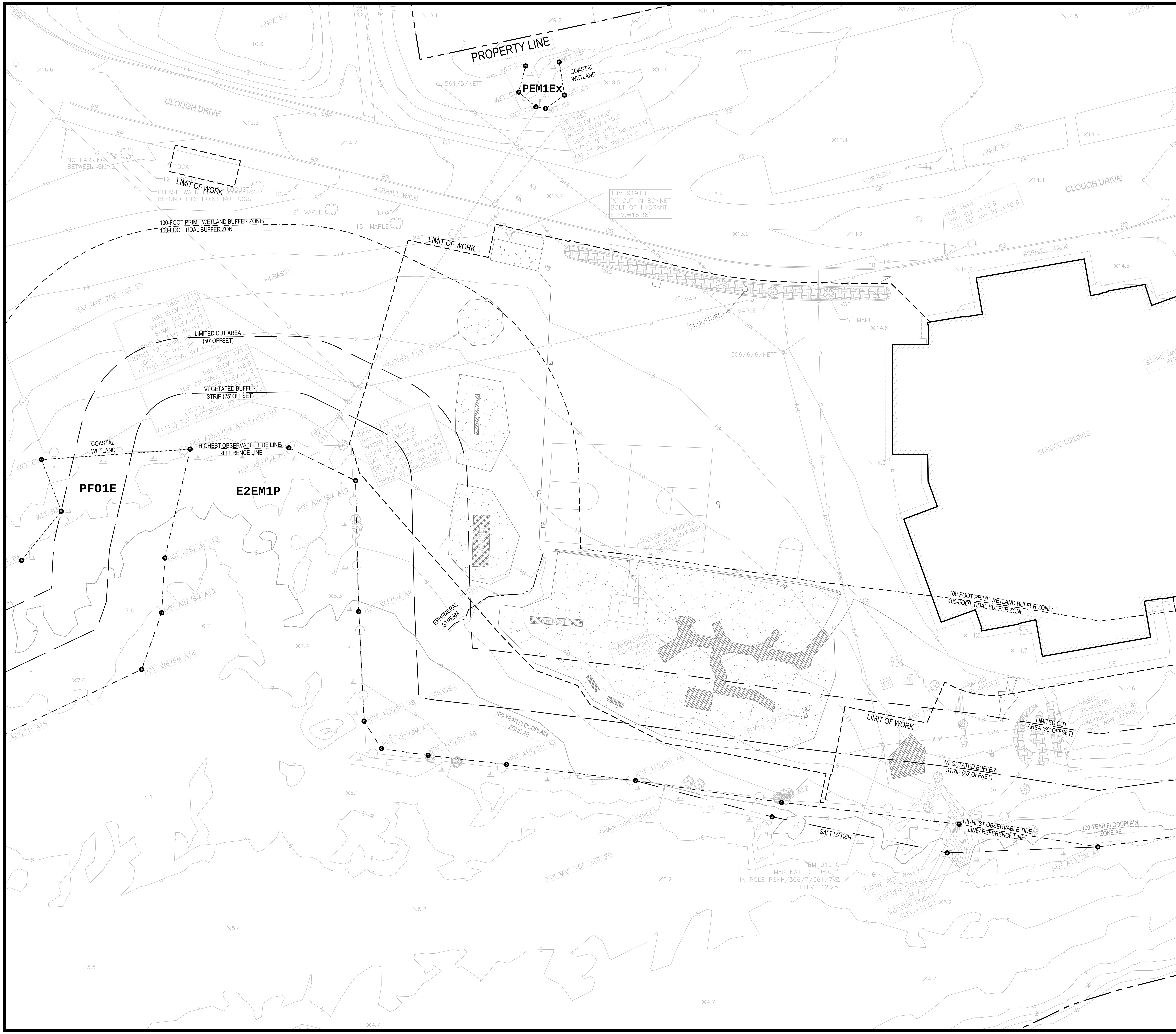

LEGEND

- LIMIT OF WORK
- APPROXIMATE LOT LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- COASTAL WETLAND LINE
- SALT MARSH LINE
- EPHEMERAL STREAM
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- APPROXIMATE ABUTTERS LOT LINE
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- EDGE OF PAVEMENT
- RETAINING WALL
- CHAIN LINK FENCE
- STOCKADE FENCE
- WIRE FENCE
- HANDRAIL
- OVERHEAD WIRE
- DRAIN LINE
- GAS LINE
- WETLAND AREA
- CONCRETE
- LANDSCAPED AREA
- WOOD CHIPS
- BRICK
- PLAYGROUND EQUIPMENT
- SPOT GRADE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- LIGHT POLE W/ARM
- DRAIN MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- WATER GATE VALVE
- WATER SHUTOFF VALVE
- MANHOLE
- SIGN
- POST
- DECIDUOUS TREE
- CONIFEROUS SHRUB
- DECIDUOUS BUSH
- MONITORING WELL LOCATION
- WETLAND FLAG
- BENCH
- BASKETBALL HOOP

BB	BITUMINOUS BERM
BW	BOTTOM OF WALL ELEVATION
CONC.	CONCRETE
DIP	DUCTILE IRON PIPE
"DOA"	DROP OFF AREA SIGN
EP	EDGE OF PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE PIPE
PT	PICNIC TABLE
RET. WALL	RETAINING WALL
SBB	SLOPED BITUMINOUS BERM
SGC	SLOPED GRANITE CURB
SWL	SINGLE WHITE LINE
TH	THRESHOLD ELEVATION
TW	TOP OF WALL ELEVATION
TYP.	TYPICAL
VGC	VERTICAL GRANITE CURB
(X)	INVERT I.D. CONNECTION UNKNOWN
HOT	HIGHEST OBSERVABLE TIDE
WET	COASTAL WETLAND
SM	SALT MARSH

STATE OF NEW HAMPSHIRE
DEVIN KELTY BATCHELDER
No. 300
CERTIFIED WETLAND SCIENTIST
02/24/2026

0 10' 20' 40'
SCALE: 1"=20'

Project:
CITY OF PORTSMOUTH
LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson
Weston & Sampson Engineers, Inc.
1 Washington Street, 10th Floor
Boston, MA 02108
617.412.4480 800.SAMPSON
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Consultants:

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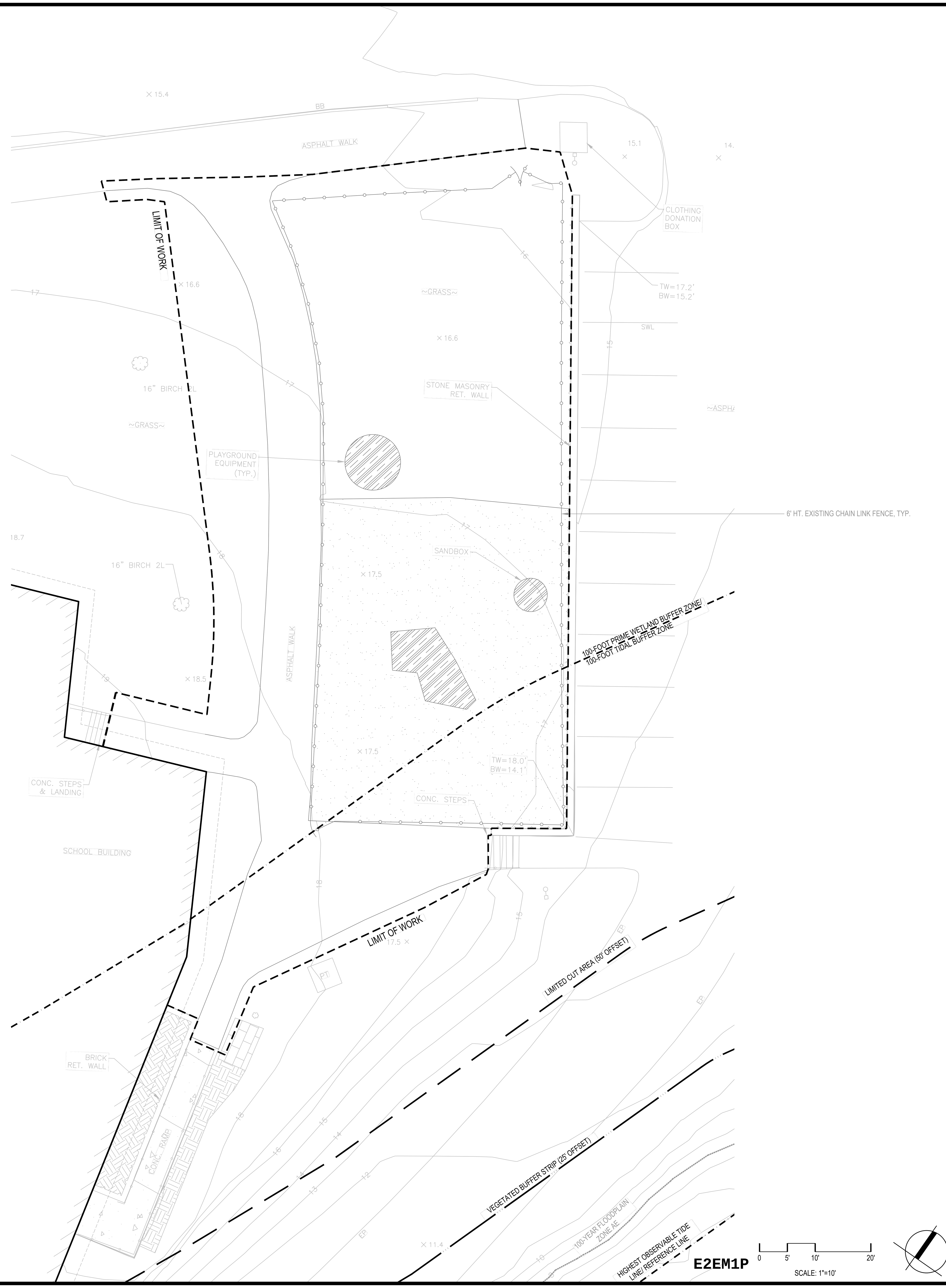
Date:	FEBRUARY 24, 2026
Drawn By:	MG, JZ
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
EXISTING CONDITIONS PLAN
LHS PLAYGROUND

Sheet Number:
L100



LEGEND

- LIMIT OF WORK
- APPROXIMATE LOT LINE
- HIGHEST OBSERVABLE TIDE LINE/ REFERENCE LINE
- VEGETATED BUFFER STRIP (25' OFFSET)
- LIMITED CUT AREA (50' OFFSET)
- 100-FOOT PRIME WETLAND BUFFER ZONE/ 100-FOOT TIDAL BUFFER ZONE
- 100-YEAR FLOODPLAIN ZONE AE (ELEVATION 8.0' NAVD88)
- APPROXIMATE ABUTTERS LOT LINE
- 100 MAJOR CONTOUR LINE
- 98 MINOR CONTOUR LINE
- EDGE OF PAVEMENT
- RETAINING WALL
- CHAIN LINK FENCE
- STOCKADE FENCE
- WIRE FENCE
- HANDRAIL
- OHW OVERHEAD WIRE
- D DRAIN LINE
- G GAS LINE
- WETLAND AREA
- CONCRETE
- LANDSCAPED AREA
- WOOD CHIPS
- BRICK
- PLAYGROUND EQUIPMENT
- × 100.0 SPOT GRADE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- LIGHT POLE W/ARM
- DRAIN MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- WATER GATE VALVE
- WATER SHUTOFF VALVE
- MANHOLE
- SIGN
- POST
- DECIDUOUS TREE
- CONIFEROUS SHRUB
- DECIDUOUS BUSH
- MONITORING WELL LOCATION
- A-1 WETLAND FLAG
- BENCH
- BASKETBALL HOOP
- BB BITUMINOUS BERM
- BW BOTTOM OF WALL ELEVATION
- CONC. CONCRETE
- DIP DUCTILE IRON PIPE
- "DOA" DROP OFF AREA SIGN
- EP EDGE OF PAVEMENT
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- PVC POLYVINYL CHLORIDE PIPE
- PT PICNIC TABLE
- RET. WALL RETAINING WALL
- SBB SLOPED BITUMINOUS BERM
- SGC SLOPED GRANITE CURB
- SWL SINGLE WHITE LINE
- TH THRESHOLD ELEVATION
- TW TOP OF WALL ELEVATION
- TYP. TYPICAL
- VGC VERTICAL GRANITE CURB
- (X) INVERT I.D. CONNECTION UNKNOWN
- HOT HIGHEST OBSERVABLE TIDE
- WET COASTAL WETLAND
- SM SALT MARSH

STATE OF NEW HAMPSHIRE
DEVIN KELTY BATCHELDER
No. 300
CERTIFIED WETLAND SCIENTIST
02/24/2026

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NH

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Date:	FEBRUARY 24, 2026
Drawn By:	MG, JZ
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
EXISTING CONDITIONS PLAN
PEEP PLAYGROUND

Sheet Number:
L101

LEGEND

	PROPERTY LINE	
	LIMIT OF WORK	
	6' HT. CONSTRUCTION FENCE	
	R&S EXISTING VERTICAL GRANITE CURB	
	R&D EXISTING FENCE AND FOOTINGS	
	SAW CUT	
	EROSION CONTROL	2 L900
	CONSTRUCTION ENTRANCE	4 L900
	R&D EX. ASPHALT, COMPLETE, TYP.	
	R&D EX. CONCRETE, COMPLETE, TYP.	
	STRIP AND STOCKPILE TOPSOIL, TYP.	
	R&D GRAVEL/ENGINEERED WOOD FIBER, TYP.	
	GRUB PLANTING BEDS AND REMOVE EXISTING PLANT MATERIAL, TYP.	
	MILL + OVERLAY EXISTING ASPHALT, TYP.	
X	R&D SITE AMENITIES, TYP.	
	TREE PROTECTION, TYP.	1 L900
	PROTECT EX. SITE FEATURE, TYP.	
	INLET SEDIMENT CONTROLS TYP.	3 L900
TYP.	TYPICAL	
EX.	EXISTING	
R&D	REMOVE AND DEMOLISH	
R&S	REMOVE AND STOCKPILE	
P&P	PRESERVE AND PROTECT	

NOTES

SALVAGED ITEM COORDINATION

EXISTING ITEMS TO BE SALVAGED ON-SITE FOR REINSTALLATION
- (2) BASKETBALL GOALS
- QUARIUS DUNHAM MEMORIAL
- GAGA PIT
- "CATERPILLAR" MONKEY BARS

EXISTING ITEMS TO BE SALVAGED ON-SITE, NOT FOR REINSTALLATION FOR THIS PROJECT. OWNER TO COORDINATE STOCKPILE LOCATION.
- BIKE RACK
- BLUE SWING SET
- VERTICAL GRANITE CURB FROM REMOVED PLANTER

STAGING AREA

CONTRACTOR SHALL COORDINATE AND CONFIRM FINAL STAGING AREA LOCATION WITH OWNER AND PROJECT TEAM PRIOR TO CONSTRUCTION. DO NOT COMMENCE MOBILIZATION OR MATERIAL STORAGE WITHOUT APPROVAL.

0 10' 20' 40'

SCALE: 1"=20'

Project:

CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson

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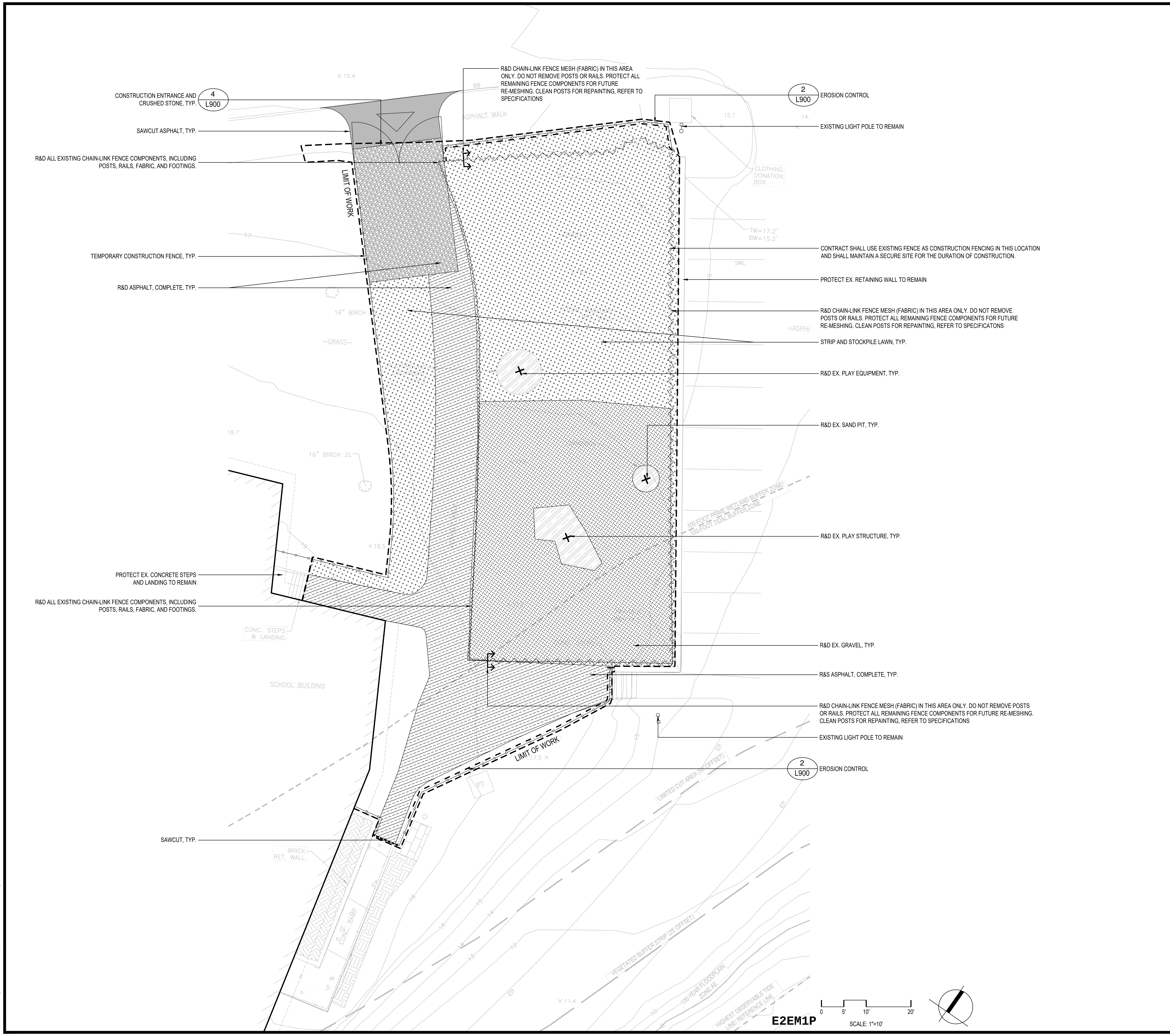
W&S File No.:	----

Drawing Title:

SITE PREPARATION & DEMOLITION PLAN LHS PLAYGROUND

Sheet Number:

L200



LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- 6' HT. CONSTRUCTION FENCE
- R&D EXISTING FENCE MESH, POSTS AND FOOTINGS
- R&D EXISTING FENCE MESH
- SAW CUT
- EROSION CONTROL (2 L900)
- CONSTRUCTION ENTRANCE (4 L900)
- R&D EX. ASPHALT, COMPLETE, TYP.
- STRIP AND STOCKPILE TOPSOIL, TYP.
- R&D GRAVEL EX., TYP.
- R&D SITE AMENITIES, TYP.
- TREE PROTECTION, TYP. (1 L900)

TYP.	TYPICAL
EX.	EXISTING
R&D	REMOVE AND DEMOLISH
R&S	REMOVE AND STOCKPILE
P&P	PRESERVE AND PROTECT

NOTES

SALVAGED ITEM COORDINATION

EXISTING "LOOSE" ITEMS TO BE SALVAGED ON-SITE. CONFIRM WITH LANDSCAPE ARCHITECT PRIOR TO ANY ADDITIONAL PLAY ELEMENT REMOVAL.

- "COMMUNITY PLAYTHINGS" - PLAY STORAGE / CABINET
- (2) WOODEN PICNIC TABLE AND BENCH SET
- WOODEN PRETEND KITCHEN
- WOODEN SITTING BENCHES
- (2) WOODEN TUNNELS
- "LAKESHORE" LOG BUILDER SET
- WOOD HEXAGON STORAGE AND COVER
- WOOD "COMMUNITY" BRIDGE

PEEP PLAYGROUND CONSTRUCTION START RESTRICTION

CONSTRUCTION AT PEEP PLAYGROUND SHALL BEGIN NO EARLIER THAN JUNE 8, 2026. ANY CONSTRUCTION ACTIVITIES OCCURRING PRIOR TO THIS DATE WITHOUT WRITTEN APPROVAL FROM THE OWNER SHALL BE CONSIDERED UNAUTHORIZED.

STAGING AREA

CONTRACTOR SHALL COORDINATE AND CONFIRM FINAL STAGING AREA LOCATION WITH OWNER AND PROJECT TEAM PRIOR TO CONSTRUCTION. DO NOT COMMENCE MOBILIZATION OR MATERIAL STORAGE WITHOUT APPROVAL.

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NH

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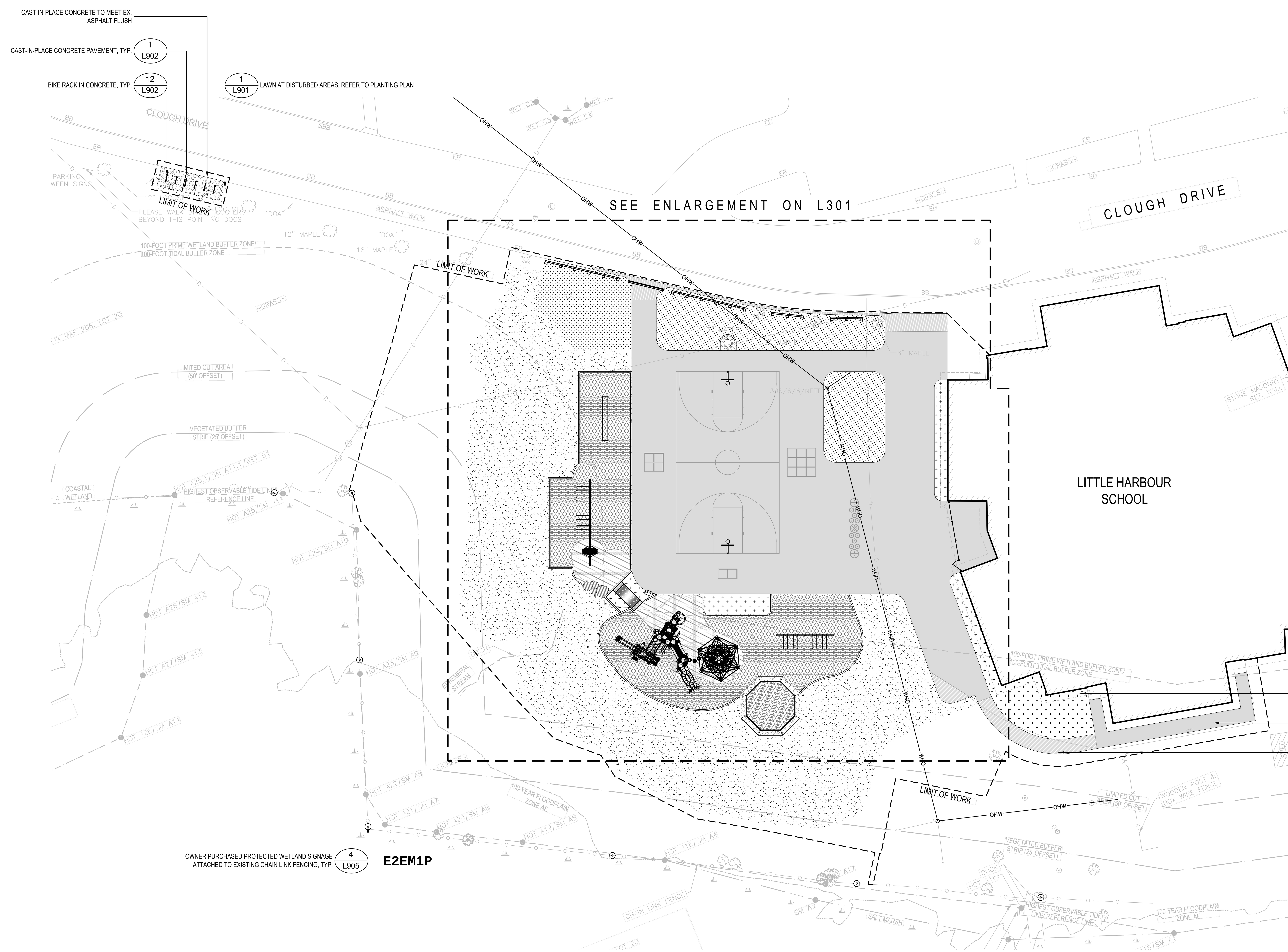
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
SITE PREPARATION & DEMOLITION PLAN PEEP PLAYGROUND

Sheet Number:
L201



LEGEND

PROPERTY LINE		
LIMIT OF WORK		
MILL + OVERLAY ASPHALT	4 L902
NEW ASPHALT AND BASE	2 L902
CAST-IN-PLACE CONCRETE PAVEMENT	1 L902
PLANTED AREA, REFER TO PLANTING PLAN	
SEEDED LAWN WHERE DISTURBED	1 L901

GENERAL NOTE:

1. ALL MENTIONS OF "COMMUNITY BUILD INSTALL" INDICATE PLAY STRUCTURES AND BONDED RUBBER SAFETY SURFACING WILL BE PURCHASED DIRECTLY BY THE OWNER AND INSTALLED BY THE OWNER UNDER THE DIRECTION OF A CPSI-CERTIFIED FOREMAN. CONTRACTOR SHALL ACCEPT DELIVERY AND PROVIDE ON-SITE STORAGE OF ALL MATERIALS UNTIL INSTALLATION.

Project:

CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
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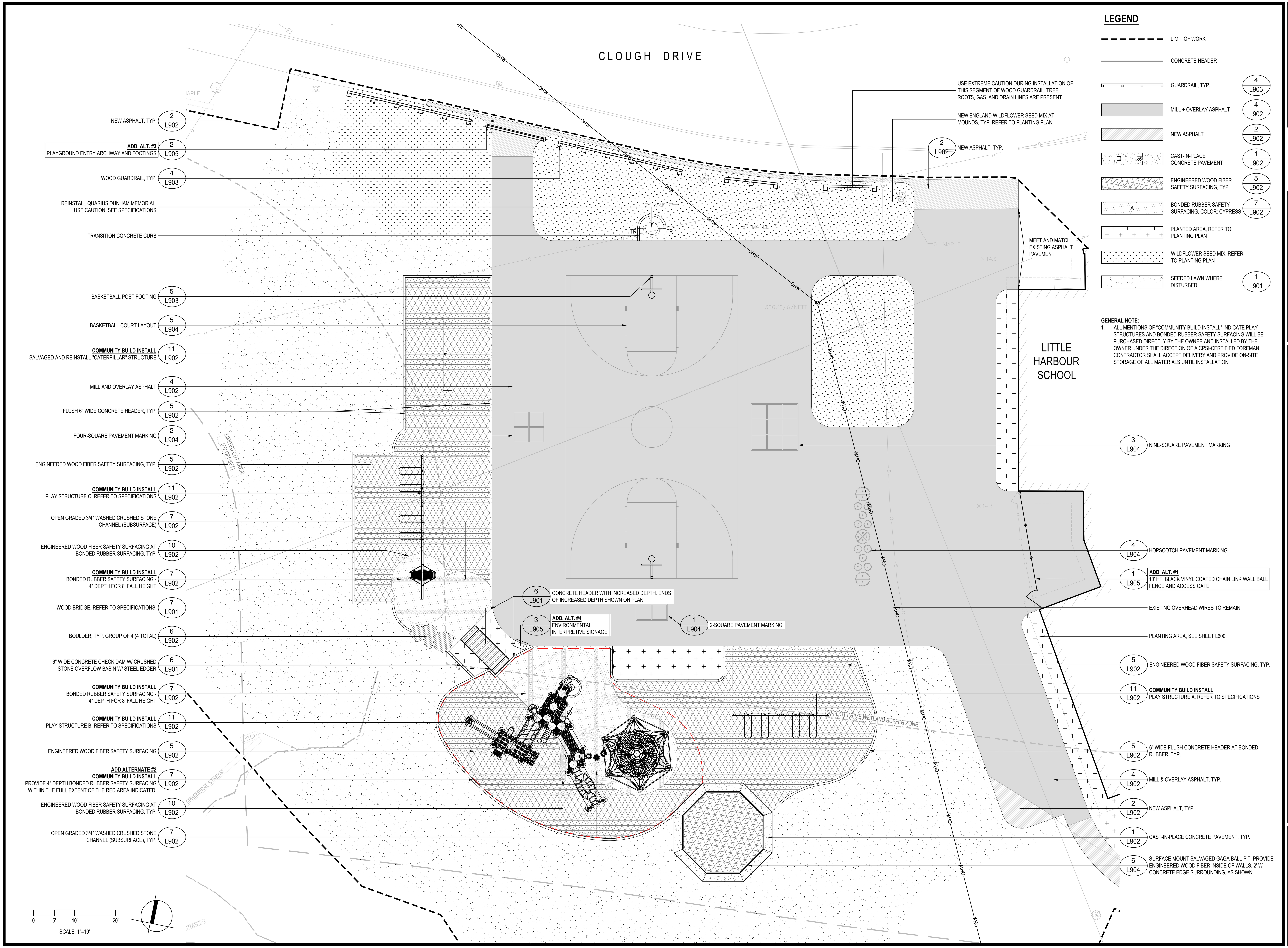
W&S File No.:	----

Drawing Title:

MATERIALS PLAN
LHS PLAYGROUND

Sheet Number:

L300



Project:
CITY OF PORTSMOUTH

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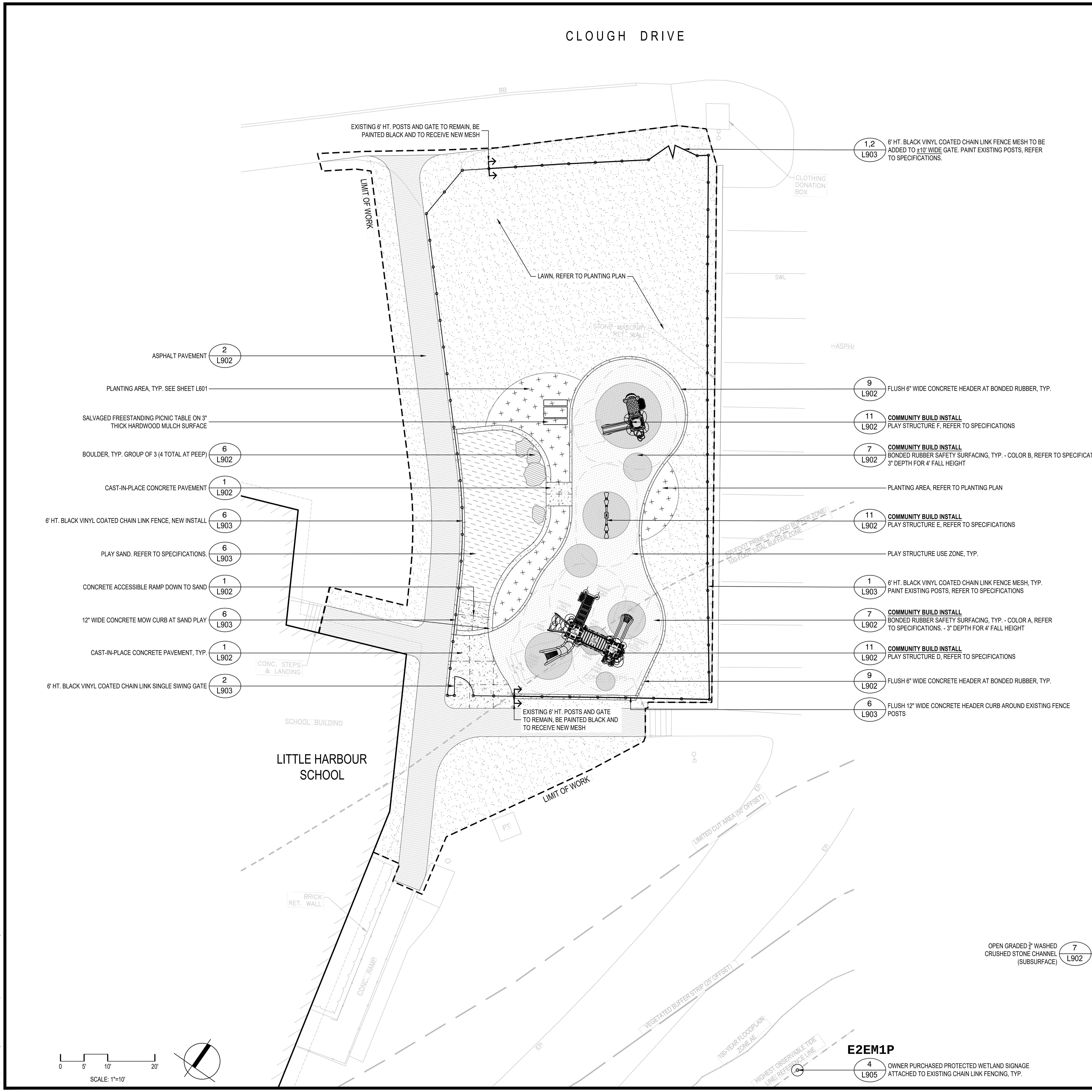
Approved By: BK
W&S Project No.: ENG25-0955
W&S File No.: ----

Drawing Title:
MATERIALS PLAN
LHS PLAYGROUND

Sheet Number:
L301



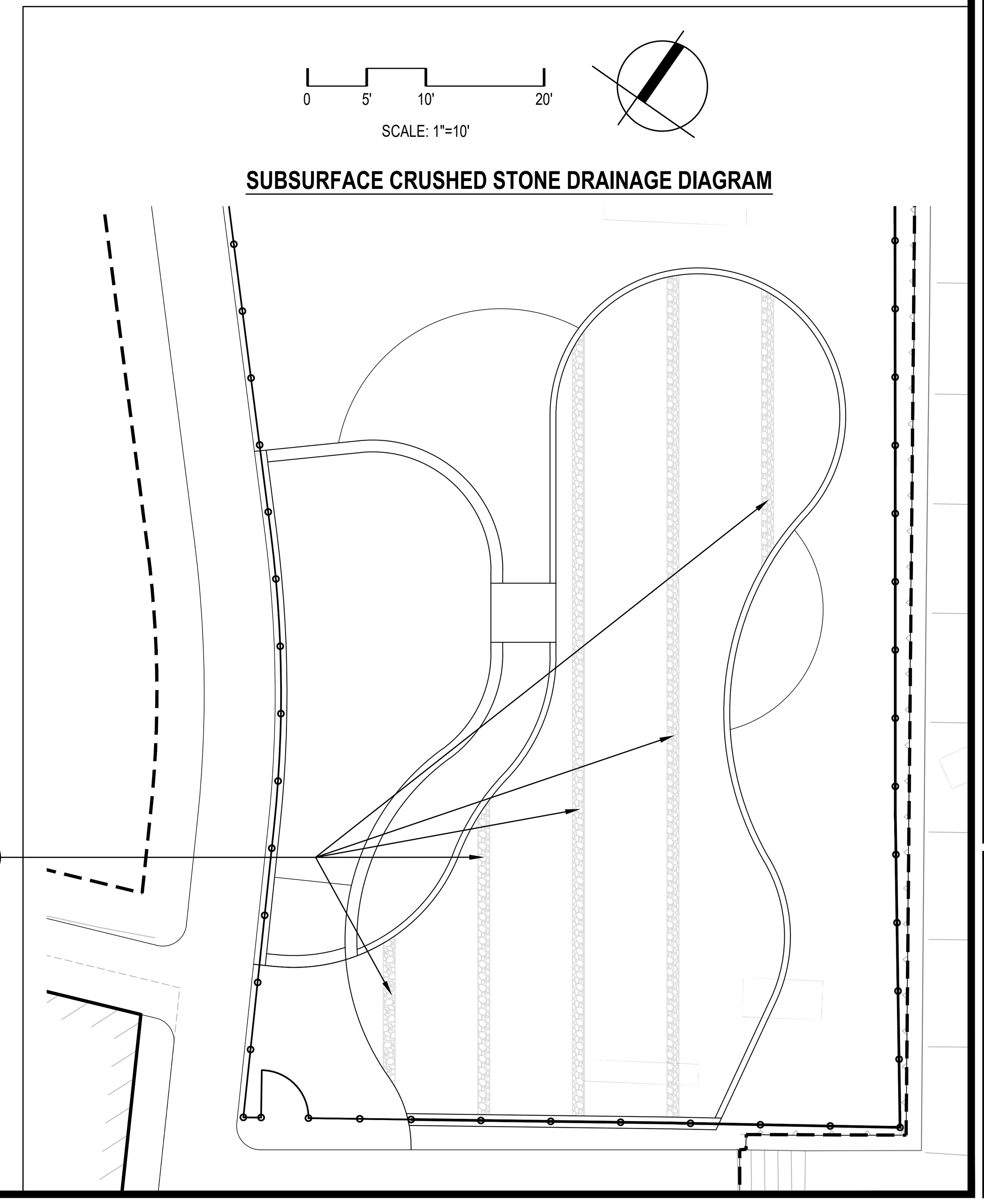
LEGEND

LIMIT OF WORK		
ASPHALT PAVEMENT	2 L902	
CAST-IN-PLACE CONCRETE PAVEMENT	1 L902	
BONDED RUBBER SAFETY SURFACING: COLOR A: CYPRESS COLOR B: BLUE	7 L902	
PLANTED AREA, REFER TO PLANTING PLAN		
PLAY SAND, REFER TO SPECIFICATIONS		
SEEDED LAWN, REFER TO PLANTING PLAN		

GENERAL NOTE:

1. ALL MENTIONS OF "COMMUNITY BUILD INSTALL" INDICATE PLAY STRUCTURES AND BONDED RUBBER SAFETY SURFACING WILL BE PURCHASED DIRECTLY BY THE OWNER AND INSTALLED BY THE OWNER UNDER THE DIRECTION OF A CPSI-CERTIFIED FOREMAN. CONTRACTOR SHALL ACCEPT DELIVERY AND PROVIDE ON-SITE STORAGE OF ALL MATERIALS UNTIL INSTALLATION.

SUBSURFACE CRUSHED STONE DRAINAGE DIAGRAM



Project:
CITY OF PORTSMOUTH
LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE PORTSMOUTH, NH

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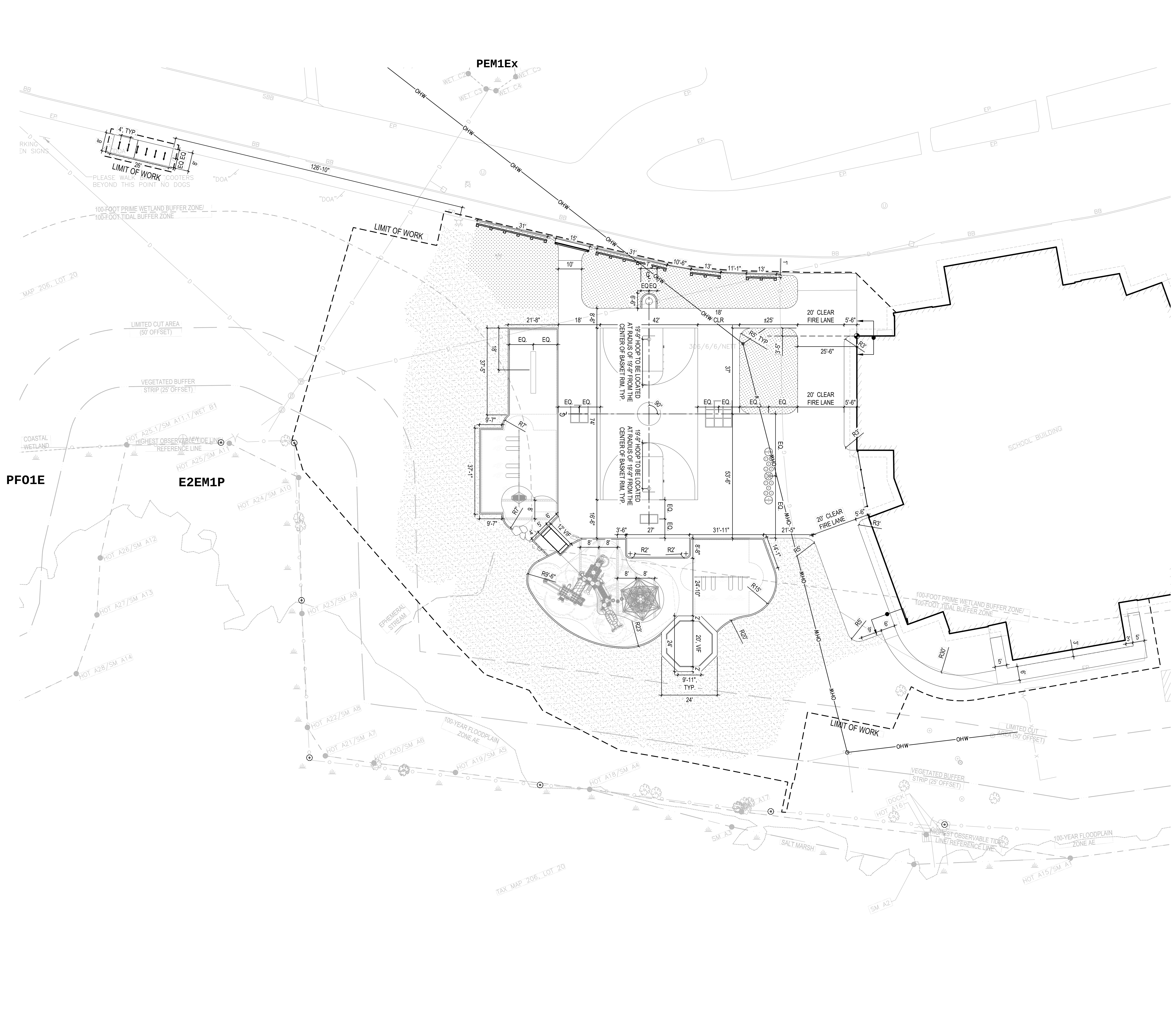
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
MATERIALS PLAN
PEEP PLAYGROUND

Sheet Number:
L302



LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- CENTER LAYOUT LINE
- TYP. DIMENSION
- TYP. RADIUS DIMENSION
- ALIGN
- POINT OF BEGINNING, TYP.
- EQ — EQUAL DIMENSIONS

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL

50 CLOUGH DRIVE
PORTSMOUTH, NH

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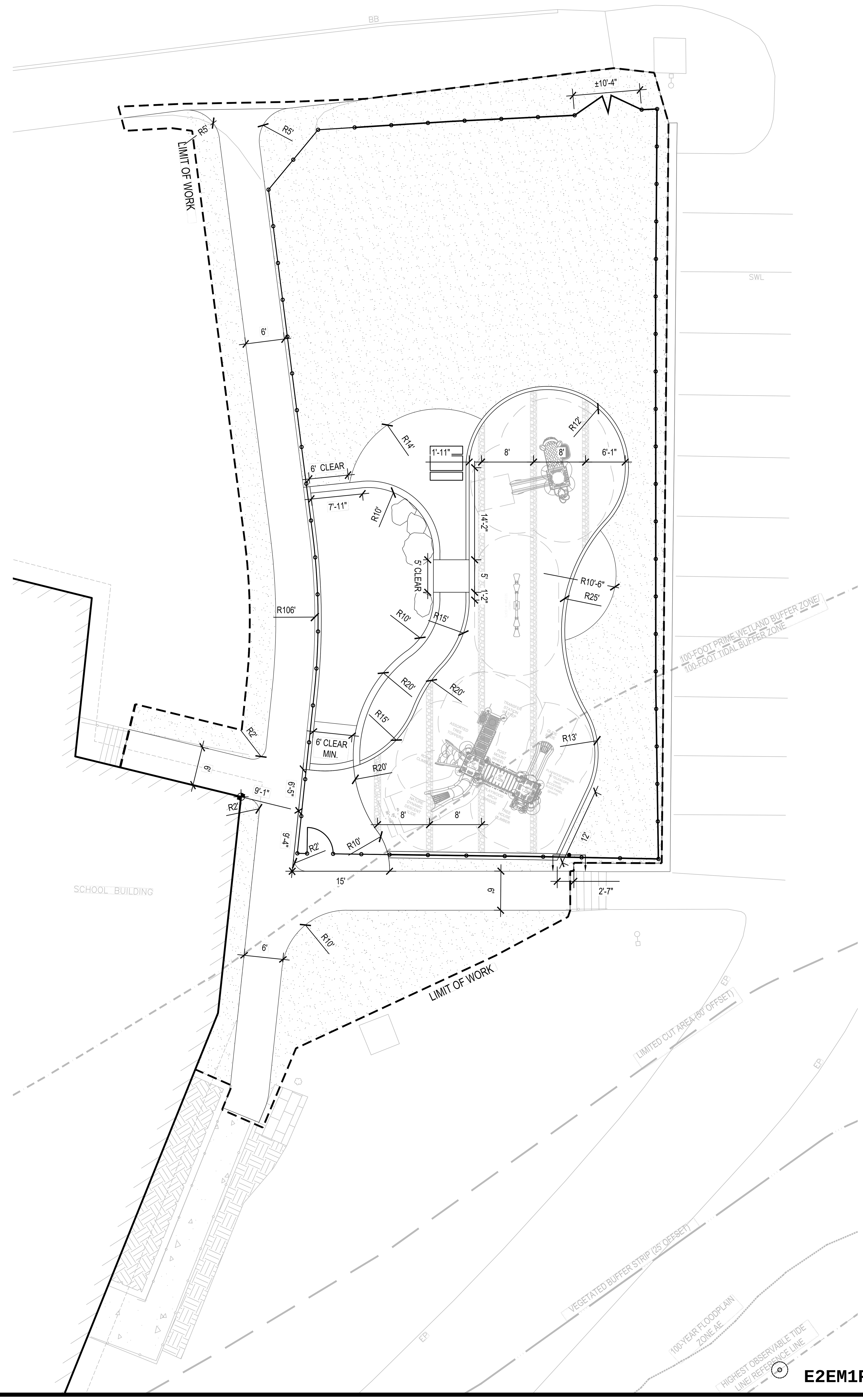
Drawing Title:
LAYOUT PLAN
LHS PLAYGROUND

Sheet Number:
L400



LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- CENTER LAYOUT LINE
- TYP. DIMENSION (26'-4")
- TYP. RADIUS DIMENSION (R174')
- ALIGN
- POINT OF BEGINNING, TYP.
- EQ — EQUAL DIMENSIONS

0 5' 10' 20'
SCALE: 1"=10'

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NH

Weston & Sampson

Weston & Sampson Engineers, Inc.
1 Washington Street, 10th Floor
Boston, MA 02108
617.412.4480 800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

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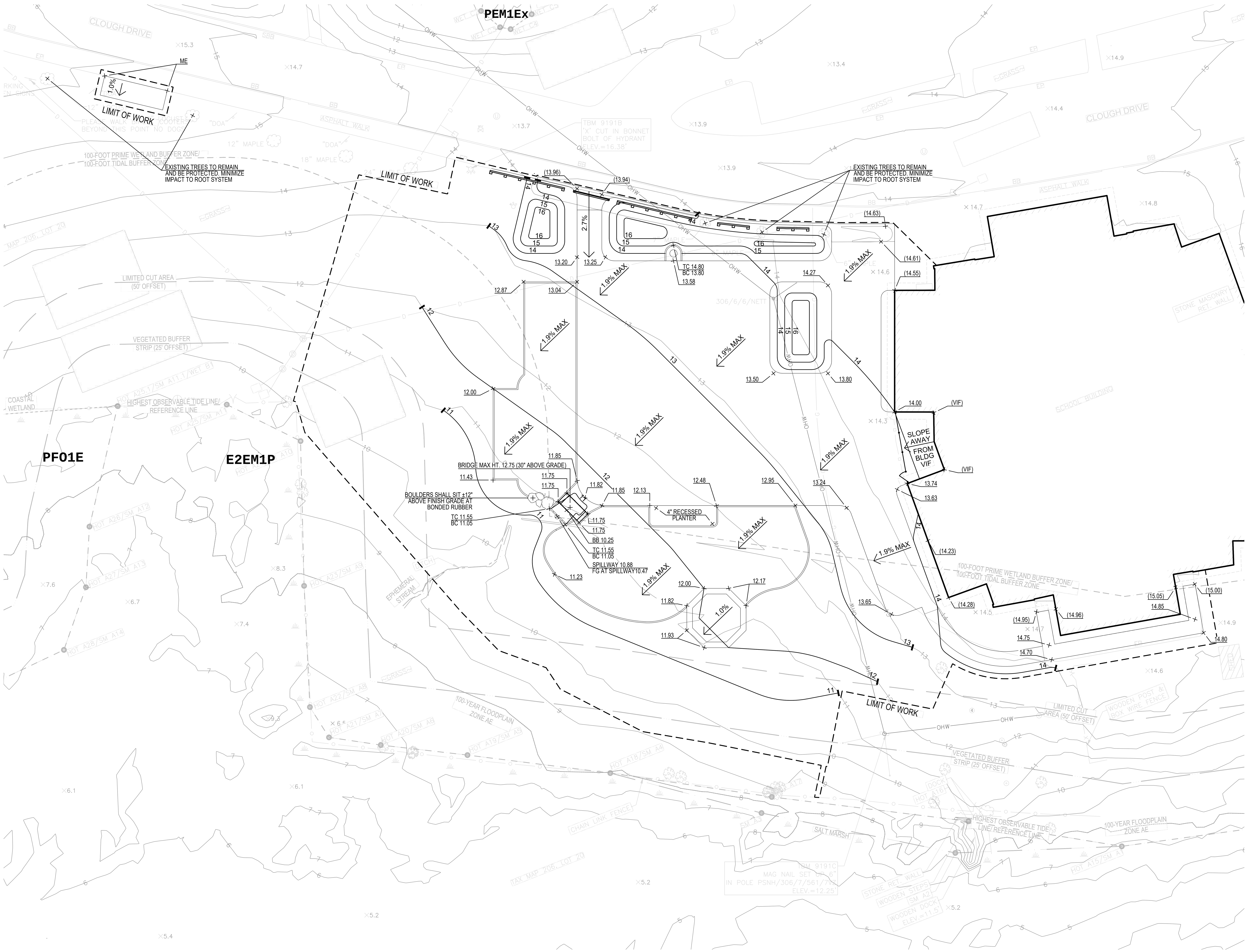
Date:	FEBRUARY 24, 2026
Drawn By:	MG, JZ
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

Drawing Title:
LAYOUT PLAN
PEEP PLAYGROUND

Sheet Number:
L401



LEGEND

(symbol)	LIMIT OF WORK
(symbol)	PROPERTY LINE
2	PROPOSED MINOR CONTOUR
10	PROPOSED MAJOR CONTOUR
2	EXISTING MINOR CONTOUR
10	EXISTING MAJOR CONTOUR
× 50.00	EXISTING SPOT ELEVATION
+ 50.00	PROPOSED SPOT ELEVATION
TC 50.50 BC 50.00	TOP & BOTTOM OF CURB
TW 50.50 BW 50.00	TOP & BOTTOM OF WALL
20%	SLOPE ARROW
TB	TOP OF BOULDER
BB	BOTTOM OF BOULDER
TC	TOP OF CURB
BC	BOTTOM OF CURB
ME	MATCH EXISTING GRADE, FLUSH
BB	BOTTOM OF BRIDGE

GENERAL NOTE:

1. MAXIMUM SLOPE AND CROSS SLOPE WITHIN THE PLAYGROUND/PLAY AREA EXTENTS SHALL NOT EXCEED 1.9% IN ANY DIRECTION, PER ADA REQUIREMENTS.
2. ALL CONCRETE HEADERS + PLAY EDGE RESTRAINTS, WITH EXCEPTION OF THE RAIN GARDEN, MUST BE FLUSH WITH SURROUNDING GRADE, UNLESS OTHERWISE NOTED.

0 10' 20' 40'
SCALE: 1"=20'

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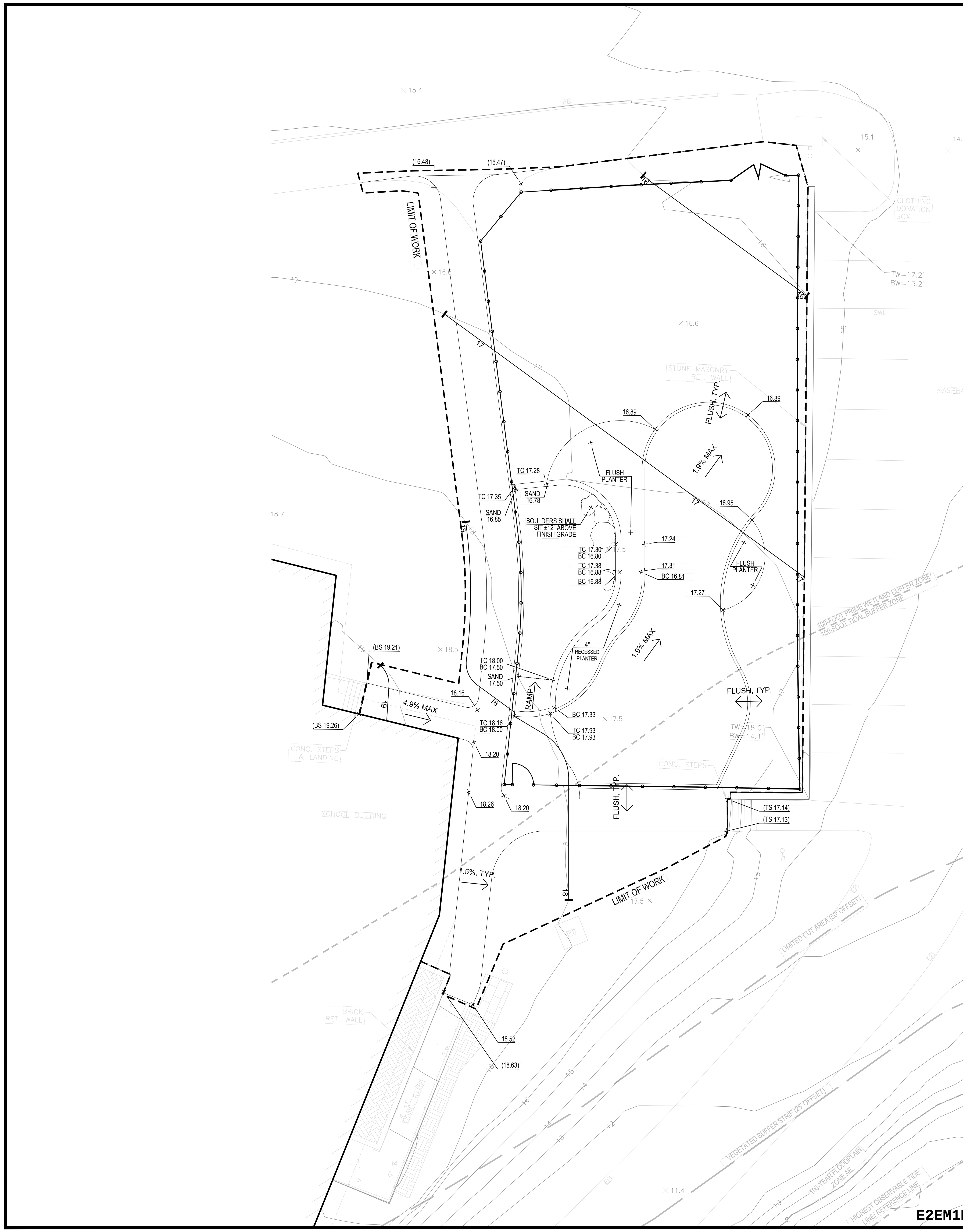
Drawing Title:
GRADING PLAN
LHS PLAYGROUND

Sheet Number:
L500



LEGEND

	LIMIT OF WORK
	PROPERTY LINE
2	PROPOSED MINOR CONTOUR
10	PROPOSED MAJOR CONTOUR
2	EXISTING MINOR CONTOUR
10	EXISTING MAJOR CONTOUR
× 50.00	EXISTING SPOT ELEVATION
+ 50.00	PROPOSED SPOT ELEVATION
TC 50.50 BC 50.00	TOP & BOTTOM OF CURB
TW 50.50 BW 50.00	TOP & BOTTOM OF WALL
1.9%	SLOPE ARROW
TB	TOP OF BOULDER
BB	BOTTOM OF BOULDER
TC	TOP OF CURB
BC	BOTTOM OF CURB
ME	MATCH EXISTING GRADE, FLUSH
TF	TOP OF FENCE
BF	BOTTOM OF FENCE

GENERAL NOTE:
MAXIMUM SLOPE AND CROSS SLOPE WITHIN THE PLAYGROUND SHALL NOT EXCEED 1.9% IN ANY DIRECTION, PER ADA REQUIREMENTS.

0 5' 10' 20'
SCALE: 1"=10'

E2EM1P

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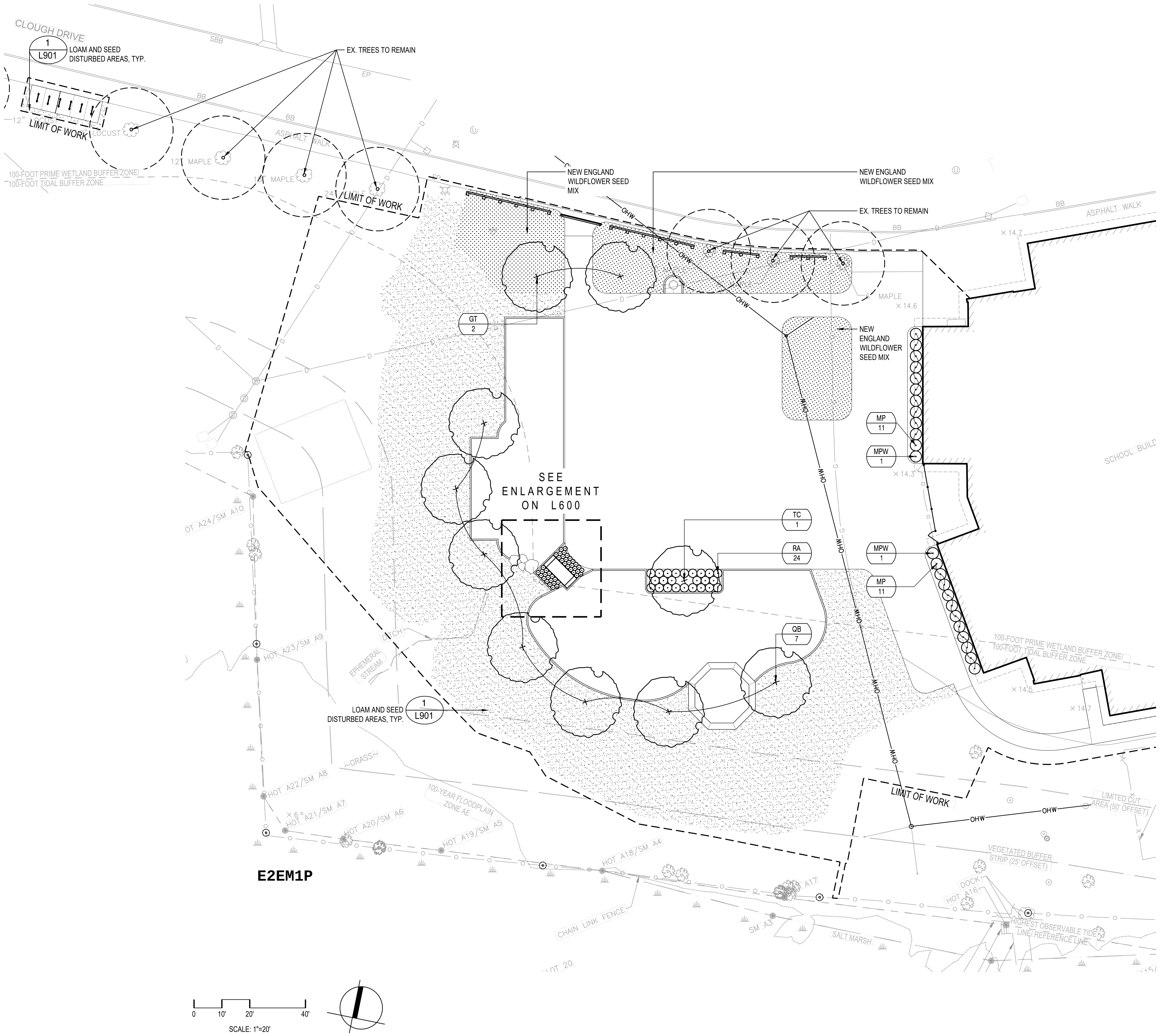
Drawing Title:
GRADING PLAN
PEEP PLAYGROUND

Sheet Number:
L501



LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- LOAM AND SEED., TYP. (1 / L901)
- WILDFLOWER SEED MIX - SEE SPECIFICATION
- PROPOSED SHRUB PLANTINGS, TYP. (3 / L901)
- PROPOSED TREE PLANTINGS, TYP. (5 / L901)
- EX. TREE

PLANT SCHEDULE - LHS PLAYGROUND

TREES

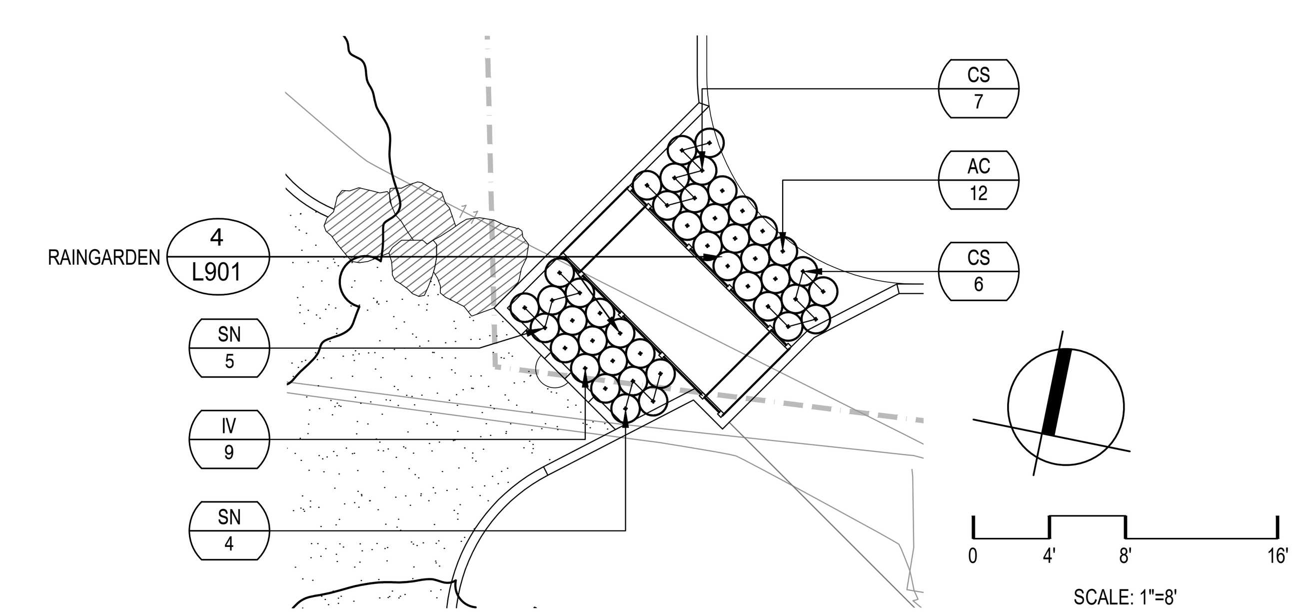
ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	2	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5"-3" CAL. B&B	WELL- BRANCHED
QB	7	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5"-3" CAL. B&B	WELL- BRANCHED
TC	1	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5"-3" CAL. B&B	WELL- BRANCHED

SHRUBS & HERBACEOUS PLANTS

ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
MP	22	MORELLA PENSYLVANICA (FEMALE)	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
MPW	2	MORELLA PENSYLVANICA 'WILDWOOD' (MALE)	NORTHERN BAYBERRY	#3 CONT., 18" HT.	48" O.C. SPACING
RA	24	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	36" O.C. SPACING

SEED MIX

ABRV.	QTY	NAME	NOTES
N/A	1 LB	NORTHEAST ANNUAL & PERENNIAL WILDFLOWER MIX - ERNMX-168 *8-12 LB PER ACRE. NO COVER CROP IS RECOMMENDED WITH THIS MIX*	NE WILDFLOWER SEED MIX



PLANT SCHEDULE - LHS PLAYGROUND

BIORETENTION PLANTER

ABRV.	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
AC	12	ANEMONE CANADENSIS	WINDFLOWER	#2 POT	18" O.C. SPACING
CS	13	CAREX STRICTA	TUSSOCK SEDGE	#2 POT	18" O.C. SPACING
IV	9	IRIS VERSICOLOR	BLUEFLAG IRIS	#2 POT	18" O.C. SPACING
SN	9	SYMPHYOTRICHUM NOVAE-ANGLIAE 'GRAPE CRUSH'	GRAPE CRUSH NEW ENGLAND ASTER	#2 POT	18" O.C. SPACING

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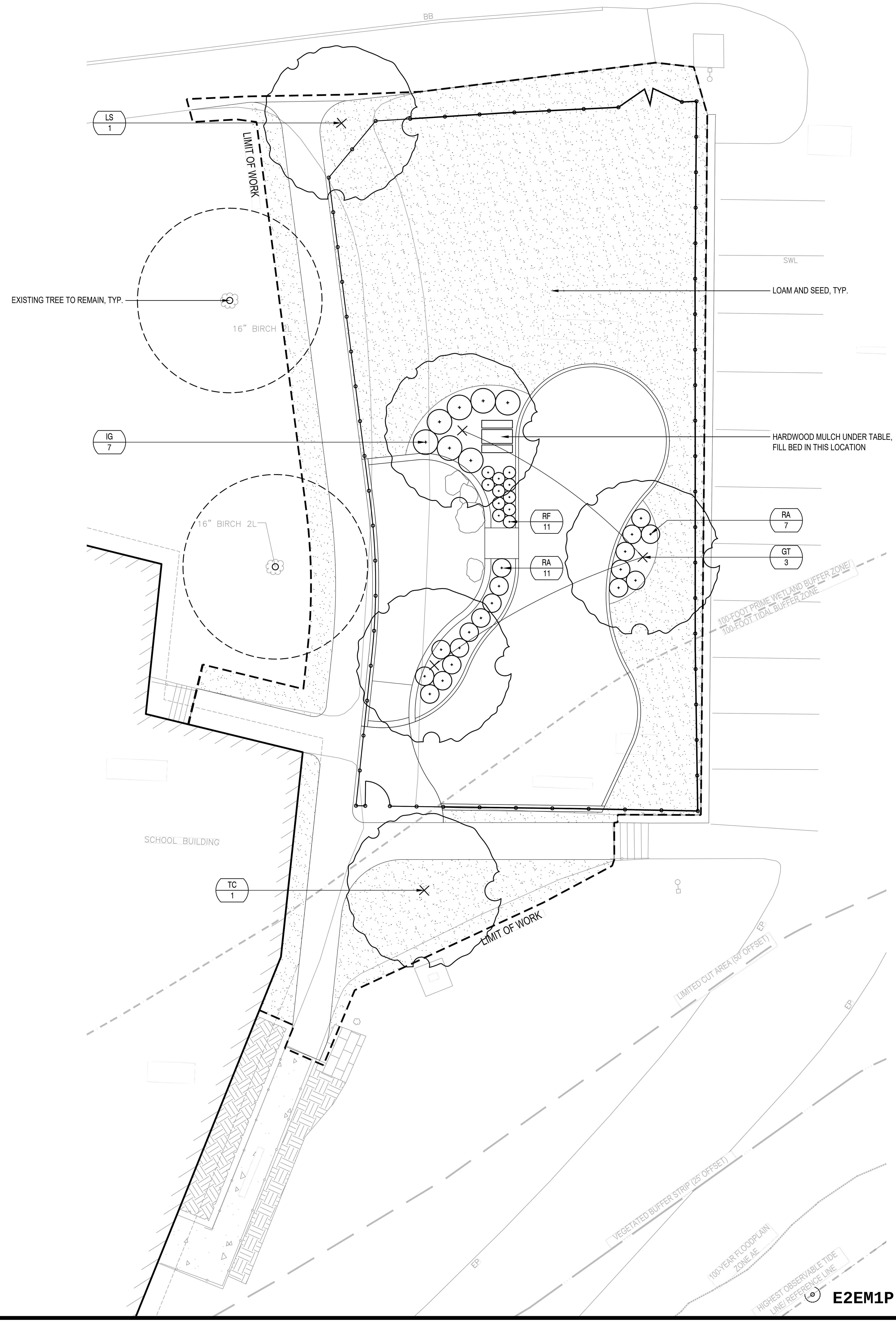
Drawing Title:
PLANTING PLAN
LHS PLAYGROUND

Sheet Number:
L600



LEGEND

PROPERTY LINE

LIMIT OF WORK

LOAM AND SEED., TYP. (1 / L901)

PROPOSED SHRUB PLANTINGS, TYP. (3 / L901)

PROPOSED TREE PLANTINGS, TYP. (5 / L901)

EX. TREE

PLANT SCHEDULE - PEEP PLAYGROUND					
TREES					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
GT	3	GLEDITSIA TRIACANTHOS 'DRAVES'	STREET KEEPER HONEYLOCUST	2.5"-3" CAL. B&B	WELL- BRANCHED
LS	1	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SWEETGUM	2"-2.5" CAL. B&B	WELL- BRANCHED
TC	1	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5"-3" CAL. B&B	WELL- BRANCHED
SHRUBS & HERBACEOUS PLANTS					
ABRV.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
IG	7	ILEX GLABRA 'SHAMROCK'	INKBERRY	#5 CONT.	48" O.C. SPACING
RA	18	RHUS AROMATICA 'GROW-LOW'	GRO-LOW FRAGRANT SUMAC	#3 CONT., 18" HT.	36" O.C. SPACING
RF	11	RUDBECKIA FULGIDA	ORANGE CONEFLOWER	#2 CONT., 18" HT.	24" O.C. SPACING

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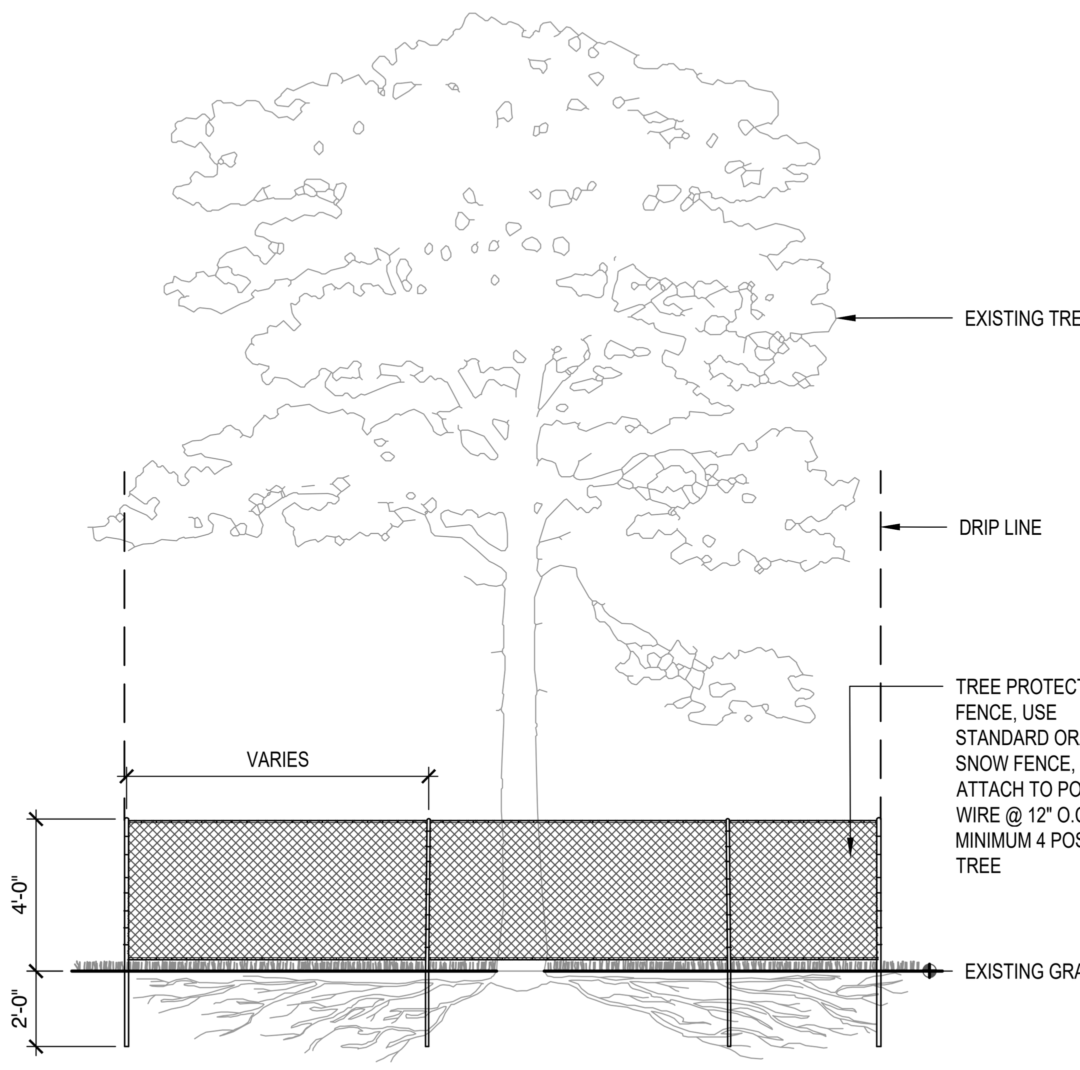
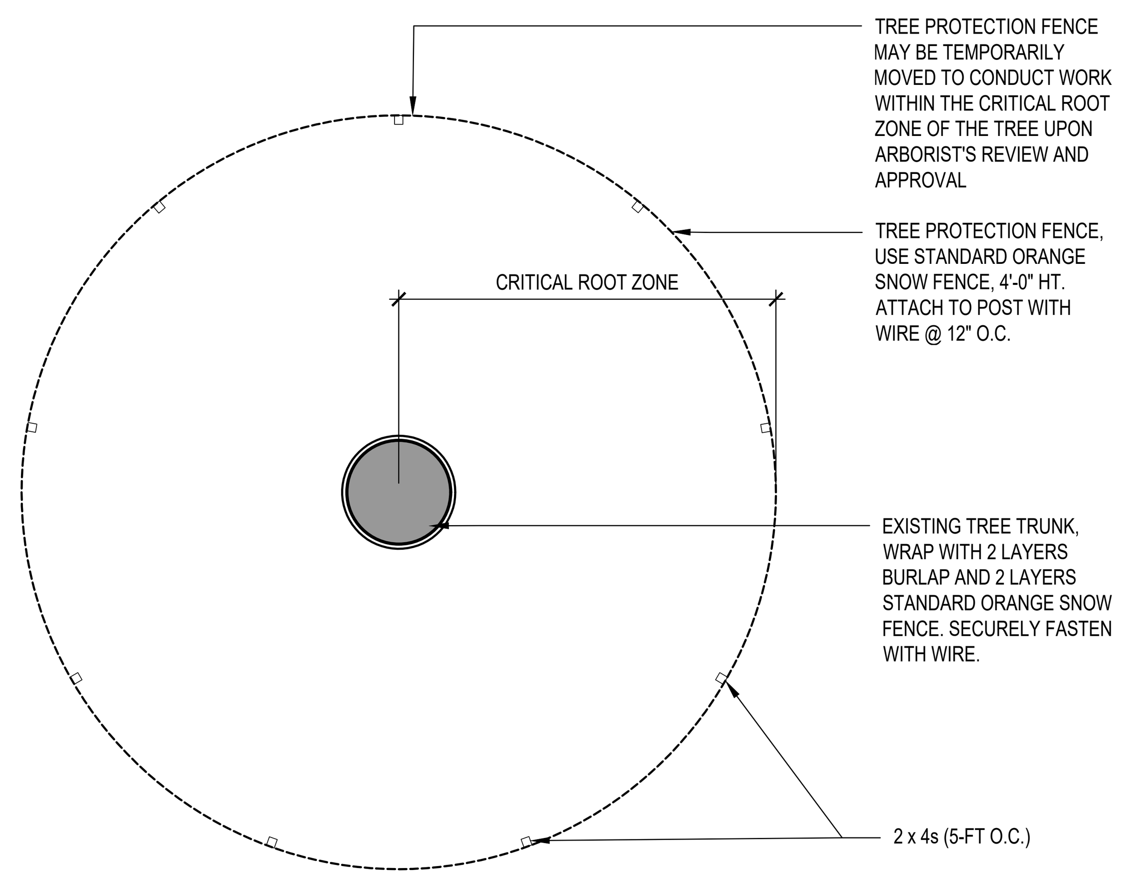
Drawing Title:
PLANTING PLAN
PEEP PLAYGROUND

Sheet Number:
L601



CRITICAL ROOT ZONE TO BE PROTECTED. ALL WORK NECESSARY WITHIN THE CRITICAL ROOT ZONE SHALL BE PERFORMED BY HAND.

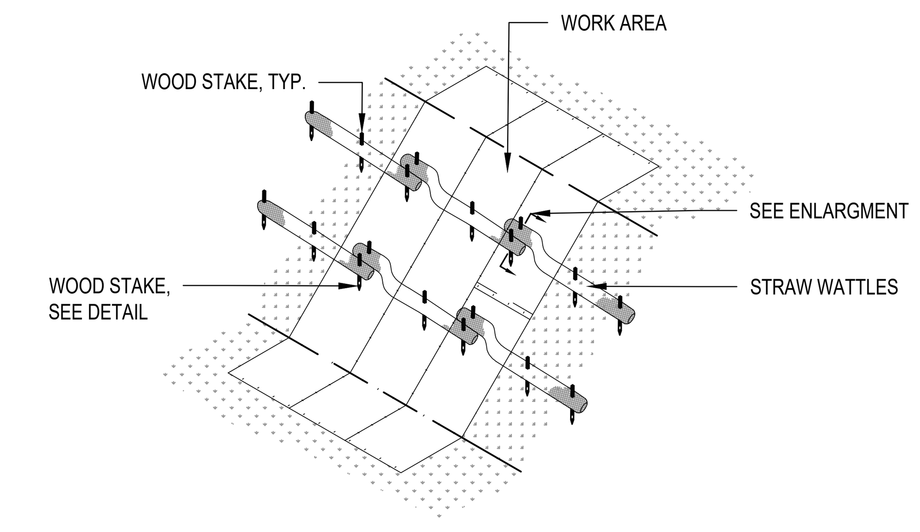


NOTES:

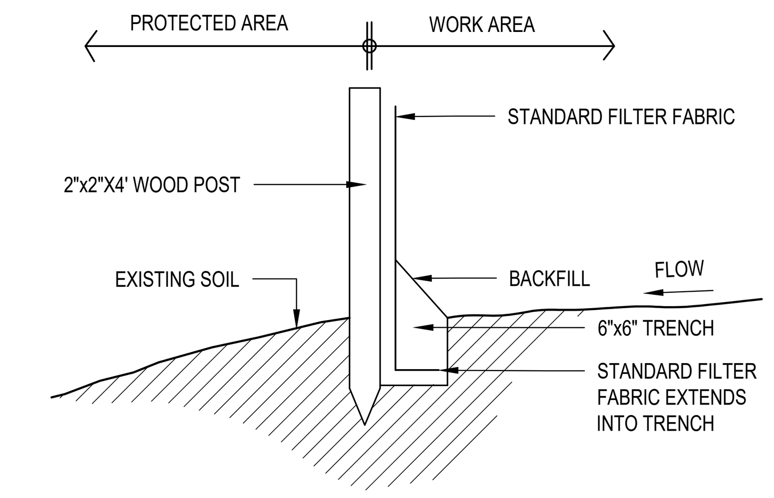
1. WHERE SPACE IS AVAILABLE, TREE PROTECTION FENCE TO BE PLACED A MINIMUM OF 10' FROM BASE OF TREE PLUS AN ADDITIONAL 1' FOR EACH ADDITIONAL DBH FOR TREES GREATER THAN 10" DBH (DIA. AT BREAST HT.)
2. ALL WORK DONE WITHIN TREE PROTECTION FENCE IS TO BE DONE BY HAND AND LIGHT EQUIPMENT.
3. ROOTS EXPOSED DURING EXCAVATION SHALL BE NEATLY CUT AND COVERED WITH SOIL IMMEDIATELY.
4. FOR TREES THAT OCCUR IN GROUPS PROVIDE TREE PROTECTION FENCE AROUND ENTIRE AREA. SEE PLAN FOR LOCATIONS.
5. MAINTAIN FENCE PROTECTION IN SOUND CONDITION UNTIL FENCE COMPLETION
6. A CERTIFIED ARBORIST SHALL DELINEATE LIMIT OF TREE PROTECTION FENCE AS THEY RELATE TO THE LIMITS OF THE CRITICAL ROOT ZONE.

1 TREE PROTECTION

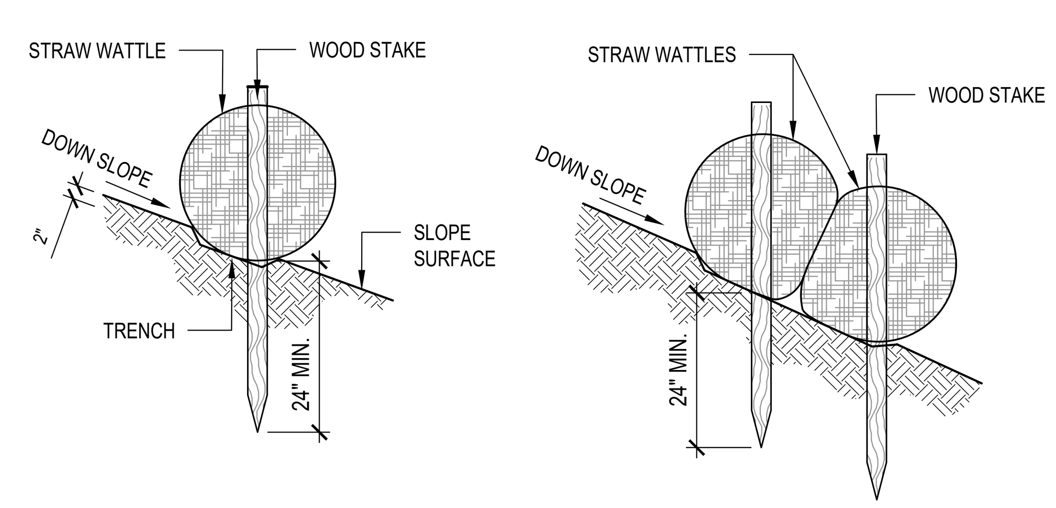
SCALE: N.T.S.



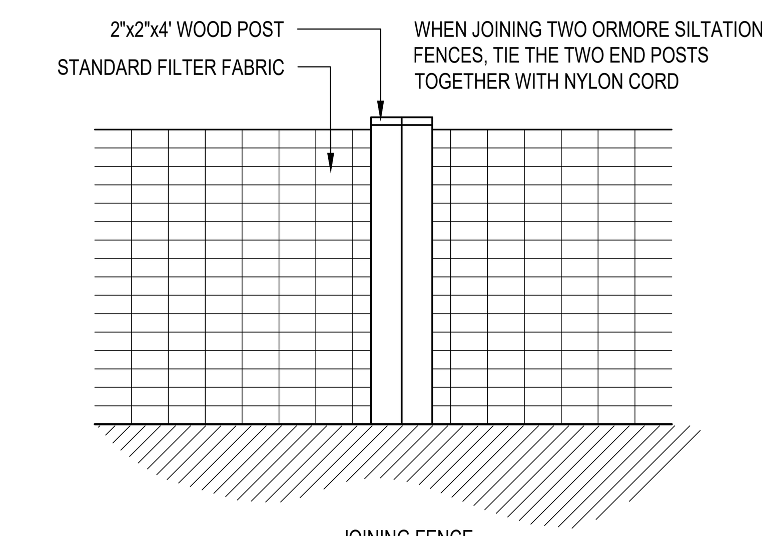
STRAW WATTLE LAYOUT ON SLOPE



SLOPE DETAIL



STRAW WATTLE STAKING DETAILS



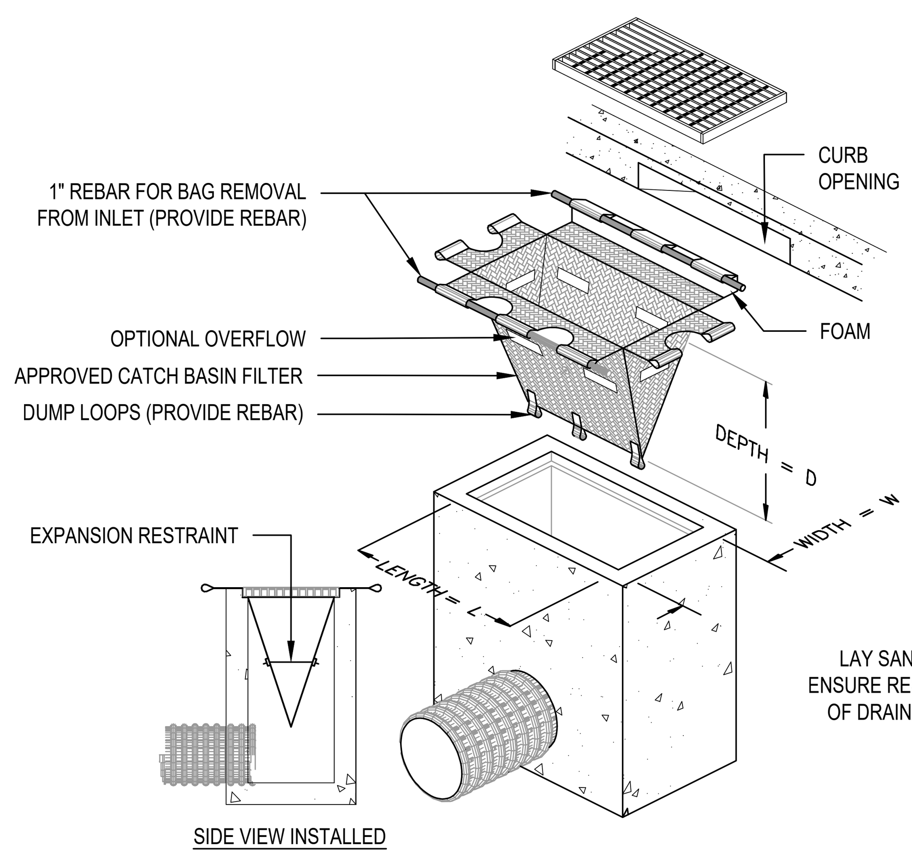
JOINING FENCE

2 EROSION CONTROL

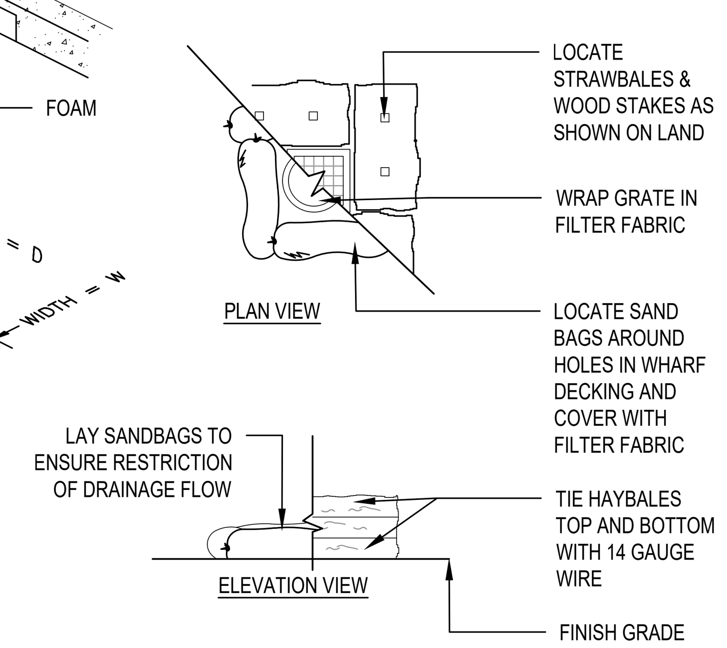
SCALE: N.T.S.

NOTE:

1. HAYBALE/SANDBAG PROTECTION OR CATCH BASIN FILTER FOR PAVED AREAS SHALL BE PROVIDED FOR ALL DRAINAGE STRUCTURES WITHIN THE LIMIT OF WORK AND ANY STRUCTURES OUTSIDE THE PROJECT TERMINII THAT ARE AFFECTED BY CONSTRUCTION.



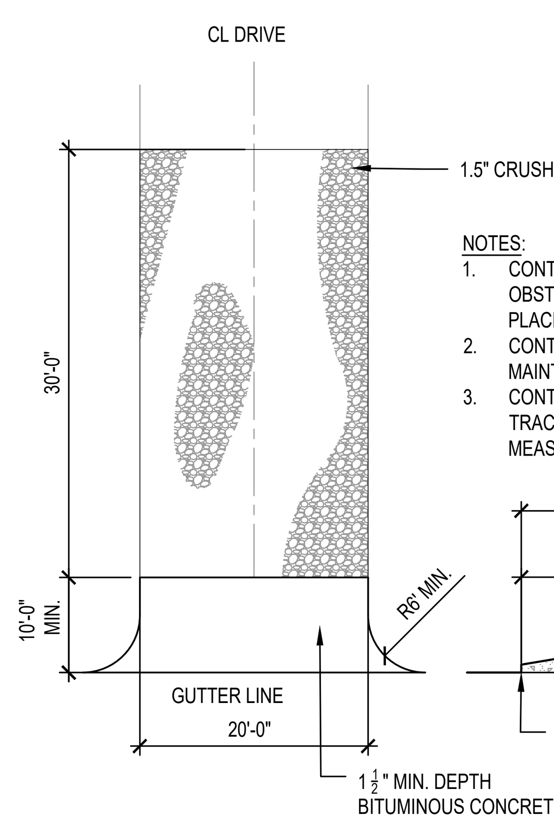
INSTALLATION IN PAVED AREAS



INSTALLATION IN GRASS AREAS

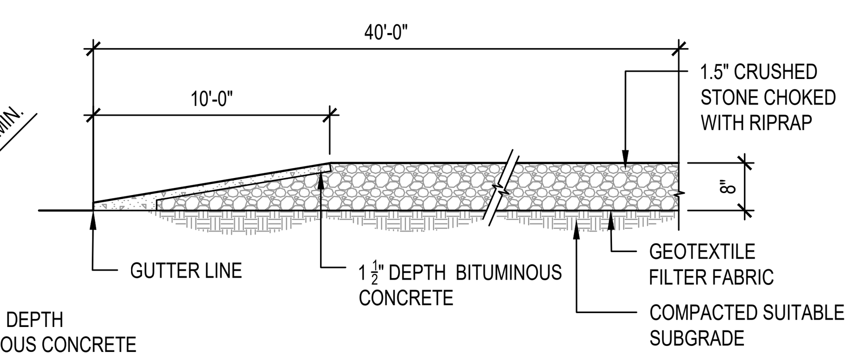
3 INLET SEDIMENT CONTROL

SCALE: N.T.S.



NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR CLEARING OF ALL VEGETATION, ROOTS AND ALL OBSTRUCTIONS IN PREPARATION FOR GRADING AND COMPACTING PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC AND CRUSHED STONE.
2. CONTRACTOR RESPONSIBLE FOR DAILY INSPECTIONS AND ALL NECESSARY MAINTENANCE OF ENTRANCE.
3. CONTRACTOR RESPONSIBLE FOR REMOVAL OF SEDIMENTS OR ANY OTHER MATERIALS TRACKED ONTO CLOUGH DRIVE, AS WELL AS MAINTENANCE OF EROSION CONTROL MEASURES.



4 CONSTRUCTION ENTRANCE

SCALE: N.T.S.

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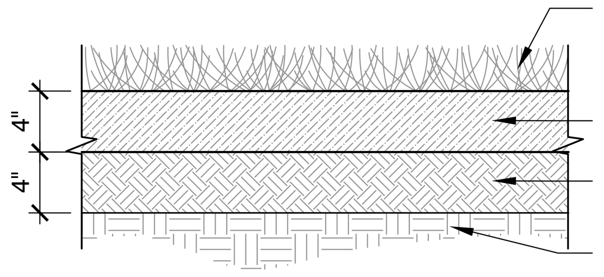
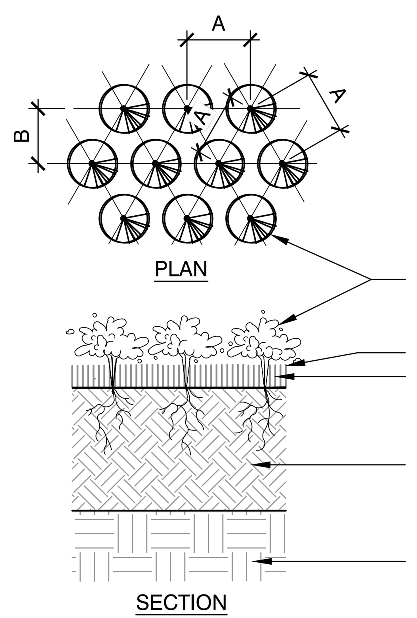


1 LOAM AND SEED
SCALE: N.T.S.

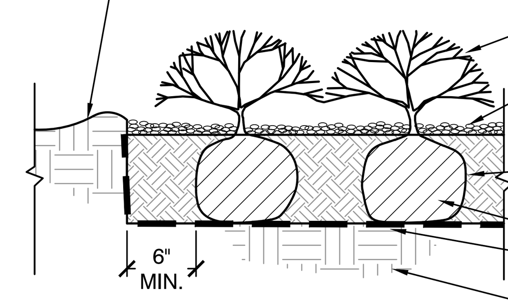


GROUNDCOVER SPACING TABLE

PLANT SPACING "A"	ROW SPACING "B"	PLANTS	AREA UNIT
6" O.C.	5.2"	4.61	1 SQ. FT.
8" O.C.	6.93"	2.6	1 SQ. FT.
10" O.C.	8.66"	1.66	1 SQ. FT.
12" O.C.	10.4"	1.15	1 SQ. FT.

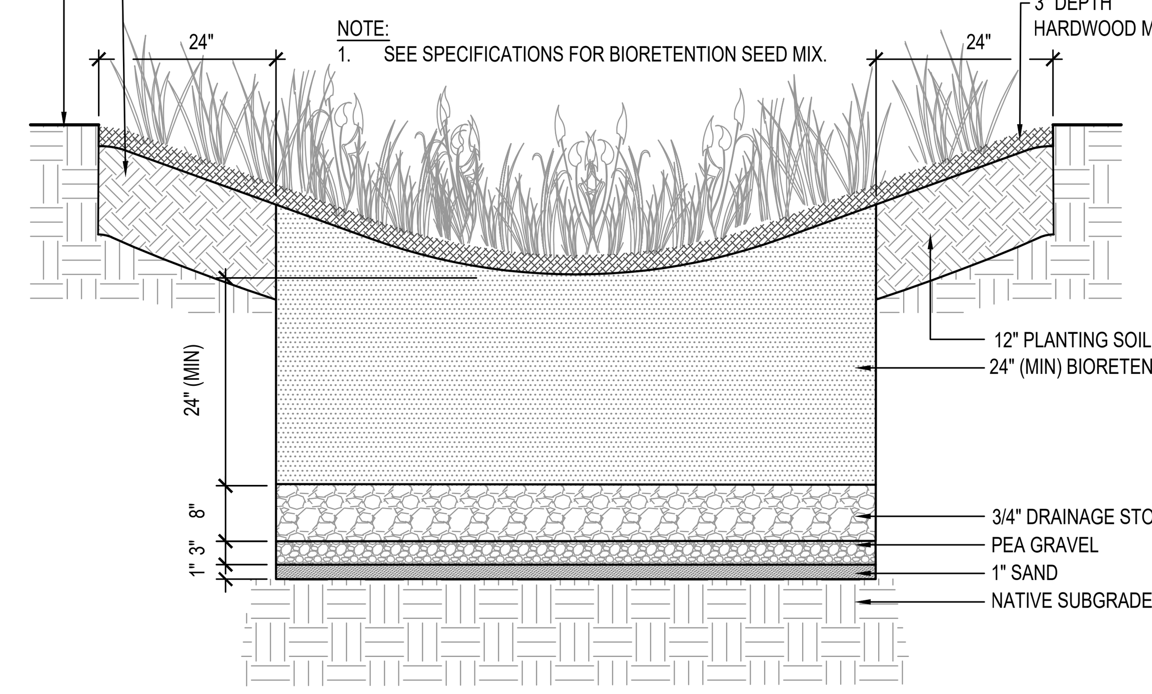
NOTES:
1. ALL GROUNDCOVER TO BE PLANTED IN TRIANGULAR PATTERN. SEE DETAIL PLAN AND GROUNDCOVER SPACING TABLE.
2. JUTE EROSION CONTROL MAT TO BE USED ON ALL SLOPES GREATER THAN 3:1

2 GROUNDCOVER PLANTING
SCALE: N.T.S.

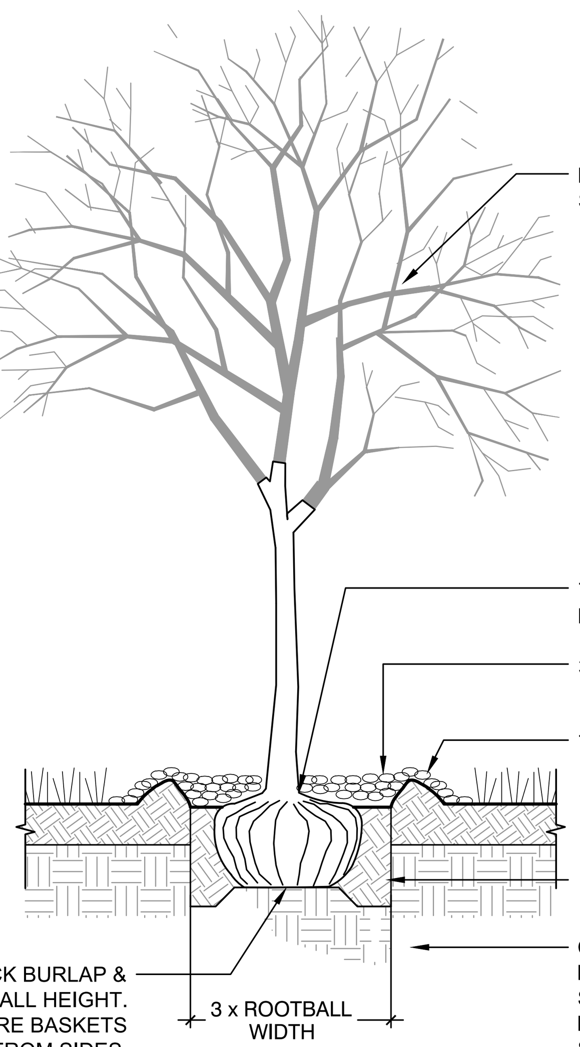


NOTE:
1. ALL MULCH MUST BE DARK IN COLOR. PROVIDE SAMPLE PRIOR TO INSTALLATION TO BE APPROVED BY OWNER'S REPRESENTATIVE.

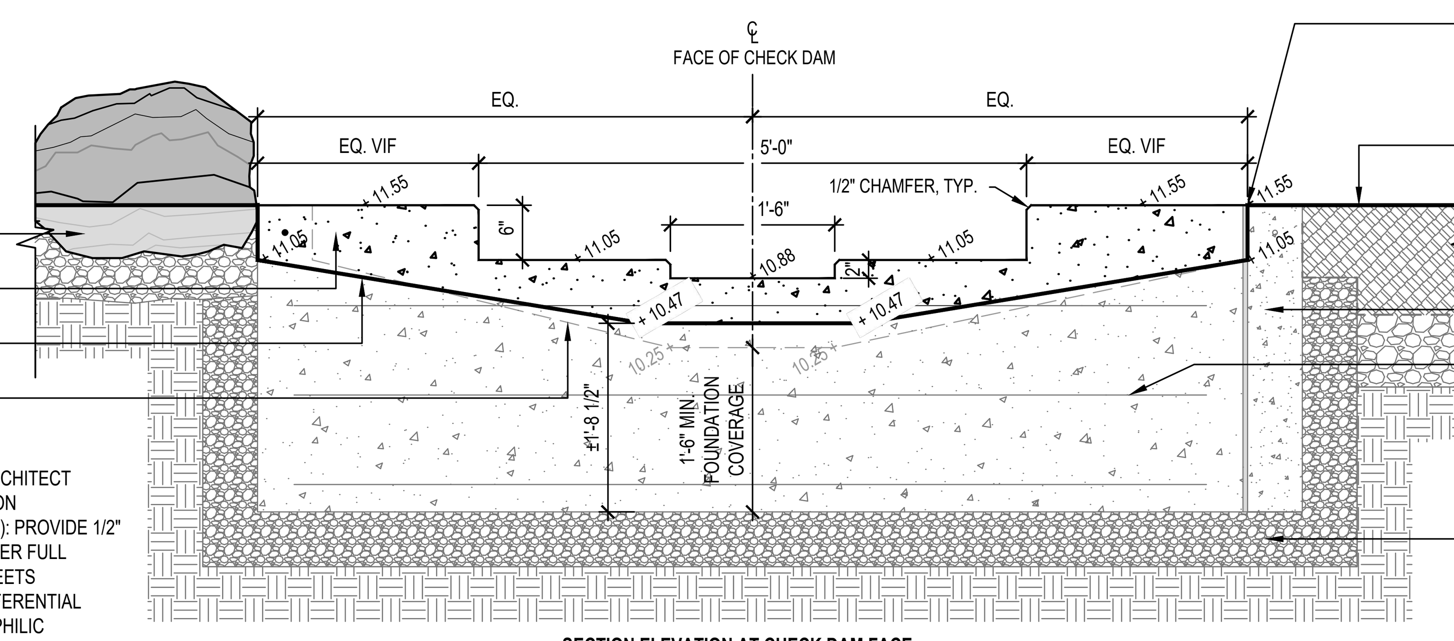
3 SHRUB PLANTING
SCALE: N.T.S.

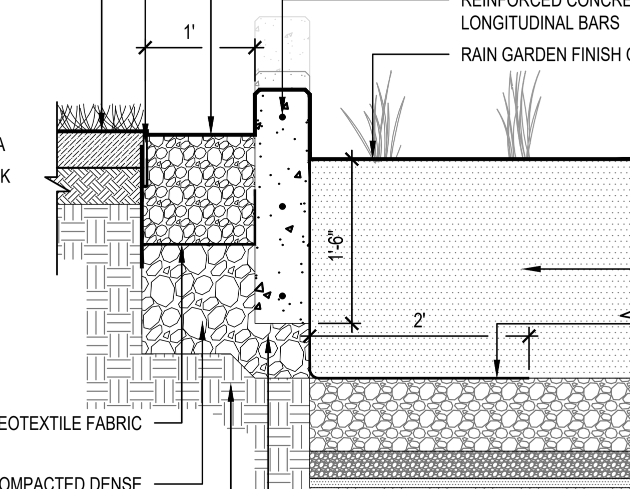


4 RAIN GARDEN
SCALE: N.T.S.



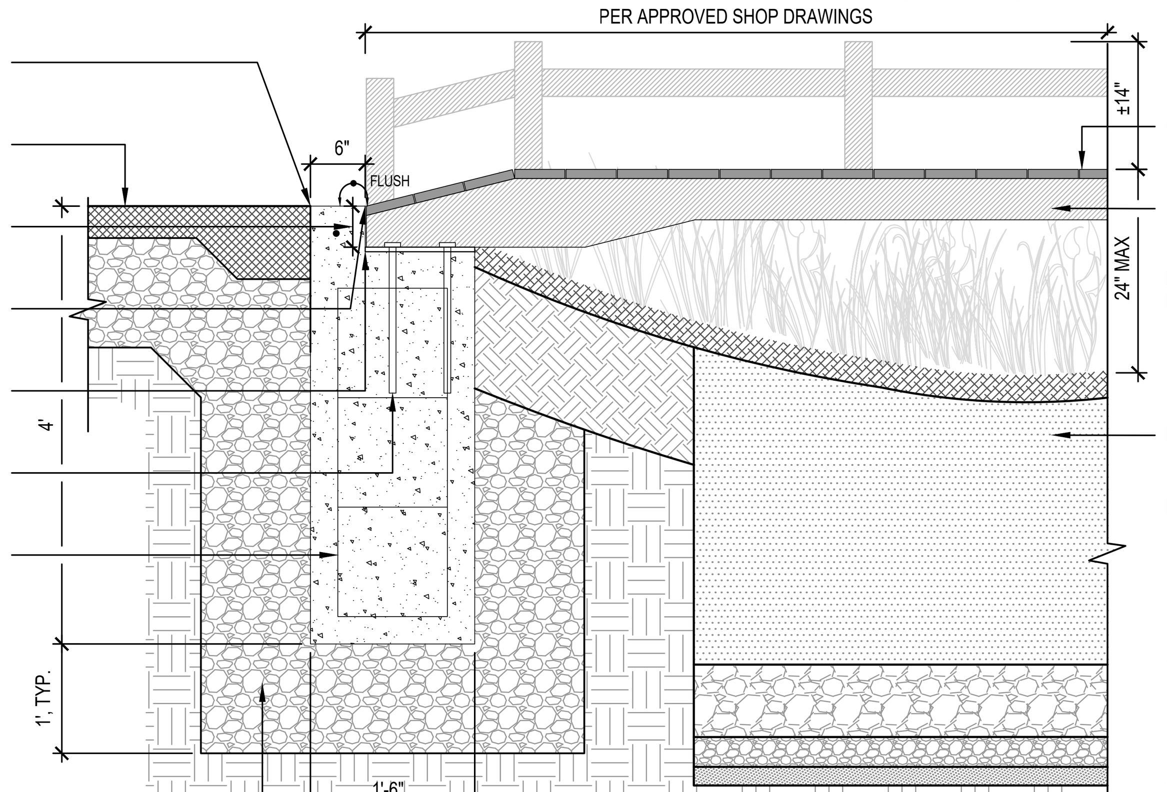
5 TREE PLANTING
SCALE: N.T.S.





NOTES:
1. PROVIDE SHOP DRAWING FOR LANDSCAPE ARCHITECT REVIEW AND APPROVAL PRIOR TO FABRICATION
2. CHECK DAM TO CURB JOINT (SEPARATE POUR): PROVIDE 1/2" (MIN.) PREFORMED COMPRESSIBLE JOINT FILLER FULL DEPTH WHERE CAST-IN-PLACE CHECK DAM MEETS CAST-IN-PLACE CURB TO ACCOMMODATE DIFFERENTIAL SETTLEMENT. PROVIDE CONTINUOUS HYDROPHILIC WATERSTOP AT JOINT (INSTALL ON FIRST POUR PER MANUFACTURER) TO PREVENT WATER MIGRATION THROUGH JOINT. TOOL/FINISH JOINT AND PROVIDE SEALANT AT TOP EDGE FOR SURFACE CLOSURE (SEALANT NOT INTENDED AS PRIMARY WATERPROOFING).

6 CHECK DAM AT RAIN GARDEN
SCALE: N.T.S.



NOTES:
1. BRIDGE LENGTH, EDGE BEAM GEOMETRY, AND BEARING CONDITIONS SHOWN ARE DIAGRAMMATIC; FIELD-VERIFY POURED CONCRETE CURB TO ENSURE PROPER DIMENSIONS. THE GAP BETWEEN BRIDGE AND CONCRETE SHALL MEET ADA CODE, 1/4" MAX.
2. DO NOT POUR CONCRETE CURB OR FOOTINGS UNTIL BRIDGE SHOP DRAWINGS ARE REVIEWED, APPROVED AND FABRICATED BRIDGE IS MEASURED.
3. DO NOT EMBED WOOD MEMBERS IN CONCRETE. ALL STEEL TO BE HOT-DIP GALVANIZED
4. CONTRACTOR RESPONSIBLE FOR COORDINATION OF BRIDGE FABRICATION, SHOP DRAWINGS, AND CONCRETE PLACEMENT SEQUENCING.
5. PROVIDE SHOP DRAWING FOR LANDSCAPE ARCHITECT REVIEW AND APPROVAL PRIOR TO FABRICATION

REPRESENTATIVE DESIGN INTENT
(ENSURE FLUSH TRANSITION FROM PATH TO BRIDGE DECKING, CONTRARY TO PRECEDENT IMAGE)

7 BRIDGE SECTION - TYPICAL END BEARING AT CONCRETE CURB
SCALE: N.T.S.

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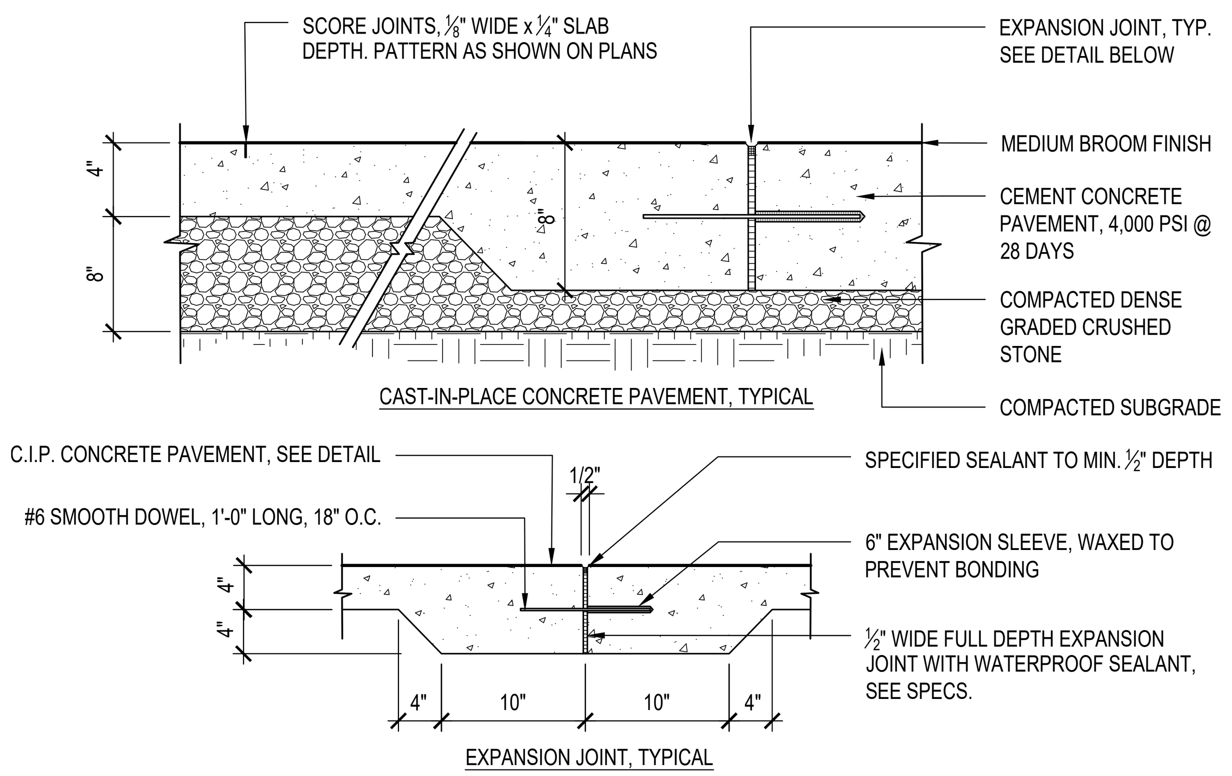
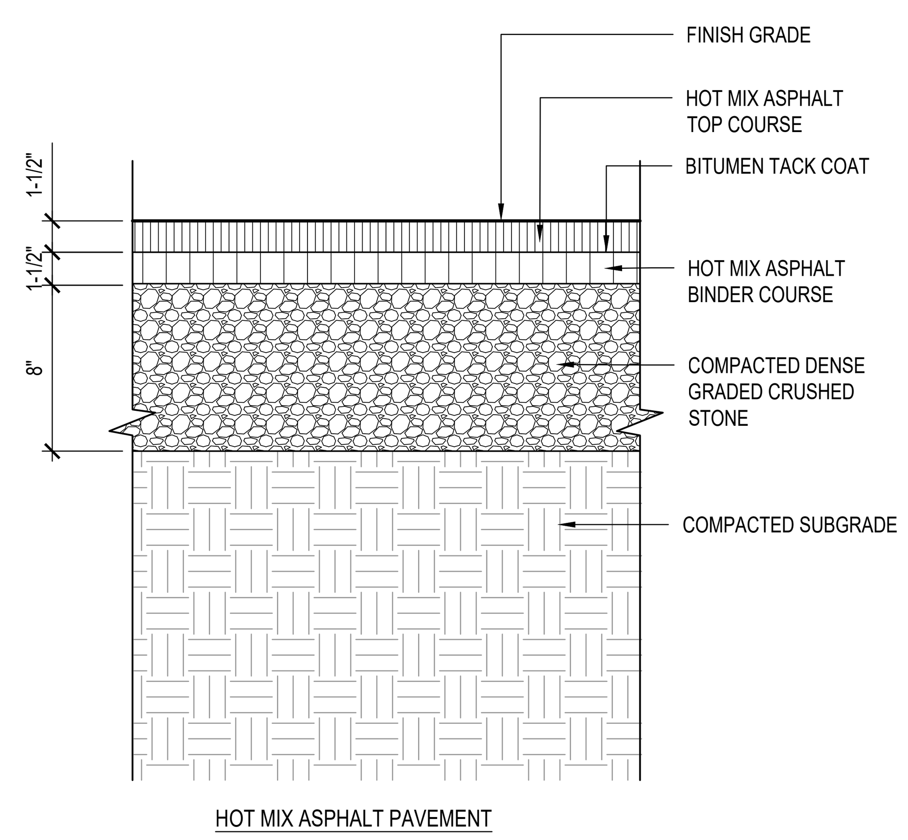
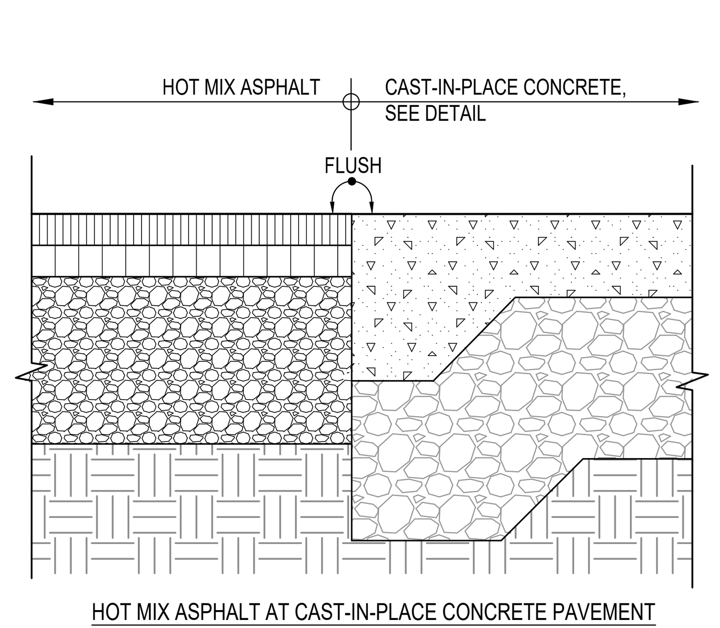


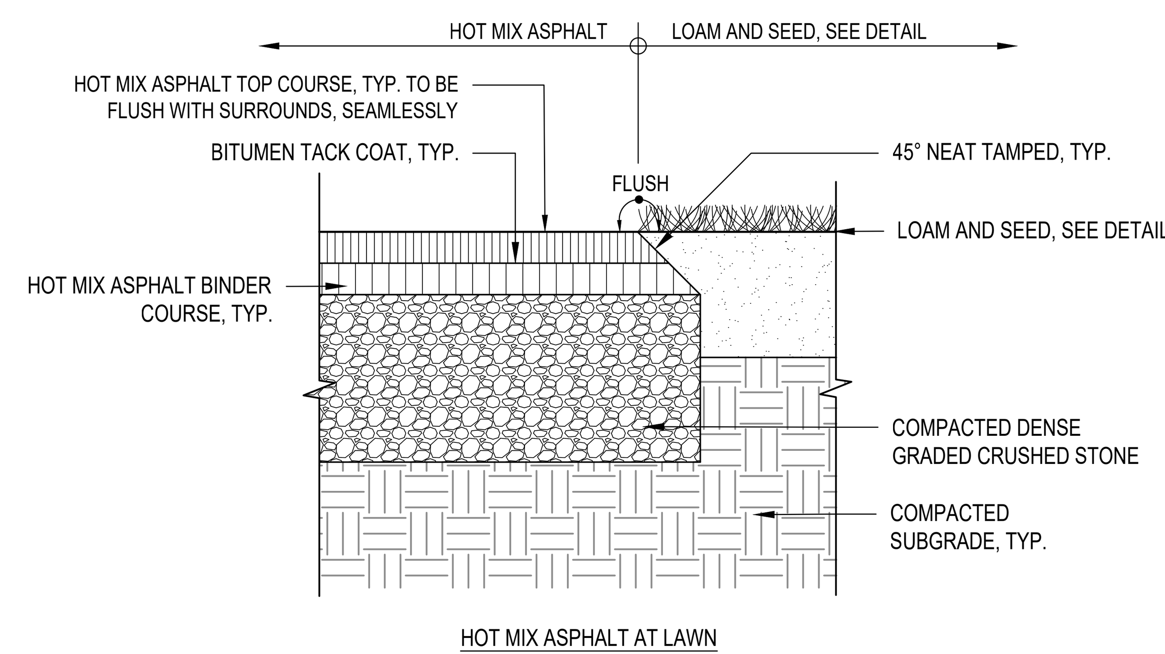
EXPANSION JOINT INSTALLATION NOTES:

1. DOWEL IS TYPICAL AT ALL EXPANSION JOINTS (18" O.C.) WITHIN CONCRETE PAVING AND BETWEEN NEW CONCRETE PAVING AND EXISTING CONCRETE PAVING TO REMAIN.
2. DELETE EXPANSION SLEEVE AND DOWEL WHERE JOINT ABUTS WALL, CURBS, OR OTHER VERTICAL SURFACES, UNLESS OTHERWISE NOTED.
3. EXPANSION JOINTS MAX. 25'-0" O.C. UNLESS SHOWN OTHERWISE.
4. EXPANSIONS JOINTS SHALL BE PLACED WHERE NEW CEMENT CONCRETE PAVEMENT MEETS EXISTING PAVEMENT OR WALLS TO REMAIN.
5. ALL EXPANSION JOINTS SHALL BE SAW CUT.

1 CAST-IN-PLACE CONCRETE PAVEMENT AND EXPANSION JOINT
SCALE: N.T.S.

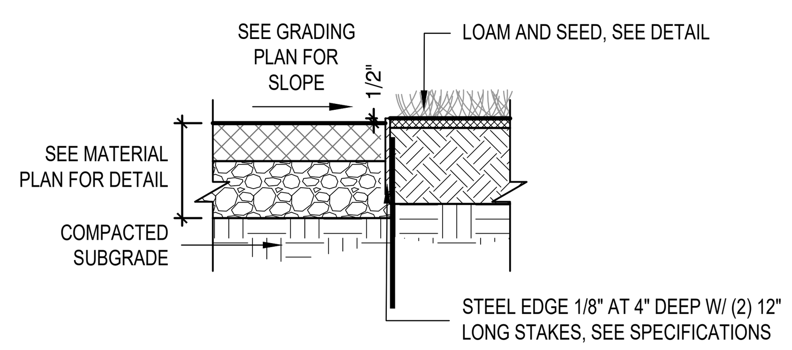




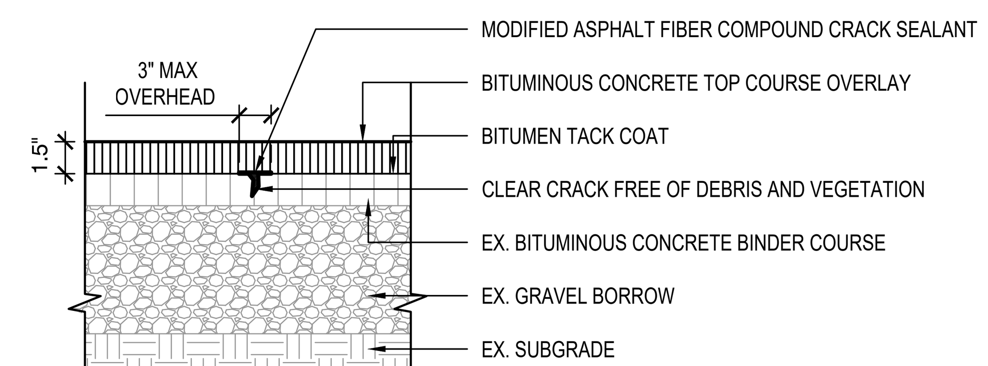


NOTES:
1. CONTRACTOR TO PROVIDE SMOOTH TRANSITION WHERE NEW PAVEMENT ABUTS EXISTING PAVEMENT, TYP.
2. DENSE GRADED CRUSHED STONE TO COMPRISE OF 12" MINIMUM DEPTH.
3. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES AND SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. PROVIDE INFRARED TREATMENT AT ALL EDGES BETWEEN NEW AND EXISTING PAVEMENT.

2 HOT MIX ASPHALT PAVEMENT - PEDESTRIAN
SCALE: N.T.S.

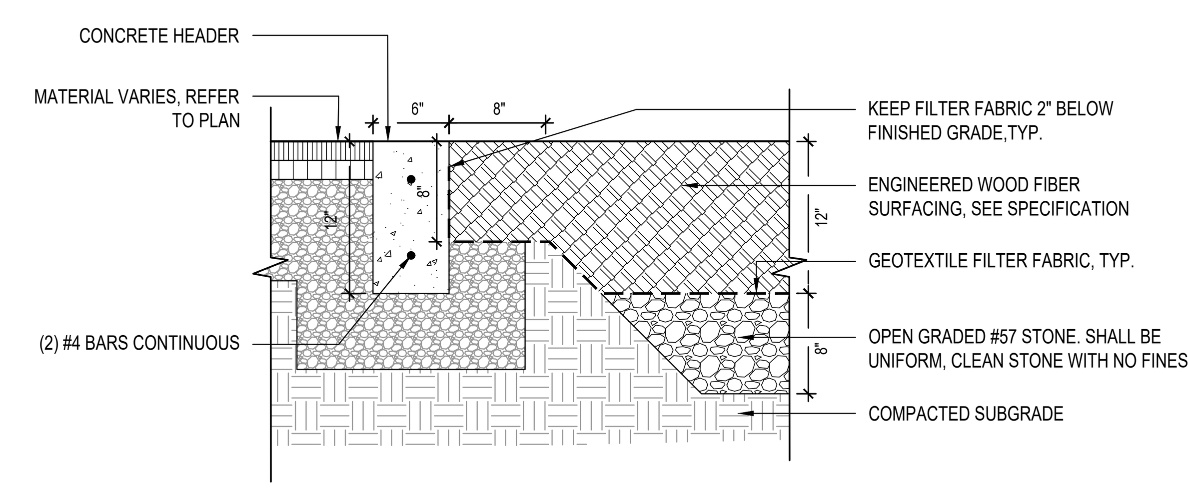


3 STEEL EDGER
SCALE: N.T.S.

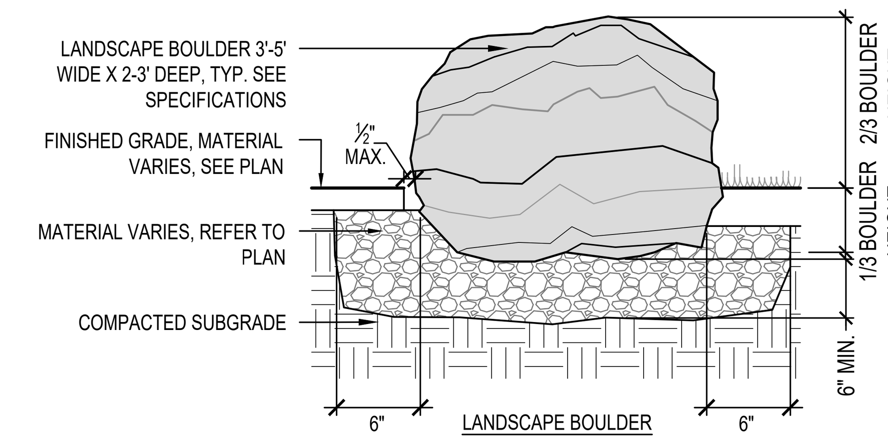


NOTES:
1. CONTRACTOR TO PROVIDE SMOOTH TRANSITION WHERE NEW PAVEMENT ABUTS EXISTING PAVEMENT, TYP.

4 MILL & OVERLAY ASPHALT
SCALE: N.T.S.

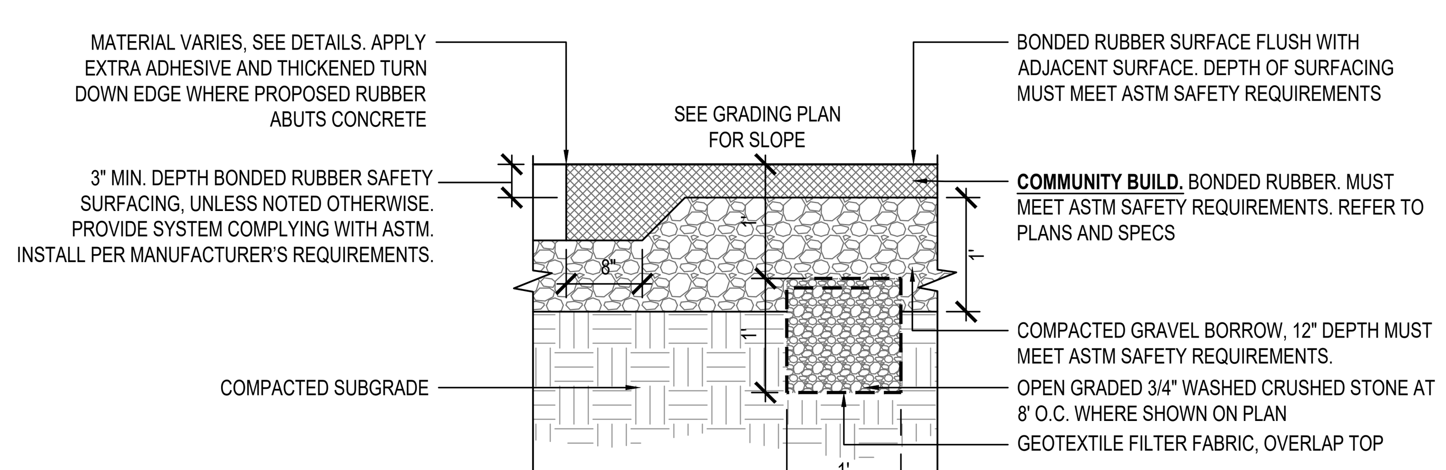


5 ENGINEERED WOOD FIBER SAFETY SURFACING
SCALE: N.T.S.

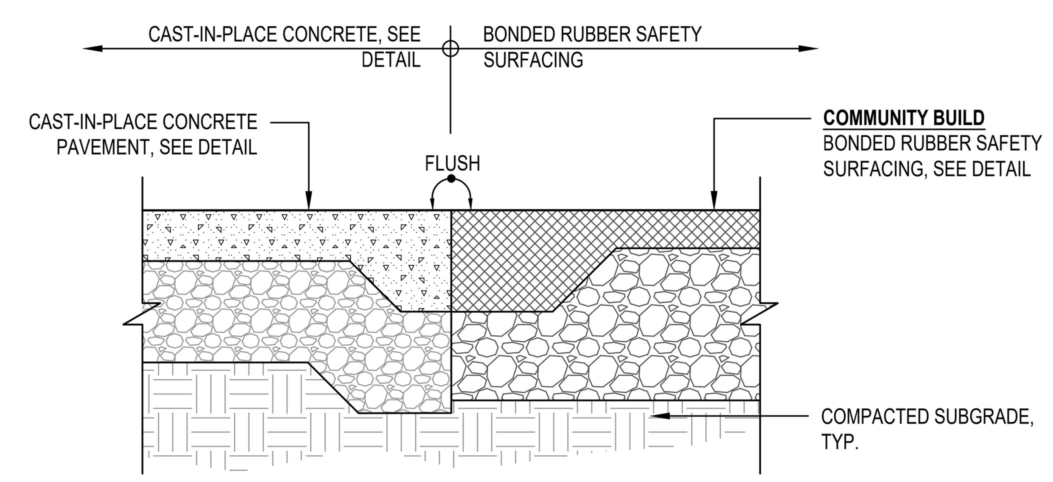


NOTES:
1. JOINT BETWEEN ROUND BOULDER AND ADJACENT MATERIAL SHALL NOT EXCEED 1/2" AND BE FILLED WITH MORTAR.

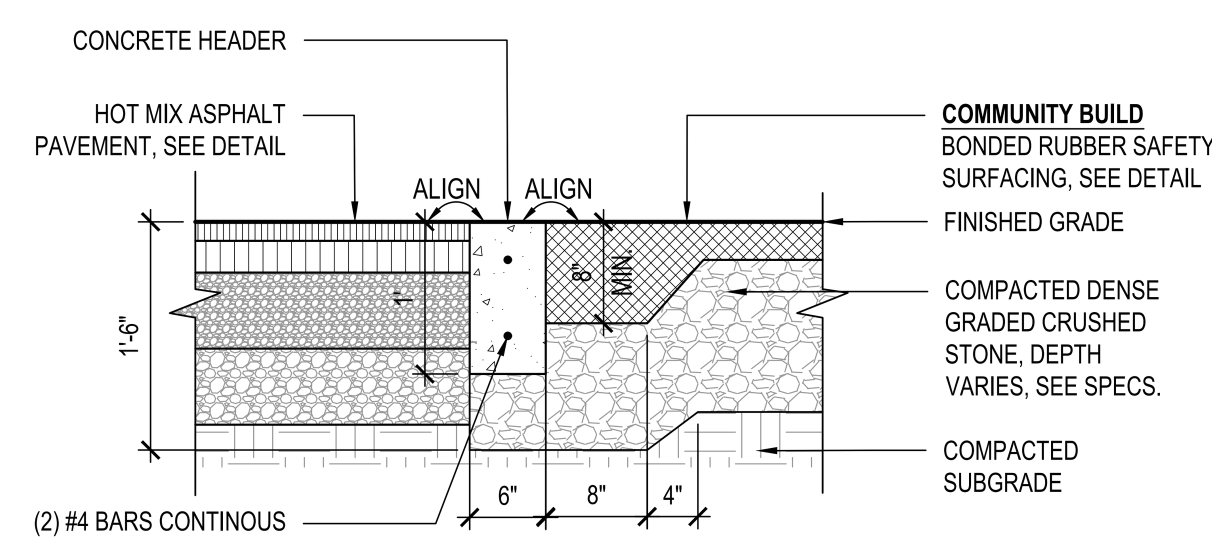
6 LANDSCAPE BOULDER
SCALE: N.T.S.



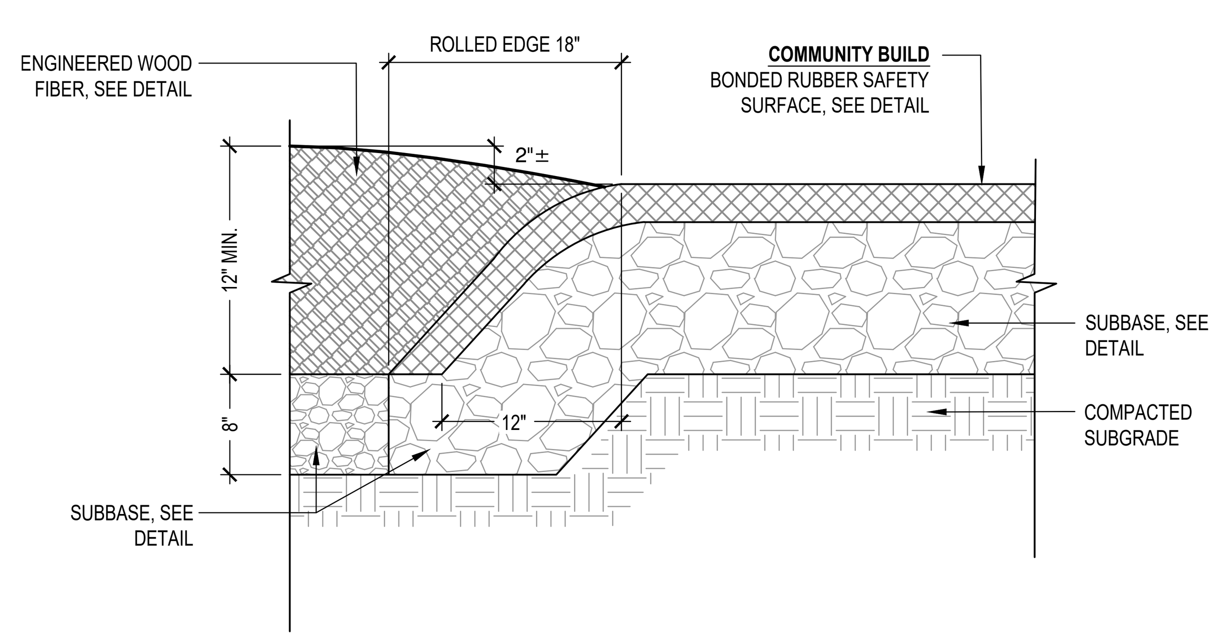
7 COMMUNITY BUILD - BONDED RUBBER SAFETY SURFACING
SCALE: N.T.S.



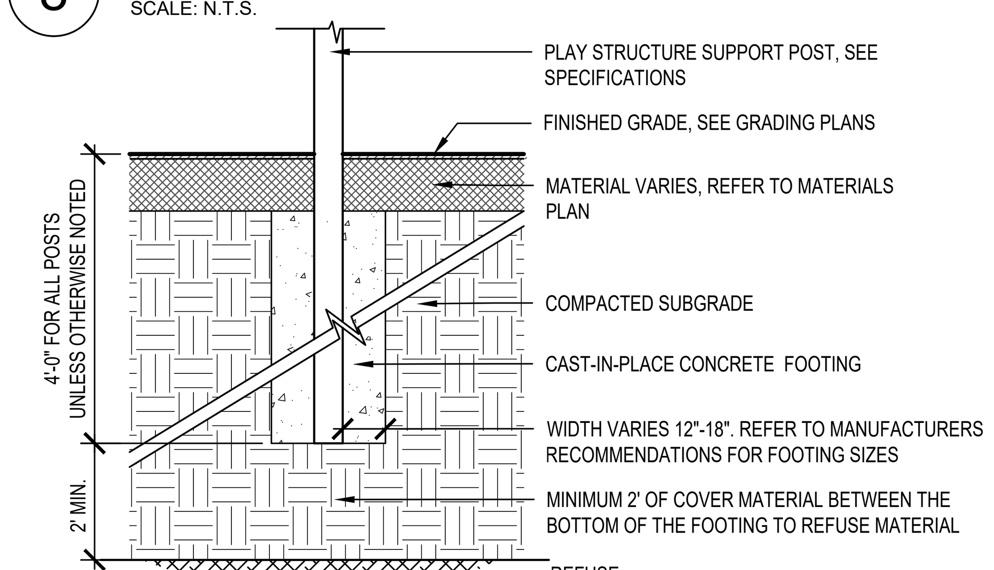
8 BONDED RUBBER SAFETY SURFACING AT CAST-IN-PLACE CONCRETE
SCALE: N.T.S.



9 BONDED RUBBER AT ASPHALT
SCALE: N.T.S.

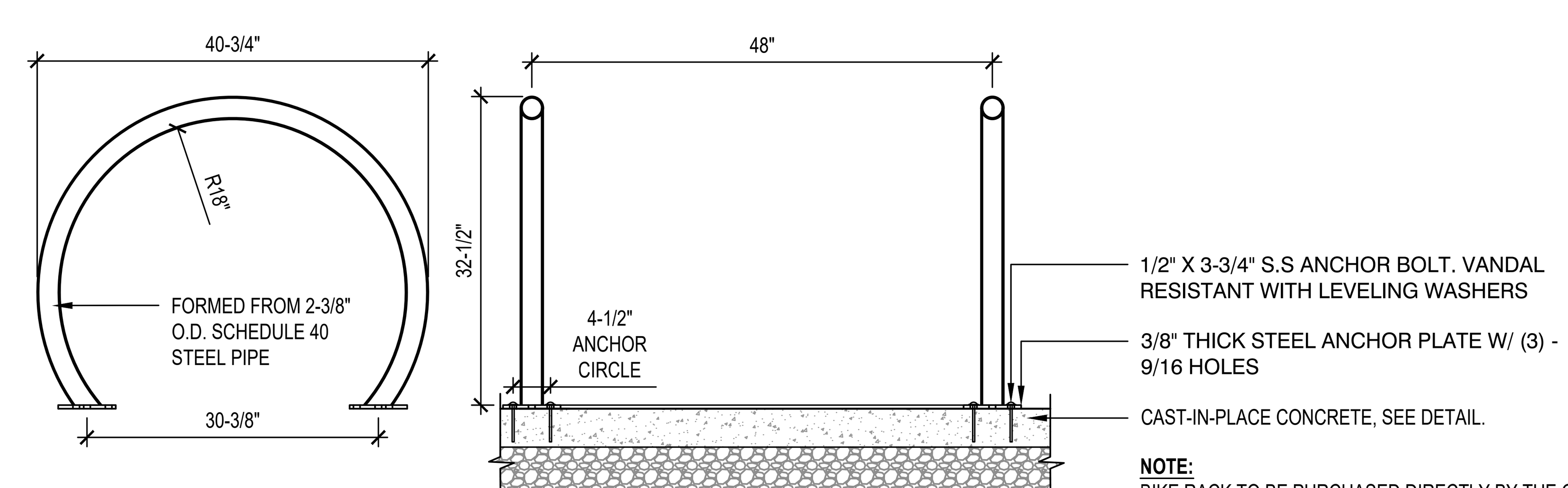


10 ENGINEERED WOOD FIBER SAFETY SURFACING AT BONDED RUBBER
SCALE: N.T.S.



NOTE:
1. FOOTINGS SHALL BE REQUIRED FOR ALL POSTS AND GROUND CONNECTIONS, SEE PLANS.
2. EXCEPT AS NOTED, EXCAVATION AREAS THAT ARE FIELD VERIFIED TO BE GREATER THAN 2' FROM TOP OF SUBGRADE TO REFUSE, THE HDPE GEOMEMBRANE MAY BE OMITTED
3. LANDSCAPE STRUCTURES "FLEXX" SWING REQUIRES A DEEPER DIRECT-BURY FOUNDATION. REFER TO SPECIFICATIONS FOR INSTALLATION REQUIREMENTS.

11 COMMUNITY BUILD - PLAY STRUCTURE FOOTING
SCALE: N.T.S.



NOTE:
BIKE RACK TO BE PURCHASED DIRECTLY BY THE CITY AS PART OF THE PLAYGROUND ORDER. THIS IS THE ONLY PLAY STRUCTURE TO BE INSTALLED BY THE CONTRACTOR.

12 BIKE RACK SURFACE MOUNTED ON CONCRETE
SCALE: N.T.S.

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CITY OF PORTSMOUTH
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Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
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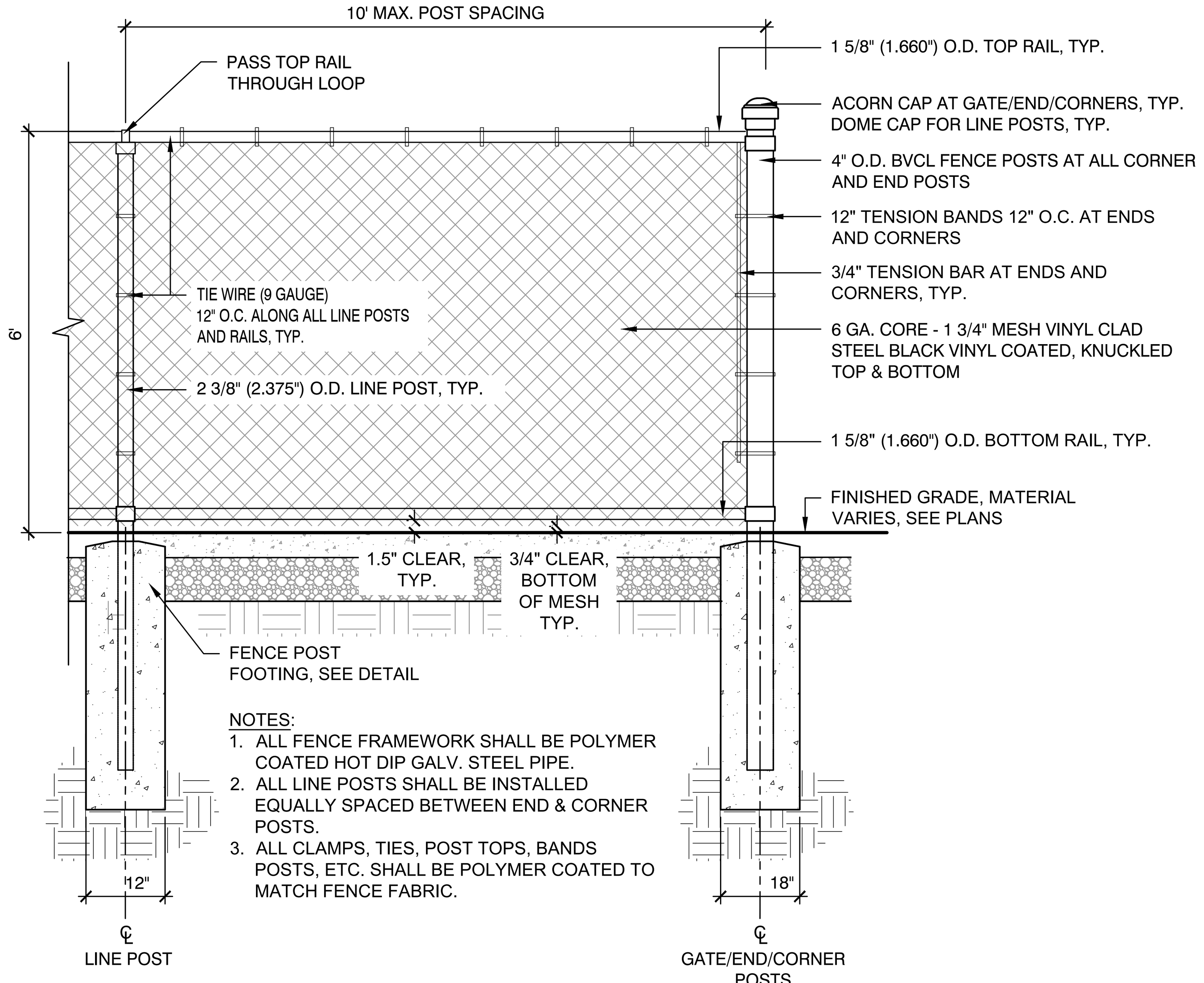
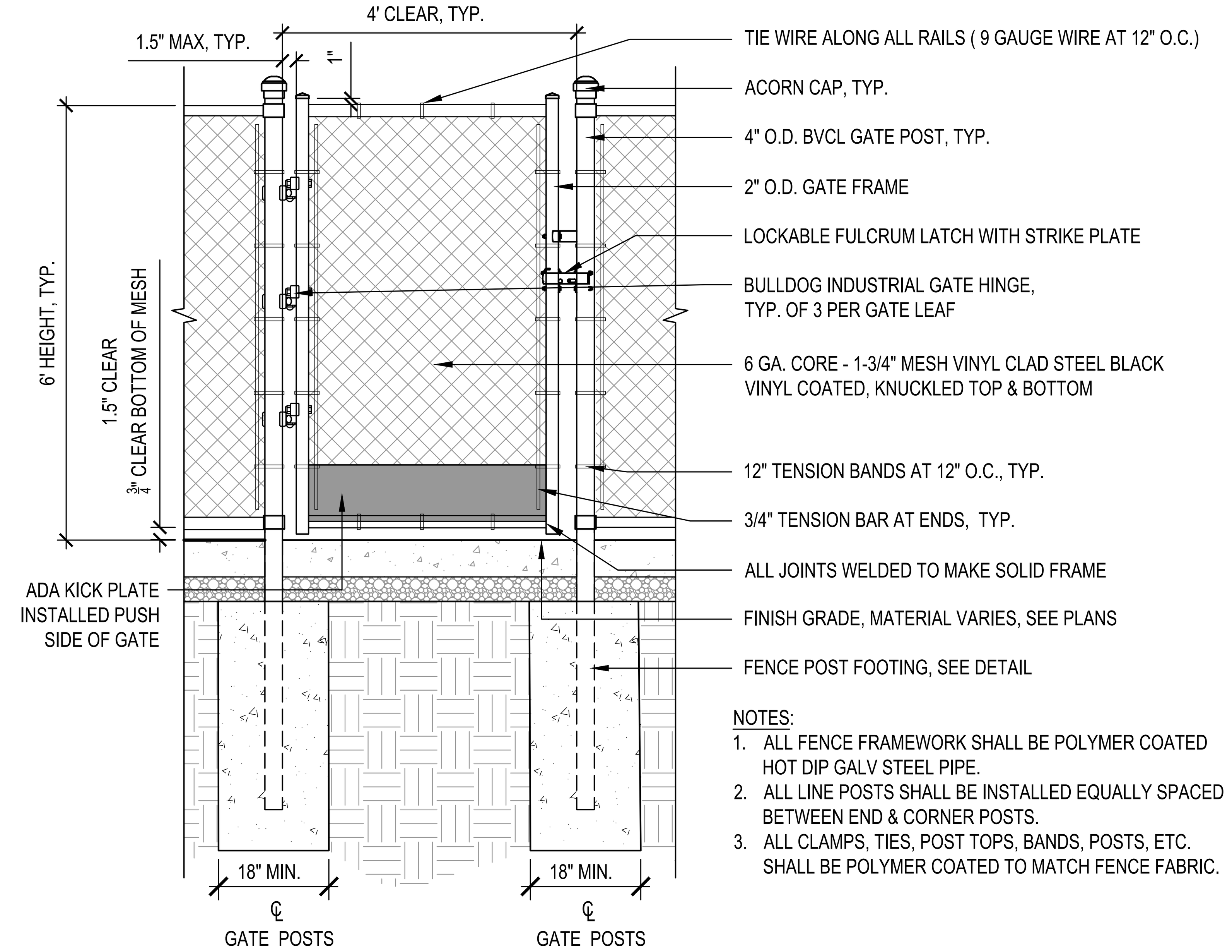


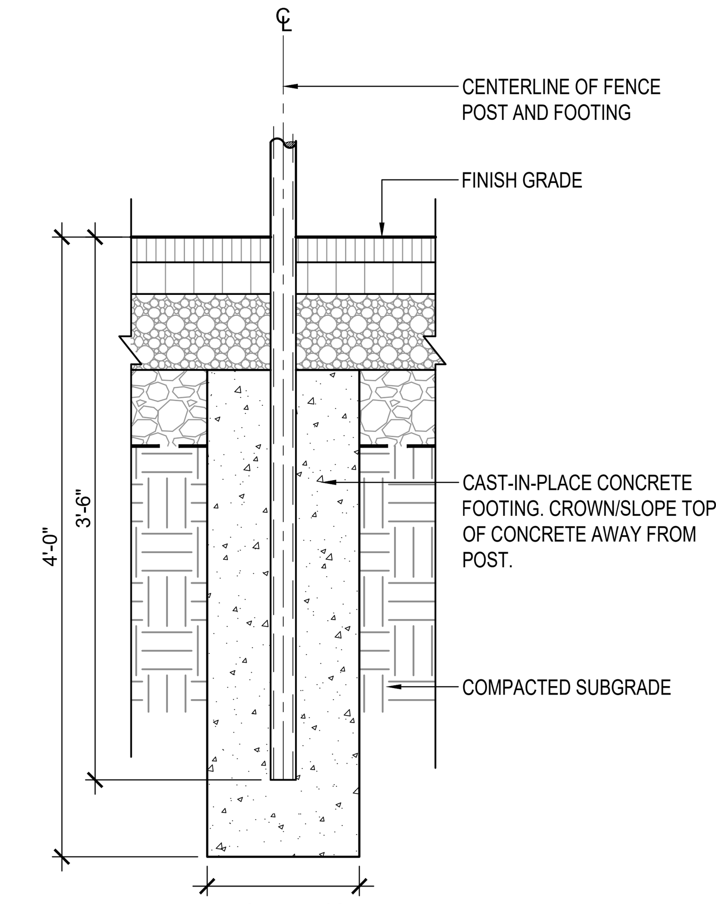
NOTES:
1. ALL FENCE FRAMEWORK SHALL BE POLYMER COATED HOT DIP GALV. STEEL PIPE.
2. ALL LINE POSTS SHALL BE INSTALLED EQUALLY SPACED BETWEEN END & CORNER POSTS.
3. ALL CLAMPS, TIES, POST TOPS, BANDS POSTS, ETC. SHALL BE POLYMER COATED TO MATCH FENCE FABRIC.

1 6' HT. BLACK VINYL CHAIN LINK FENCE
SCALE: N.T.S.



NOTES:
1. ALL FENCE FRAMEWORK SHALL BE POLYMER COATED HOT DIP GALV STEEL PIPE.
2. ALL LINE POSTS SHALL BE INSTALLED EQUALLY SPACED BETWEEN END & CORNER POSTS.
3. ALL CLAMPS, TIES, POST TOPS, BANDS, POSTS, ETC. SHALL BE POLYMER COATED TO MATCH FENCE FABRIC.

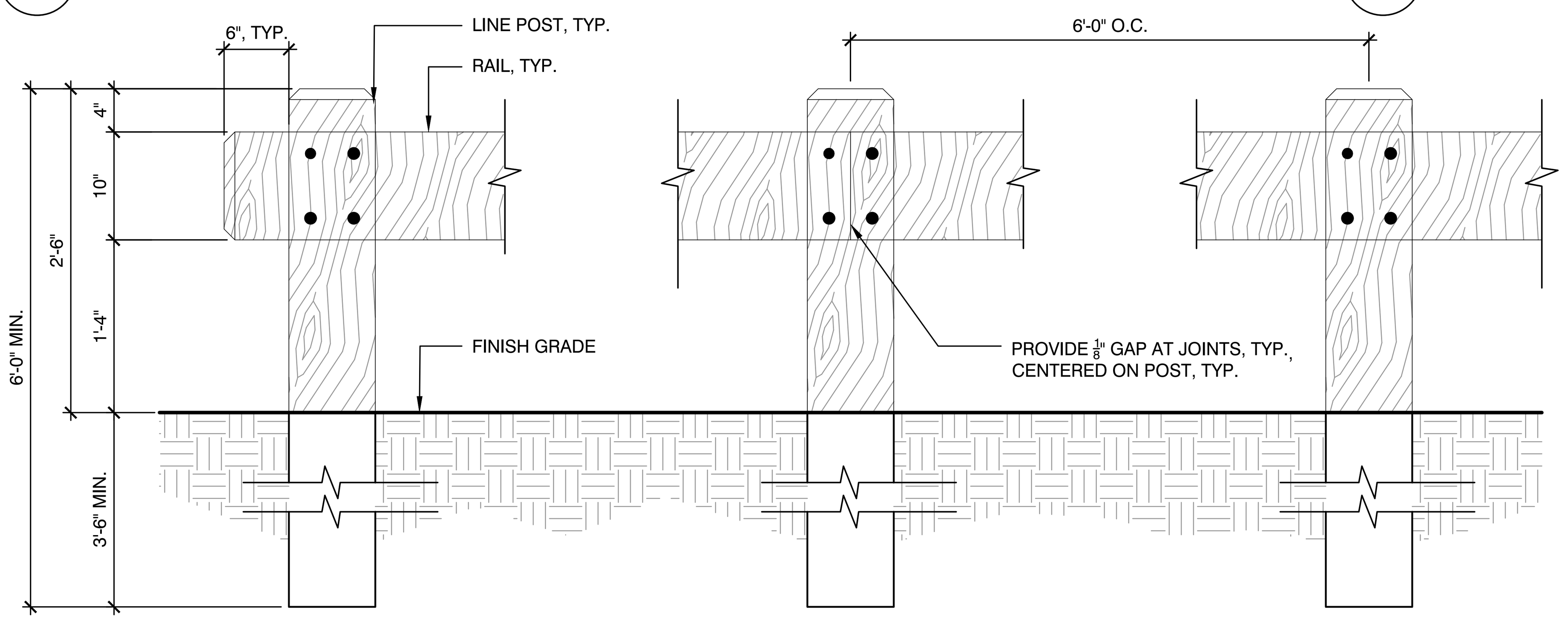
2 6' HT. CHAIN LINK SINGLE SWING GATE
SCALE: N.T.S.



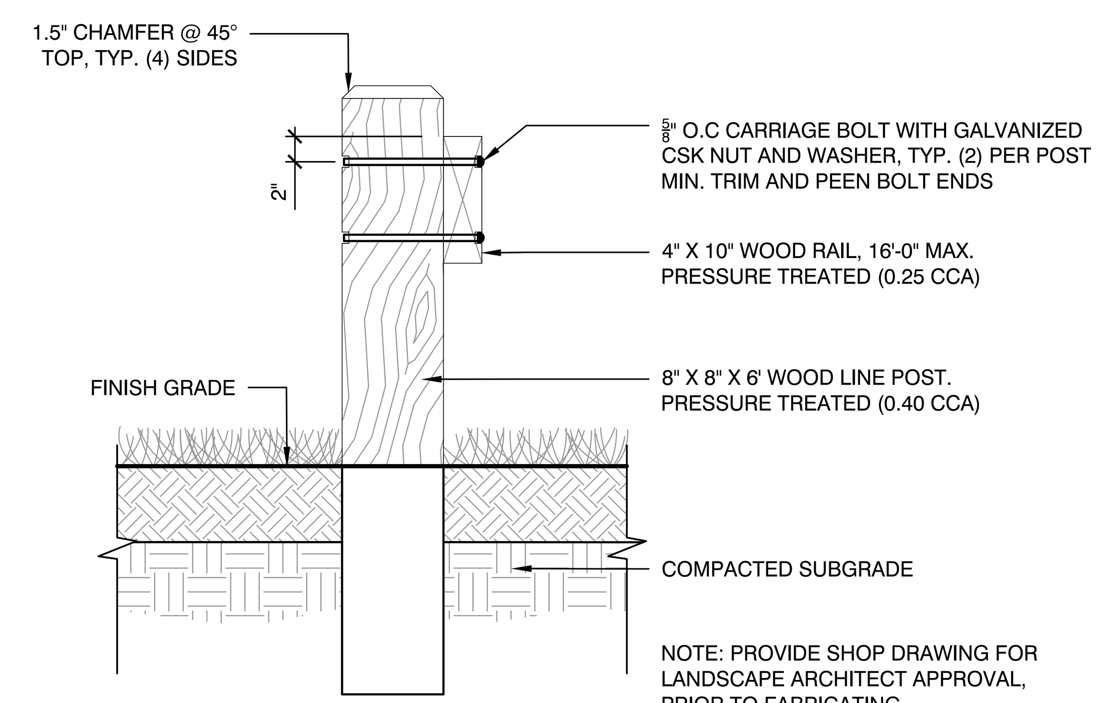
12" FOR LINE POST
18" FOR GATE, END OR CORNER POST
24" FOR DOUBLE GATE AND CANTILEVERED GATE

NOTE:
1. ALL FENCE POST POLES SHALL BE INSPECTED BY THE OWNER/ENGINEER PRIOR TO THE INSTALLATION OF CONCRETE AND FENCE POST.

3 CHAIN LINK FENCE POST FOOTING
SCALE: N.T.S.



TYPICAL RAILING ELEVATION

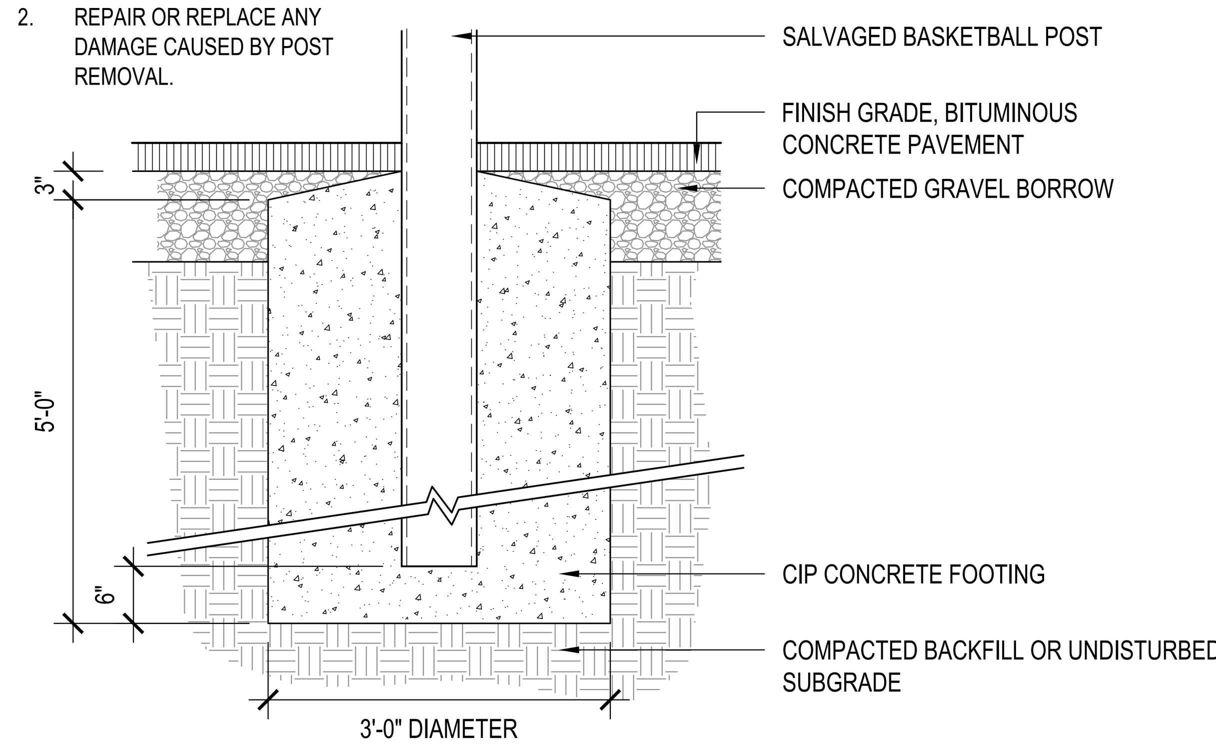


NOTE: PROVIDE SHOP DRAWING FOR LANDSCAPE ARCHITECT APPROVAL, PRIOR TO FABRICATING

TYPICAL RAILING SECTION

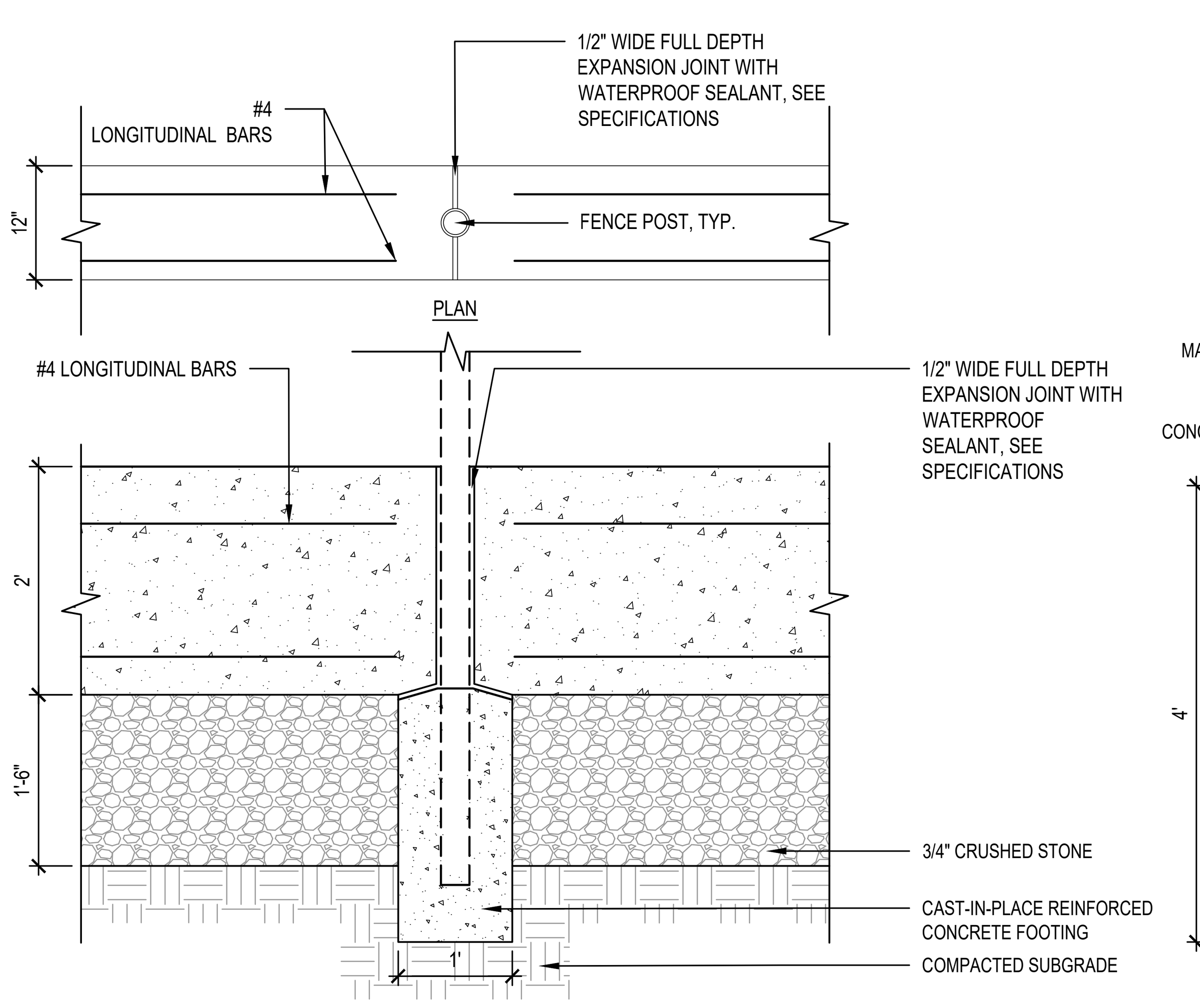
4 WOOD GUARDRAIL
SCALE: N.T.S.

NOTE:
1. SALVAGE AND REUSE EXISTING BASKETBALL GOAL AND POST; FIELD-VERIFY POST SIZE.
2. REPAIR OR REPLACE ANY DAMAGE CAUSED BY POST REMOVAL.

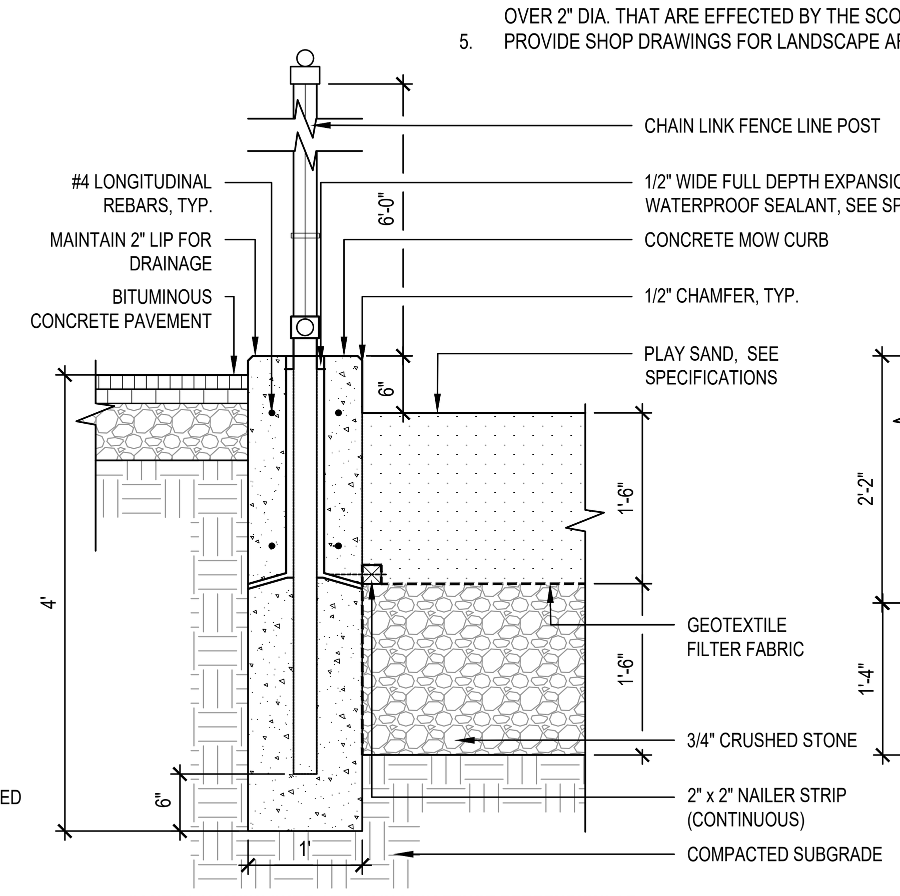


5 BASKETBALL POST FOOTING
SCALE: N.T.S.

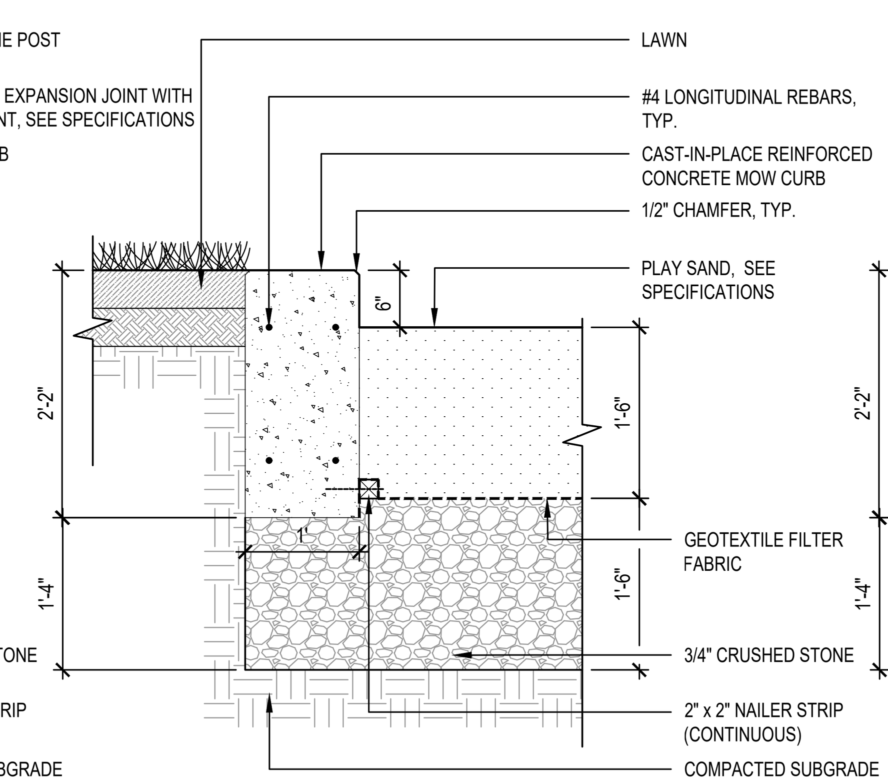
NOTES:
1. MOW STRIP CORNERS ADJACENT TO RESILIENT SURFACING SHALL BE SQUARE TO ENSURE SMOOTH INTERFACE BETWEEN MATERIALS.
2. MOW STRIP CORNERS ADJACENT TO PLANTING BED OR LAWN AREAS WILL HAVE 1/2" CHAMFER
3. CONTRACTOR SHALL PROVIDE 1/2" WIDE FULL DEPTH EXPANSION JOINT WITH WATERPROOF SEALANT EVERY 30' O.C. UNLESS OTHERWISE NOTED. REFER TO SPECIFICATIONS
4. CONTRACTOR SHALL USE EXTREME CAUTION AT ROOT ZONE OF EXISTING TREES TO REMAIN. CONTRACTOR SHALL CLEAN CUT ANY ROOTS OVER 2" DIA. THAT ARE EFFECTED BY THE SCOPE OF WORK. CONTRACTOR SHALL CONSULT ARBORIST PRIOR TO ANY ROOT REMOVAL.
5. PROVIDE SHOP DRAWINGS FOR LANDSCAPE ARCHITECT APPROVAL



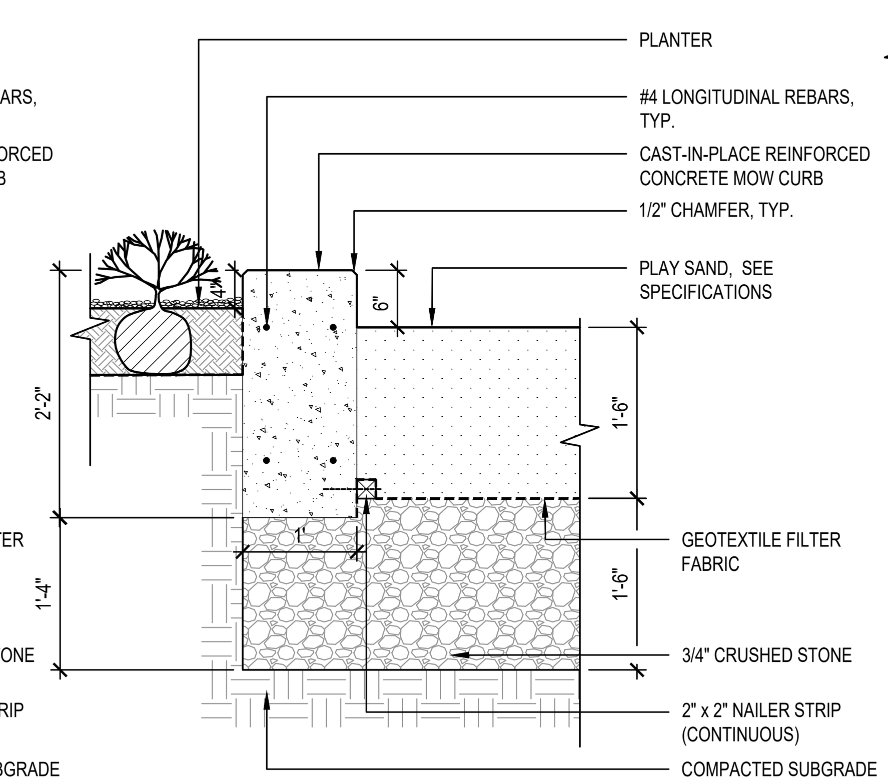
SAND PLAY MOW CURB AT CHAIN LINK FENCE PARALLEL



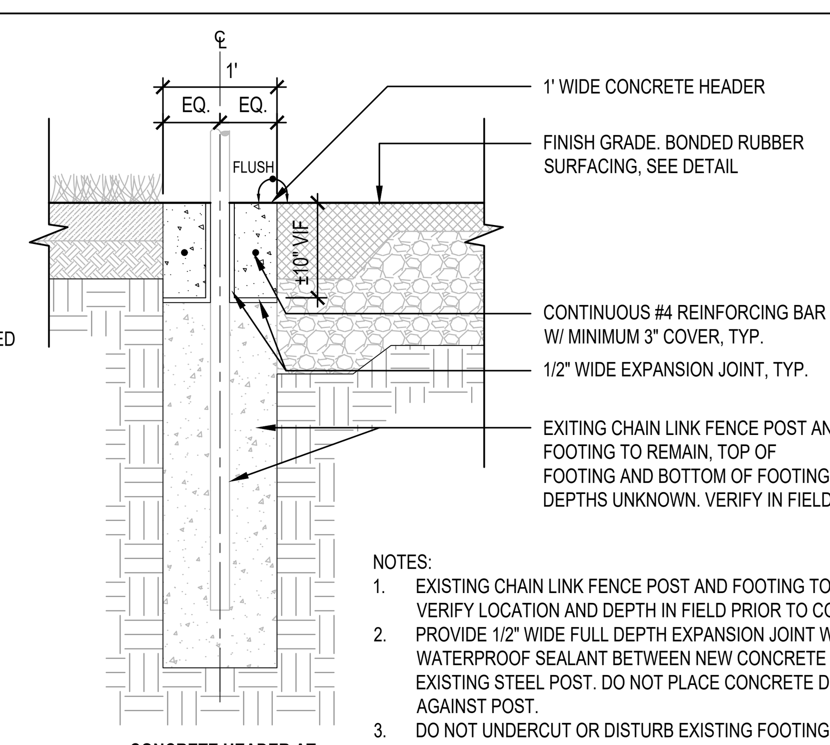
SAND PLAY MOW CURB AT CHAIN LINK FENCE PERPENDICULAR



SAND PLAY AT LAWN



SAND PLAY AT PLANTER



CONCRETE HEADER AT EXISTING FENCE POST

NOTES:
1. EXISTING CHAIN LINK FENCE POST AND FOOTING TO REMAIN. VERIFY LOCATION AND DEPTH IN FIELD PRIOR TO CONSTRUCTION.
2. PROVIDE 1/2" WIDE FULL DEPTH EXPANSION JOINT WITH WATERPROOF SEALANT BETWEEN NEW CONCRETE HEADER AND EXISTING STEEL POST. DO NOT PLACE CONCRETE DIRECTLY AGAINST POST.
3. DO NOT UNDERCUT OR DISTURB EXISTING FOOTING DURING EXCAVATION. HAND EXCAVATE AS REQUIRED ADJACENT TO FOOTING.
4. FORM KEYWAY, REVEAL, OR ROUGHENED EDGE AT CONCRETE HEADER TO PROVIDE POSITIVE MECHANICAL BOND FOR BONDED RUBBER SURFACING AND LIMIT MIGRATION.
5. CONTRACTOR SHALL PROTECT EXISTING FENCE POSTS DURING WORK. ANY DAMAGE OR LOSS OF PLUMB SHALL BE RESET BY CONTRACTOR AT NO ADDITIONAL COST.
6. IF EXISTING FOOTING DEPTH IS ABOVE LOCAL FROST DEPTH OR FOUND INADEQUATE, NOTIFY ENGINEER FOR DIRECTION PRIOR TO PLACEMENT OF CONCRETE.

6 CONCRETE MOW CURB AND CHAIN LINK FENCE AT SAND PLAY
SCALE: N.T.S.

Project:
CITY OF PORTSMOUTH

LITTLE HARBOUR ELEMENTARY SCHOOL
50 CLOUGH DRIVE
PORTSMOUTH, NH

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Drawn By: MG, JZ
Reviewed By: AA
Approved By: BK
W&S Project No.: ENG25-0955
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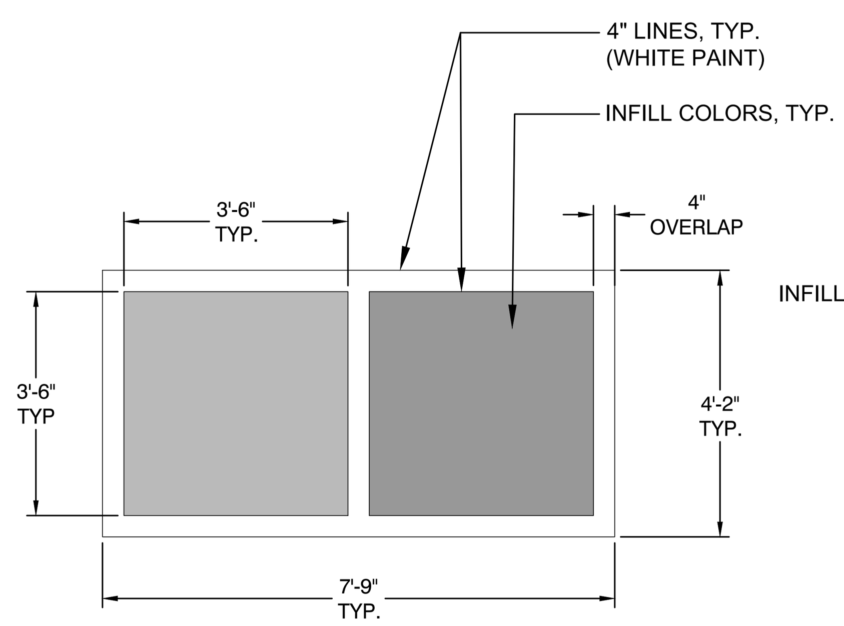
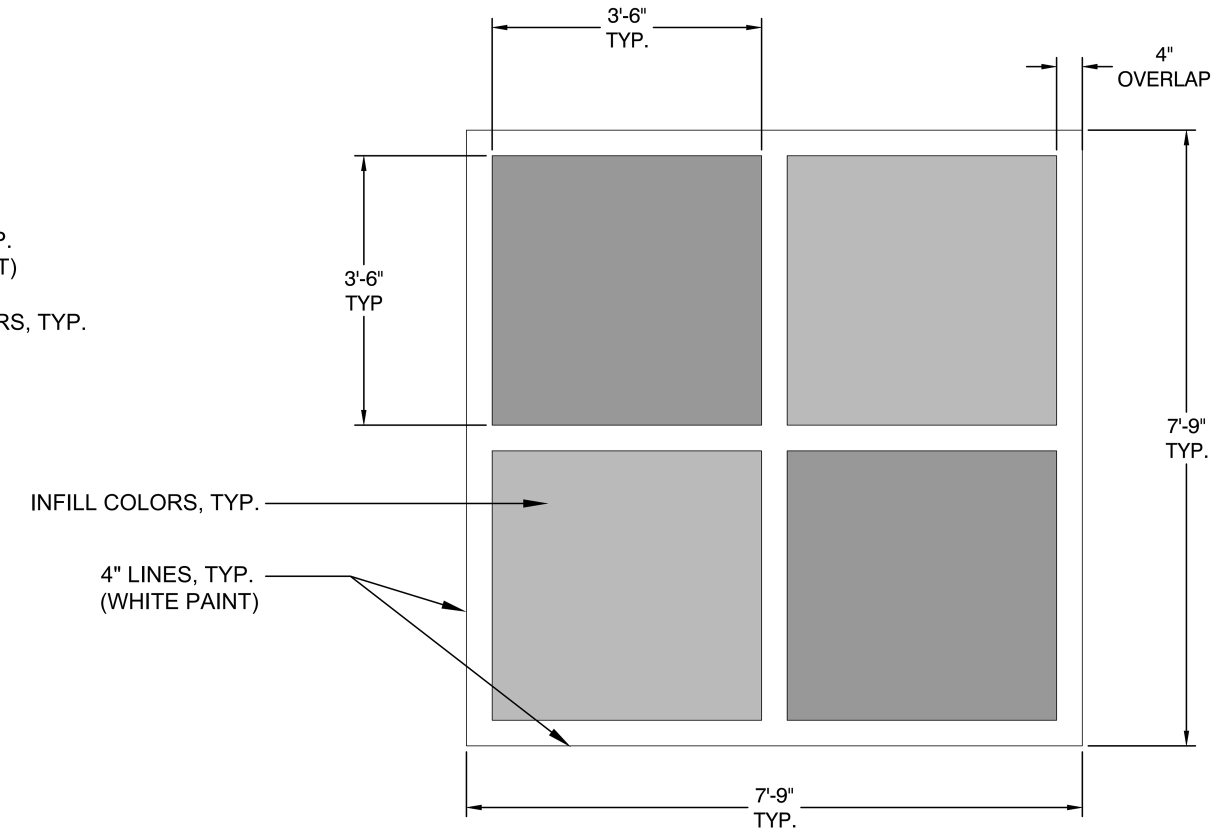


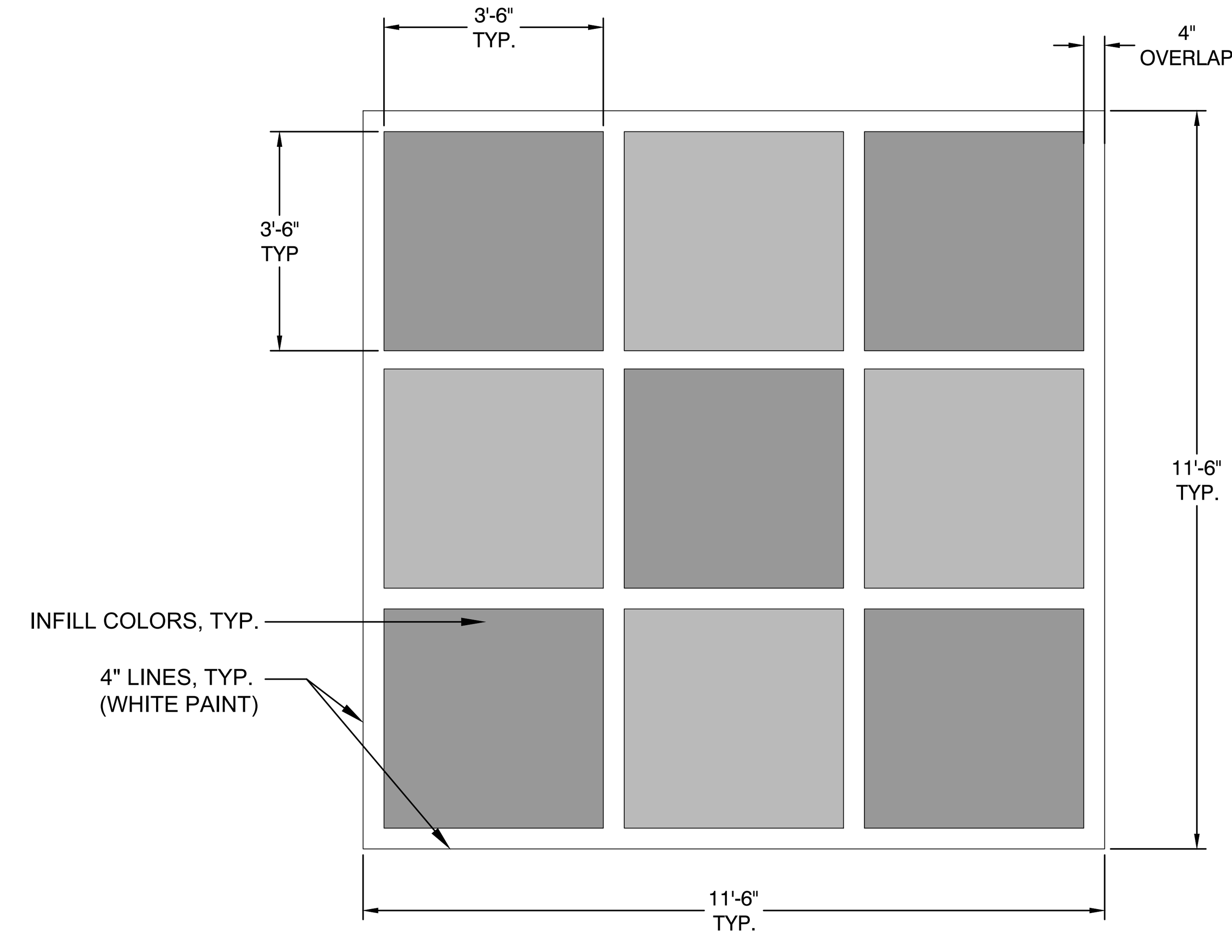
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

1 TWO-SQUARE PAVEMENT MARKING
SCALE: N.T.S.



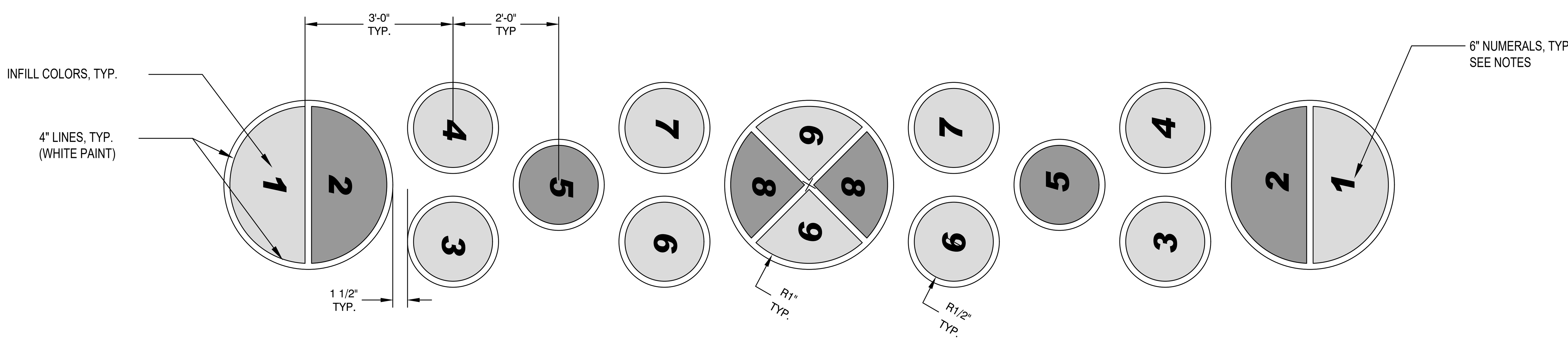
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

2 FOUR-SQUARE PAVEMENT MARKING
SCALE: N.T.S.



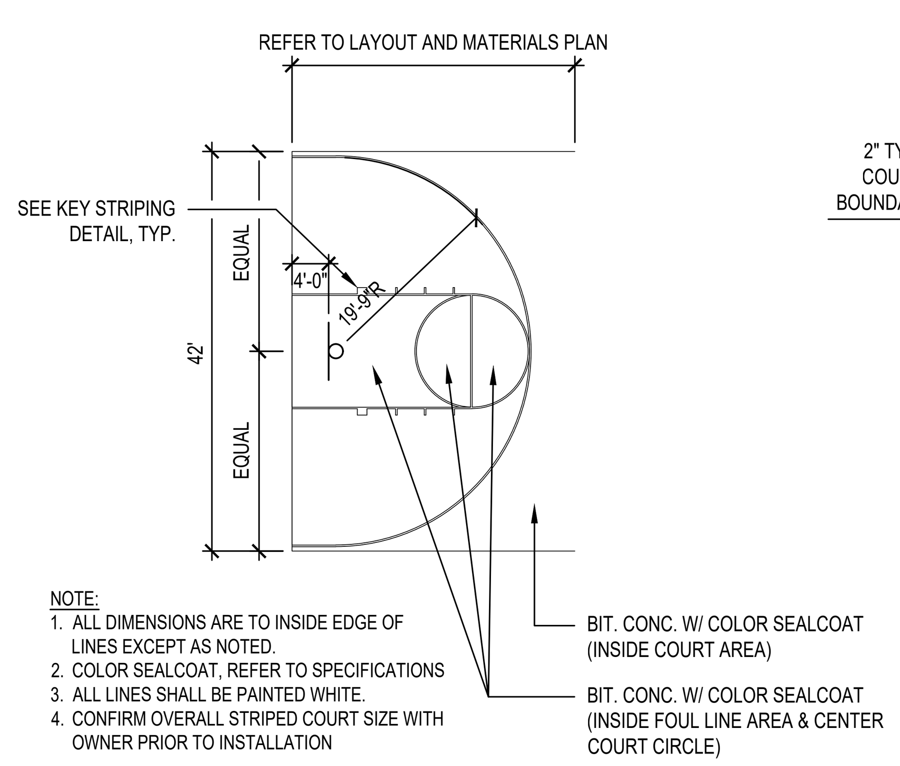
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

3 NINE-SQUARE PAVEMENT MARKING
SCALE: N.T.S.



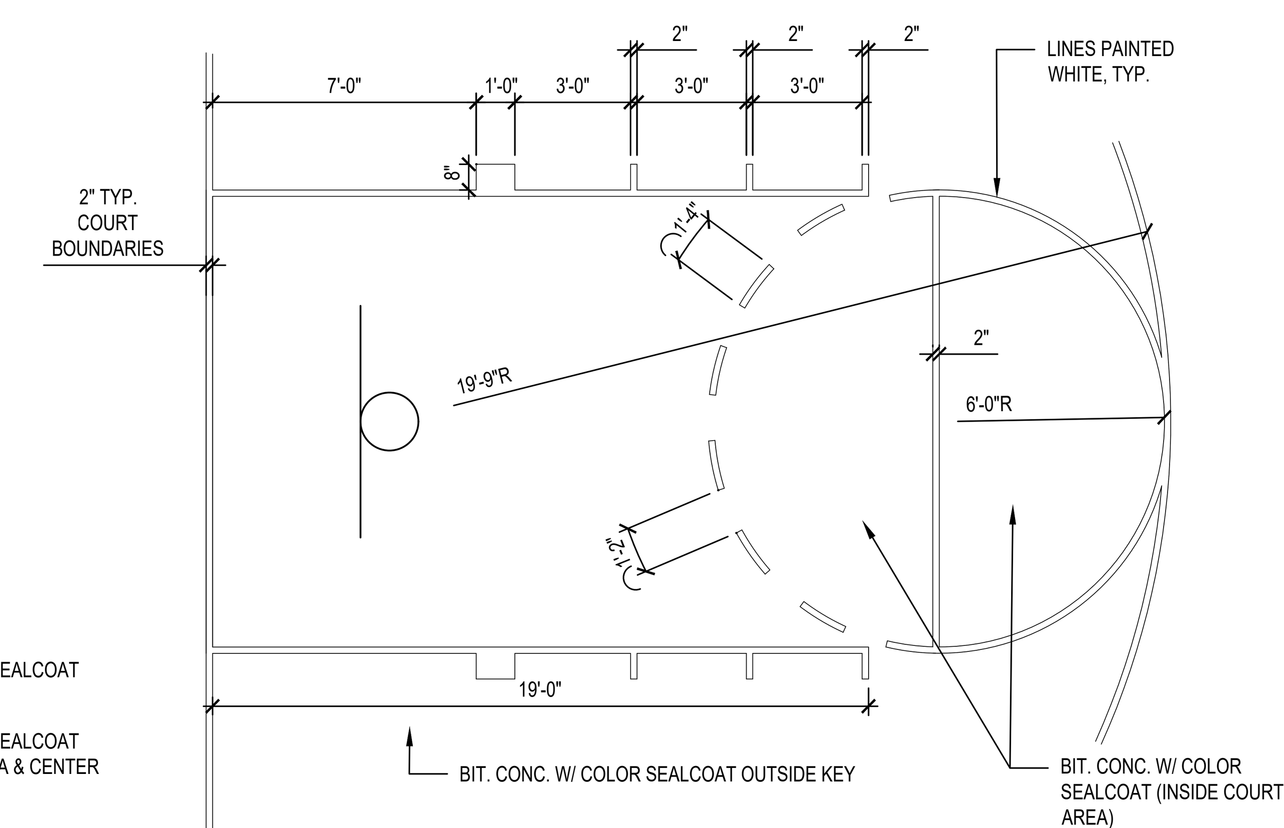
NOTES:
1. LINES TO BE 4" WIDE. COLOR TO BE WHITE.
2. FILL COLORS TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.
3. NUMBERS TO BE 6" TALL- FONT TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

4 HOPSCOTCH PAVEMENT MARKING
SCALE: N.T.S.



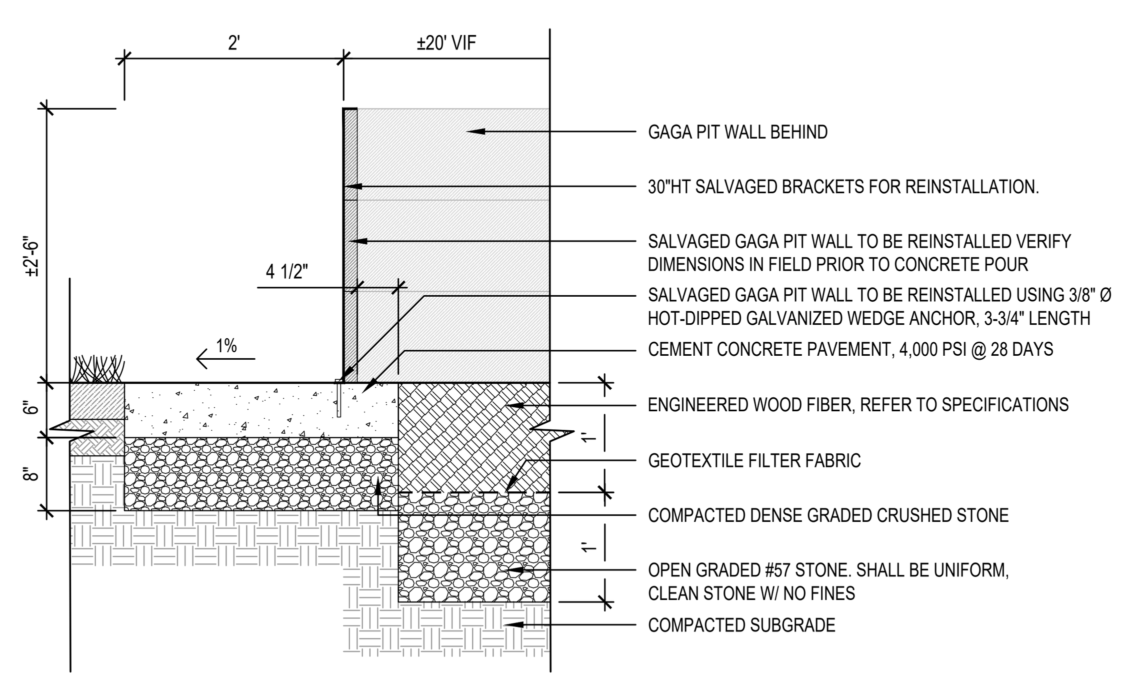
NOTE:
1. ALL DIMENSIONS ARE TO INSIDE EDGE OF LINES EXCEPT AS NOTED.
2. COLOR SEALCOAT, REFER TO SPECIFICATIONS
3. ALL LINES SHALL BE PAINTED WHITE.
4. CONFIRM OVERALL STRIPED COURT SIZE WITH OWNER PRIOR TO INSTALLATION

BASKETBALL COURT STRIPING



BASKETBALL KEY STRIPING

5 BASKETBALL COURT LAYOUT
SCALE: N.T.S.



NOTES:
1. ANY DAMAGE TO EXISTING GAGA PIT FOOTINGS, ANCHORS, OR BRACKETS CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED IN KIND AT NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTOR TO REMOVE "SEAT" TOPPER FROM EXISTING GAGA PIT. CONFIRM WITH OWNER PRIOR TO REMOVAL.

6 GAGA PIT
SCALE: N.T.S.

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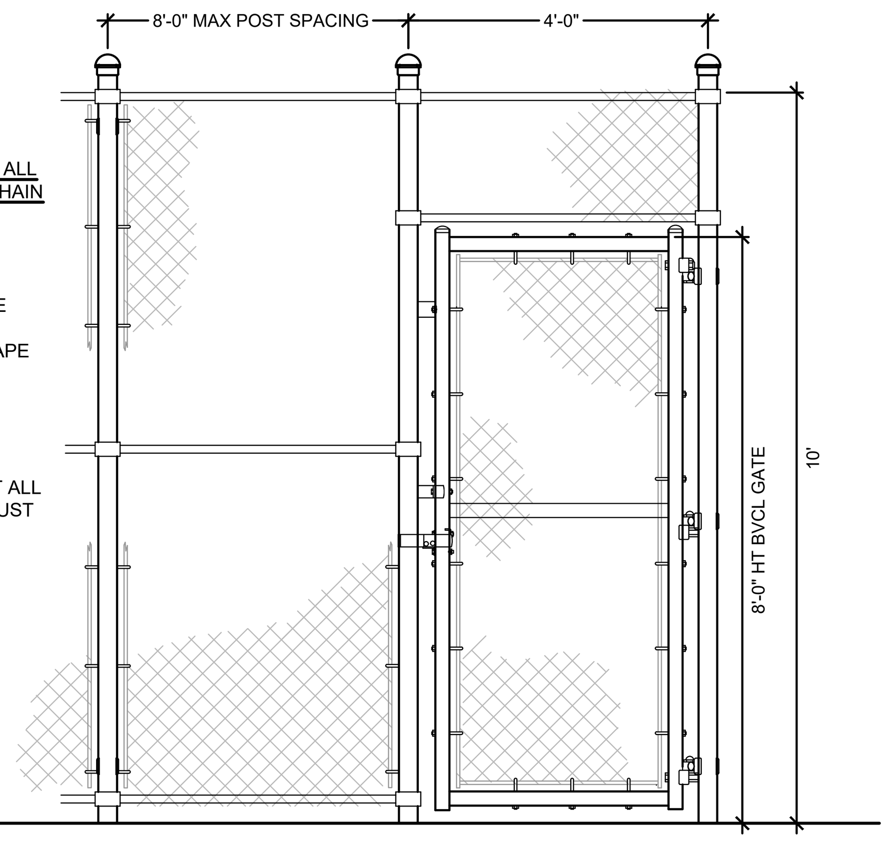
Reviewed By:	AA
Approved By:	BK
W&S Project No.:	ENG25-0955
W&S File No.:	----

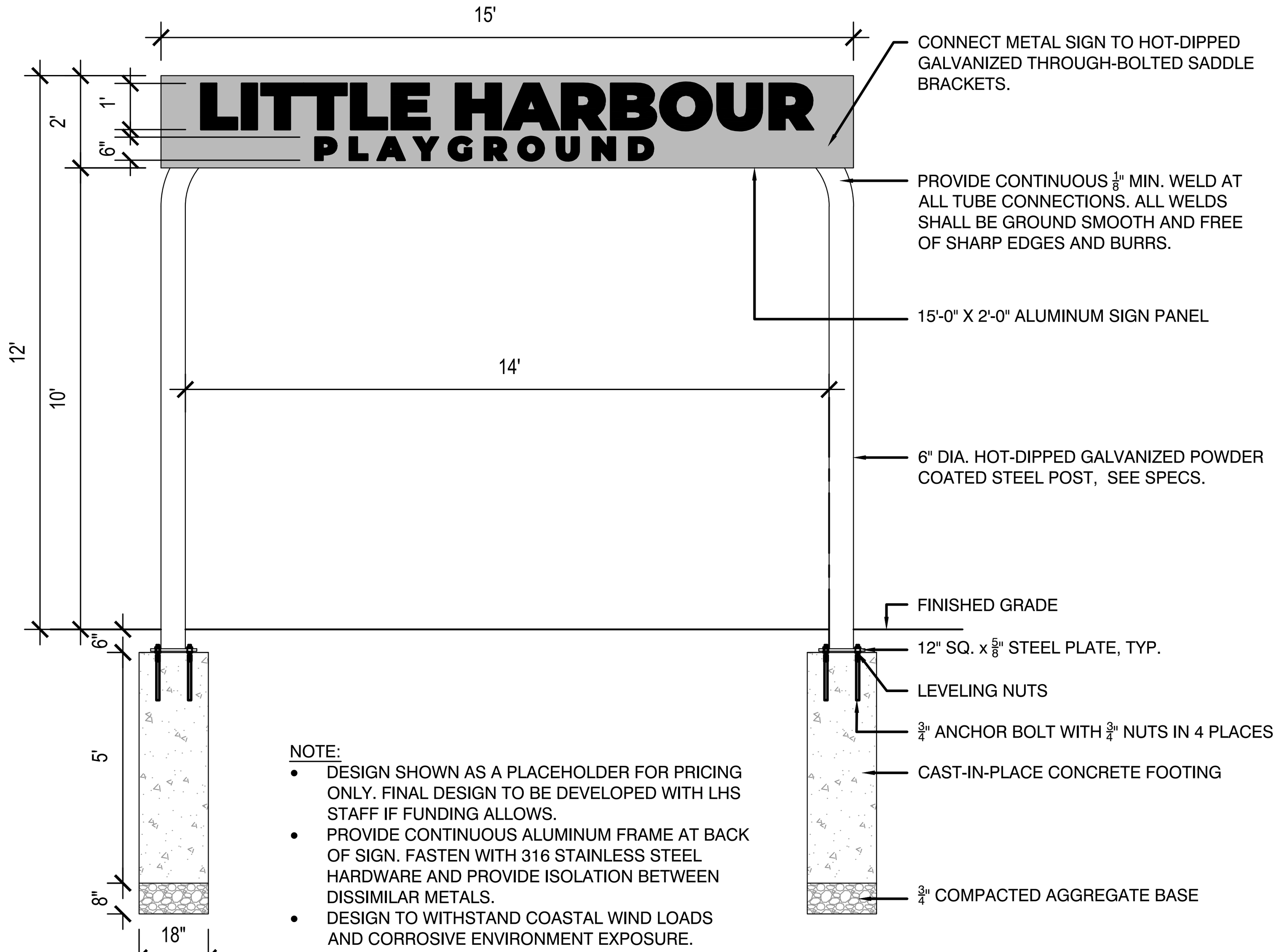
Drawing Title:
DETAILS

Sheet Number:
L904

NOTES:
1. REFERENCE TO DETAILS FOR ALL BLACK VINYL COATED CHAIN LINK FENCE + GATE COMPONENTS AND DIMENSIONS, TYP.
2. DETAIL FOR REFERENCE ONLY. PROVIDE SHOP DRAWING FOR LANDSCAPE ARCHITECT APPROVAL
3. PROVIDE 5' DEPTH FOOTINGS AT THIS LOCATION
4. BVCL STANDARD (BOULEVARD) CLAMP AT ALL MID-RAILS. MID-RAILS MUST BE INCLUDED AT 10' HT. FENCE

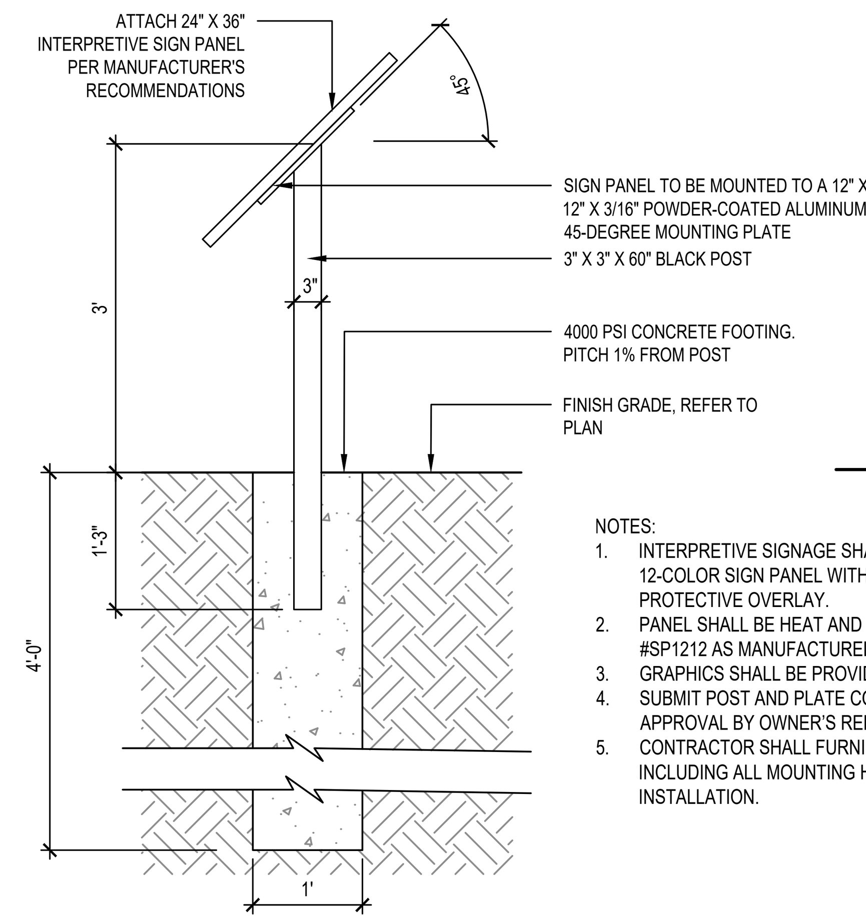


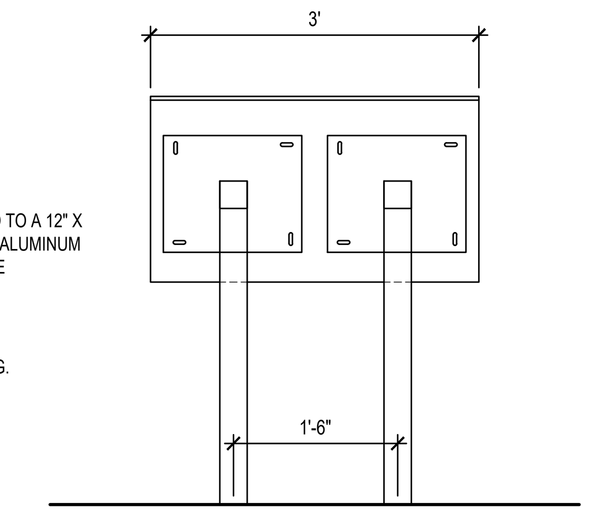
1 ADD ALTERNATE 1 - WALL BALL CHAIN LINK FENCE AND ACCESS GATE
SCALE: N.T.S.



NOTE:
- DESIGN SHOWN AS A PLACEHOLDER FOR PRICING ONLY. FINAL DESIGN TO BE DEVELOPED WITH LHS STAFF IF FUNDING ALLOWS.
- PROVIDE CONTINUOUS ALUMINUM FRAME AT BACK OF SIGN. FASTEN WITH 316 STAINLESS STEEL HARDWARE AND PROVIDE ISOLATION BETWEEN DISSIMILAR METALS.
- DESIGN TO WITHSTAND COASTAL WIND LOADS AND CORROSIVE ENVIRONMENT EXPOSURE.
- NO FIELD WELDING OR FIELD DRILLING OF POSTS PERMITTED.

2 ADD ALTERNATE 3 - PLAYGROUND ENTRY ARCHWAY
SCALE: N.T.S.

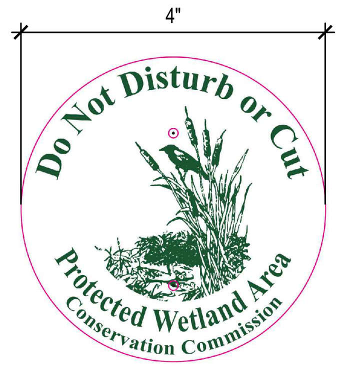




NOTES:
1. INTERPRETIVE SIGNAGE SHALL BE ONE (1) 1/2" THICK, 24" X 36" DIGITAL HIGH PRESSURE LAMINATE (HPL) 12-COLOR SIGN PANEL WITH HIGH-RESOLUTION CUSTOM GRAPHICS AND EXTERIOR UV/GRAFFITI PROTECTIVE OVERLAY.
2. PANEL SHALL BE HEAT AND PRESSURE BONDED WITH WATERPROOFED EDGES AND SHALL BE MODEL #SP1212 AS MANUFACTURED BY FOSSIL INDUSTRIES, DEER PARK, NY, OR APPROVED EQUAL.
3. GRAPHICS SHALL BE PROVIDED BY OWNER DURING SUBMITTAL PROCESS.
4. SUBMIT POST AND PLATE COLOR SAMPLES AND LAMINATE GRAPHIC PANEL SAMPLE FOR REVIEW AND APPROVAL BY OWNER'S REPRESENTATIVE.
5. CONTRACTOR SHALL FURNISH AND INSTALL ONE (1) COMPLETE SIGN WITH DIRECT-BURY POSTS, INCLUDING ALL MOUNTING HARDWARE AND INCIDENTAL WORK REQUIRED FOR A COMPLETE INSTALLATION.

3 ADD ALTERNATE 4 - ENVIRONMENTAL INTERPRETIVE SIGNAGE - DOUBLE POST
SCALE: N.T.S.

4"



NOTES:
1. PORTSMOUTH WETLAND BOUNDARY MARKERS TO BE PURCHASED BY OWNER.
2. MARKERS TO BE PLACED 100' O.C. ALONG EXISTING FENCE, UNLESS OTHERWISE NOTED. REFER TO MATERIALS PLAN

4 OWNER PURCHASED - PROTECTED WETLAND SIGNAGE
SCALE: N.T.S.

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