

City of Biddeford
Planning Board
March 20, 2024 6:00 PM City Hall
Council Chambers, & Zoom
<https://biddeford.zoom.us/j/94983531202?pwd=Q3ZyejcyUVpBaUVVMHduYXJhSzB4UT09>
Webinar ID 949 8353 1202; Passcode 223739

**STATUS: PLANNING BOARD MEETING, WEDNESDAY, MARCH 20, 2024, 6:00 PM,
CITY COUNCIL CHAMBERS & ZOOM**

- 1. PLEDGE OF ALLEGIANCE**
- 2. DECLARATION OF QUORUM/VOTING MEMBERS**
- 3. ADJUSTMENTS TO THE AGENDA**
- 4. PLANNER'S BUSINESS**
 - 4.A. 2024.16 AVESTA Housing project in the pipeline needing a Contract Zone
 - 4.B. 2024.17 Change of Zone for 118 Alfred Street from MSRD2 to MSRD1
- 5. CONSENT AGENDA**
 - 5.A. Approval of Meeting Minutes from 3-6-24
[3-6-24-Meeting Minutes-DRAFT.pdf](#)
- 6. UNFINISHED BUSINESS**
- 7. NEW BUSINESS**
 - 7.A. 2024.13 The Planning Board will hold a public meeting to review and discuss a Shoreland Zoning Permit Application for Samuel P. Brady to repair an existing ramp to the beach at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) in the Coastal Residential Zone and Shoreland Overlay. Existing ramp was damaged in the storms recently.
[2024.13 Brady 3 Sea Spray Drive Shoreland Zoning Permit DCMG FINAL 3-20-2024.pdf](#)
[Brady Application.pdf](#)
[PBR 78696.pdf](#)
 - 7.B. 2024.14 The Planning Board will hold a public meeting to review and discuss a Site Plan Application for BVH Biddeford, LLC for an internal change of use at 420 Alfred Road (Tax Map 20, Lot 26-1) in the I-3 Zone.
[2024.14 BHV Biddeford LLC 420 Alfred Street DCMG Report 3-20-2024 PDF .pdf](#)
[2024-03-05 Application Binder.pdf](#)
[2024-02-15 Site Plan.pdf](#)
 - 7.C. 2024.01 The Planning Board will hold a public meeting to review and discuss a Preliminary Site Plan Application for the City of Biddeford School Department to expand the primary school located at 320 Hill Street (Tax Map 82, Lot 32) in the R1A Zone.
[2024.01 Biddeford School Department - Primary School Preliminary Site Plan Review 3-20-2024.pdf](#)
 1. Cover Sheet.pdf
 2. Existing Conditions Plan.pdf

- 3. General Notes and Legend.pdf
- 4. Demolition & Erosion Control Plan.pdf
- 5. Overall Site Plan.pdf
- 6. Site Plan.pdf
- 7. Grading & Utility Plan.pdf
- 8. Fire Access Turn Template.pdf
- 9. Site Details.pdf
- 10. Architectural - First Floor Plans.pdf
- 11. Architectural - Second Floor Plans.pdf
- 12. Proposed Elevations.pdf
- 13. 3D Views.pdf
- Primary School - Preliminary Site Plan Application.pdf

8. OTHER BUSINESS

9. ADJOURN

The Board reserves the right to halt official business at 9:30 p.m. Items not heard at tonight's meeting shall be rescheduled to the next meeting of the Board. All materials pertaining to items on the agenda are available for public review at the Biddeford Planning Department, second floor, Biddeford City Hall during normal business hours.



CITY OF BIDDEFORD

Planning and Development Department

205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

Planning Board Meeting Meeting Minutes

DRAFT

Date: March 6, 2024
Time: 6:00 PM
Location: Council Chambers & Zoom

1. Pledge of Allegiance
2. Declaration of Quorum/Voting Members
Quorum Present: Larry Patoine (Chair), Roch Angers, Alexa Plotkin, & Stephen Beaudette
Staff Present: David Galbraith & Nan Whitten
Chair Patoine opened the meeting at 6:10 PM
3. Adjustments to the Agenda-none
4. Planner's Business-none
5. Consent Agenda
6. A. Approval of Meeting Minutes from 2-21-24
MOTIONS: 6:11 PM
Motion-Plotkin -Motion to approve minutes as presented
Second-Angers
Motion passed unanimously
7. Unfinished Business
8. New Business
7.A. 2024.09 The Biddeford Planning Board will hold a public meeting to review and discuss of a Conditional Use Permit request for Glenn Peterson of Wellrick, Inc. dba Canuvo to open an adult-use cannabis retail store at 4 Wellspring Road (Map 2, Lot 47-2) in the I-3 zone.
 - Galbraith introduced the project
 - Glenn Peterson represented the project
 - No public comments
 - Patoine-why does this say not an active license
 - It is activated once State is happy with allMOTIONS: 6:15 PM
Motion-Plotkin-Motion to waive Article XI, Full Site Plan Review. I motion to waive Article XI, full site plan review.
Second-Beaudette
Motion passed 2-1 (Plotkin & Beaudette in favor, Angers against)
Motion-Plotkin- Motion to approve the Conditional Use Permit and the Findings of Fact and Conclusions of Law for Glenn Peterson of Wellrick, Inc. dba Canuvo for an adult-use recreational marijuana retail facility at 4 Wellspring Road (Tax Map 2, Lot 47-2).

Second-Beaudette

Motion passed 2-1 (Plotkin, Beaudette in favor, Angers against)

7.B. 2024.02 The Biddeford Planning Board will hold a public meeting to review and discuss a Preliminary Site Plan Application submitted by Bryan Holden to reconfigure the structure on 129 Main Street, (the Marble Block) creating a bowling alley, restaurant & bar on the ground floor, apartments on the second and third floors (Tax Map 38, Lot 386) in the MSRD1 Zone.

- Galbraith introduced the project
- Two phases, phase 1 bowling alley, phase 2 living quarters
- Bryan Holden attended via Zoom
- Mr. Holden addressed questions and concerns noted on the staff report
- Mr. Holden questioned the parking requirements, he has an agreement with Premium Parking for the apartments
- Plotkin is of the opinion that there is enough parking in the City to accommodate the bowling alley and restaurant.
- Angers agrees on parking for the bowling alley but is concerned about the apartment parking.
- Angers is concerned about the fact that the applicant is waiting for interest rates to drop for phase 2. He does not want another unfinished building.
- Angers asked about the HPC and what is required?
- Holden read the following: Before work begins, the applicant shall submit to the Planning and Development Department the final set of construction drawings, including a detail drawing showing the method used to enclose exterior columns at the front of building in exterior sheathing.
- Holden said they are working with the National Parks Services for the tax credit
- Apartments will be started after phase 1 is completed
- Patoine wants to know if it is possible to close in the I beam in the front
- Holden answered that in working with the National Parks he will have to go back and tell them why that is requested
- It will be a challenge to go back to the NPS to change the approval
- Board feels the façade will look better to enclose and paint the I beam
- Applicant will go back to NPS and ask about the I beam.
- No questions or comments from the public
- Next steps were discussed with the applicant Preliminary & Final.

7.C. 2023.36 The Biddeford Planning Board will hold a public meeting regarding a Final Site Plan Review Application submitted by Riverbend Reserve, LLC for Homestead by the River. The request is to erect a 6,000 square foot pole barn, 1,950 square foot lean, and a 2,504 square foot 16-foot-wide gravel drive at Homestead by the River Campground located at 608-610 New County Road further described as Tax Map 6, Lot 35-2 in the Rural Farm District (RF) and Shoreland Overlay.

- Galbraith re-introduced the project explaining the re-routing of drain due to it draining onto the neighbor's property
- No Public Comments

MOTIONS: 6:43 PM

Motion- Plotkin -To approve the site plan approval for the construction of a 6,000 square foot storage building for the storage of RV's used at the facility and items associated with the campground, a connected 1,950 square foot lean-to serviced by a 16 foot gravel drive, at 608-610 New County Road (Property ID# Map 6, Lot 35, Sub-lot 2), with the Conditions of Approval (COA) and Findings of Fact (FOF) as written.

Second- Angers

Motion passed unanimously

9. Other Business

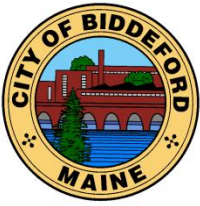
10. Adjourn

Meeting adjourned at 6:45 PM

Planning Board Chair/Vice Chair

Date

These minutes are summary and are not intended to be verbatim. Archived meetings are viewable on the City's website: www.biddefordmaine.org.



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Interim Director/City Planner

DATE: March 13, 2024

RE: **2024.13 After the Fact - Shoreland Zoning Permit request for Samuel P. Brady to repair an existing ramp leading to the beach located at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) in the Coastal Residential and Shoreland Overlay Zone.**

MEETING DATE: March 20, 2024 at 6:00 PM

1. INTRODUCTION

The City is in receipt from the Samuel P. Brady who is seeking a Shoreland Zoning Permit for the proposed repair of an existing ramp leading to the beach located at 3 Sea Spray Drive.



3 Sea Spray – Ramp Repair (Ramp shown far left from street to beach)

2024.13 Shoreland Zoning Permit request for Samuel P. Brady to repair an existing ramp leading to the beach located at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) / in the Coastal Residential Zone and Shoreland Overlay.

Planning Board Meeting Date: March 20, 2024



Pre-storm Condition

The photo at right shows the damage from the January storms. As explained by the Applicant, elderly people use this ramp to get to the beach and the owners remain concerned about the liability of the existing damaged ramp and therefore are seeking the Board's approval as expediently as possible. The proposed ramp is allowed, however, MDEP and City permits should have been obtained in advance. The bottom of the ramp is located below the high tide line.

The subject property consists of two lots, namely Map #67-41-2 and Map 67-41-1. As explained by the City's Code Office, the subject ramp is located to the far left of Map #67-41-2 and was constructed within the last year without the required State and Local permits. The Code Office informed the property owner of the violation and that MDEP and Planning Board review and approval was required. The Applicant has applied for the required Permit by Rule (PBR) to the MDEP. During the January 10 and 13, 2024 storms the existing ramp (shown left) was severely damaged and as a result, remains a safety hazard. The City's Director of Code Enforcement, Roby Fecteau and George Monteith – Civil Violations Officer have visited the site and concur that a safety hazard exists.



Post-storm Condition

2. PROJECT DATA/INFORMATION

1.	Applicant:	Samuel P. Brady 3 Sea Spray Drive Biddeford, ME 04005
2.	Owner of Property:	Janice A. Brady Trust
3.	Agent:	Applicant
4.	Surveyor:	N/A
5.	Project Location:	3 Sea Spray Drive
6.	Project Tax Map #/Lot #:	Tax Map 67, Lot 41-1
7.	Lot Size:	.43 Acres
8.	Base Zoning:	CR

2024.13 Shoreland Zoning Permit request for Samuel P. Brady to repair an existing ramp leading to the beach located at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) / in the Coastal Residential Zone and Shoreland Overlay.

Planning Board Meeting Date: March 20, 2024

9.	Overlay Zoning:	Shoreland
10.	Existing Use:	Single Family
11.	Proposed Use:	Repair Existing Ramp to Beach
12.	Approvals Required:	Shoreland Zoning Permit
13.	Uses in the Vicinity:	Residential
14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	
23.	LDR Attachment A: Fees Paid:	All Paid
25.	Planning Board Review History: Shoreland Zoning Permit 3-20-24	

3. REVIEW PROCESS

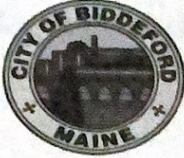
Per City ordinance, this application is subject to Shoreland Zoning Permit (Land Development Regulations, Shoreland Zoning Ordinance, Article XIV) review and approval by the Planning Board.

4. STAFF RECOMMENDATION

This application is for an after the fact approval for the construction of a ramp within the shoreland zoning district and approval of the existing ramp reconstruction. Staff is supportive of the proposal as it brings the property into compliance and as it will eliminate a hazardous condition.

5. SAMPLE MOTIONS:

- A. Motion to approve Case # 2024.13 a Shoreland Zoning Permit request for Samuel P. Brady to repair an existing ramp leading to the beach located at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) / in the Coastal Residential Zone and Shoreland Overlay.
- B. Motion to Table Case # 2024.13 Shoreland Zoning Permit request for Samuel P. Brady to repair an existing ramp leading to the beach located at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) / in the Coastal Residential Zone and Shoreland Overlay, based upon the following reasons:
- a) _____
- b) _____
- c) _____
- C. Motion to Deny Case # 2024.13 Shoreland Zoning Permit request for Samuel P. Brady to repair an existing ramp leading to the beach located at 3 Sea Spray Drive (Tax Map 67, Lot 41-1) / in the Coastal Residential Zone and Shoreland Overlay, based upon the following reasons:
- a) _____
- b) _____
- c) _____



City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Revised: May 17, 2022

Type of Application:

☐ Shoreland Zoning Permit ☐ Site Plan Review ☐ Extraction
☐ Conditional Use Permit ☐ Subdivision ☐ Private Way
☐ Other: Repair existing ramp

Applicant Information:

Name: Samuel P Brady
Mailing Address: 3 Sea Spray Drive
Telephone: (207) (603) 731-1971 - (Ruth Lugar - daughter)
Email: r.lugar@live.com
What is your legal interest in the property? — This is an easement for Access to Beach
☐ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: Same as Applicant
Mailing Address: _____
Telephone: _____
Email: _____

Agent's Information:

Name: N/A
Mailing Address: _____
Telephone: _____
Email: _____

Engineer/Surveyor's Information:

Name: N/A
Mailing Address: _____
Telephone: _____
Email: _____

Project Location and Lot Information:

Street Address: 3 Sea Spray Drive Biddeford — Beach Access Drainage Watershed: _____
Tax Map: _____ Lot: _____
Current Zoning: _____ Shoreland Zoning: _____
Size of Lot: 67 41-1 () acres () s.f. Lot Frontage: _____
Existing Use of Property: Residential

Property currently serviced by:

☐ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash
☒ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☐ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope) N/A

Are there any wetlands or waterbodies on the site? ☒ (Yes) ☐ (No) if yes attach information Ocean

Is the project within the 100-year floodplain? ☐ (Yes) ☐ (No) if yes attach information

Do you plan to bring fill onto the lot? ☐ (Yes) ☒ (No) If yes attach information

use existing material around ramp

Description of proposed use of property:

Project/Proposed Use:

Repair existing ramp to allow safe passage to beach

Property to be Serviced by:

☐ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash
☒ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Limits of Disturbance: _____ () acres () s.f.

Net change in impervious cover: _____ () acres () s.f.

Is this project part of a larger project? ☐ (Yes) ☒ (No)

Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)

Is this project within the Urbanized Area/MS4 (see City Drainage Map) ☐ (Yes) ☒ (No)

Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)

Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)

☒ If in a Shoreland Zone:

Percent of residential lot coverage (Max 20%): No expansion - Repairing existing ramp

Percent of structure expansion (Max 30%): _____

☐ If Subdivision Review, number of lots proposed: _____

☐ If a Private Way is proposed, number of lots served: _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: N/A

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval

- ☐ Fire Department – Contact Chief or Deputy Chief – 282-9986
- ☐ Ability to Serve for Water Service – Maine Water – 282-1543
- ☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
- ☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127

B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.

C. Photographs of Site.

D. Architectural renderings/drawings of proposed buildings, as required.

E. Engineering Plans, as required.

F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

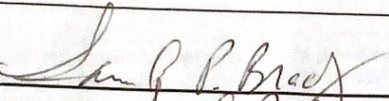
Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

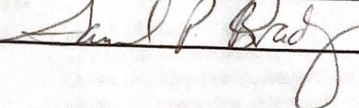
Will the proposed project cause 1 acre or more of site disturbance?: (Yes) X (No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: 

Date

3/4/24

Signature of Property Owner: 

Date

3/4/24

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
 - All drawings & CAD reference files must be to-scale and within the following coordinate systems:
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

11/01/2024

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM**
(For use with DEP Regulation, Natural Resources Protection Act - Permit by Rule Standards, Chapter 305)

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	Samuel P. Brady	Name:	
Mailing Address:	3 Sea Spray Drive	Mailing Address:	
Mailing Address:		Mailing Address:	
Town/State/Zip:	Biddeford	Town/State/Zip:	Ext:
Daytime Phone #:	(207) 423-3759 Ext:	Daytime Phone #:	
Email Address:	Cupcake38@live.com	Email Address:	

PROJECT INFORMATION			
Part of a larger project? (check 1):	☐ Yes ☒ No	After the Fact? (check 1):	☐ Yes ☒ No
Project Town:	Biddeford	Town Email Address:	Cupcake38@live.com
Brief Project Description:	This is a residential home impacted by the January storm. Our ramp and sea wall need repositioning, clean mud from them.		
Project Location & Brief Directions to Site:	3 Sea Spray Drive, Biddeford Maine		

PERMIT BY RULE (PBR) SECTIONS (Check at least one): I am filing notice of my intent to carry out work that meets the requirements for Permit-by-Rule (PBR) under DEP Rules, Chapter 305. I and my agent(s), if any, have read and will comply with all of the standards in the Sections checked below

- | | | |
|--|--|---|
| ☐ Sec. (2) Act. Adj. to Prot. Natural Res. | ☐ Sec. (9) Utility Crossing | ☐ Sec. (16) Coastal Sand Dune Projects |
| ☐ Sec. (3) Intake Pipes | ☐ Sec. (10) Stream Crossing | ☐ Sec. (16-A) Beach Nourishment |
| ☐ Sec. (4) Replacement of Structures | ☐ Sec. (11) State Transportation Facilities | ☐ Sec. (17) Transfer/Permit Extension |
| ☒ Sec. (6) Movement of Rocks or Veg. | ☐ Sec. (12) Restoration of Natural Areas | ☐ Sec. (18) Maintenance Dredging |
| ☐ Sec. (7) Outfall Pipes | ☐ Sec. (13) F&W Great/Water Qual. Improv. | ☐ Sec. (19) Act. Near SVP Habitat |
| ☐ Sec. (8) Shoreline Stabilization | ☒ Sec. (15) Public Boat Ramps | ☐ Sec. (20) Act. Near Waterfowl/Bird Habitat |

Private Ramp - Move slabs into position

NOTE: Municipal permits also may be required. Contact your local code enforcement office for information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS AND FEE

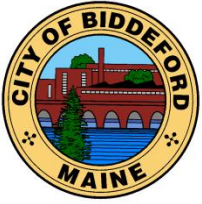
- ☒ **Attach** all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.
- ☒ **Attach** a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).
- ☐ **Attach Proof of Legal Name** if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://licrs.informeg.org/nel-sos-licrs/ICRS?MainPage=x>). Individuals and municipalities are not required to provide any proof of identity.

FEE: Pay by credit card at the [Payment Portal](https://www.maine.gov/dep/feeschedule.pdf). The Permit-by-Rule fee may be found here <https://www.maine.gov/dep/feeschedule.pdf> and is currently \$307.

- ☐ **Attach** payment confirmation from the Payment Portal when filing this notification form.

Signature & Certification:	
- I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. - I understand that this PBR becomes effective 14 calendar days after receipt by the Department of this completed form, the required submissions, and fee, unless the Department approves or denies the PBR prior to that date.	
By signing this Notification Form, I represent that the project meets all applicability requirements and standards in Chapter 305 rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.	
Signature of Agent or Applicant (may be typed):	Date: 2-5-24

Keep a copy as a record of permit. Email this completed form with attachments to DEP at: DEP.PBRNotification@maine.gov. DEP will send a copy to the Town Office as evidence of DEP's receipt of notification. No further authorization will be issued by DEP after receipt of notice. A PBR is valid for two years, except Section 4, "Replacement of Structures," are valid for three years. Work carried out in violation of the Natural Resources Protection Act or any provision in Chapter 305 is subject to enforcement.



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Interim Director/City Planner

DATE: March 13, 2024

RE: **2024.14 Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.**

MEETING DATE: March 20, 2024 at 6:00 PM

1. INTRODUCTION

The City is in receipt from BVH Biddeford LLC who is seeking a Preliminary Site Plan/Conditional Use Review for the proposed change of use and the creation of a pickle ball recreation center located at 420 Alfred Road.



Five Points Shopping Center – 420 Alfred Road (Tax Map 20, Lot 26-1)

2024.14 Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.
Planning Board Meeting Date: March 20, 2024



Pickleball Courts proposed to be located within the existing tenant space formerly Big Lots retail

Kylie S. Mason, R.L.A., LEED-AP, Chief Operations Officer of Sebago Technics, the project representative and Agent for BVH Biddeford, LLC. is pleased to submit the attached Major Site Plan Application for review. As discussed in the submitted project narrative:

"The Applicant proposes an internal change of use for a portion of the Five Points Shopping Center located at 420 Alfred Road in Biddeford. The proposed project site is located in the I3 Commercial Industrial Zone and further identified as Lot 26-1 on the City of Biddeford Tax Map 20. The proposed project involves the redevelopment and internal change of use of a portion of the building currently uninhabited for the development of a commercial pickleball facility. The project site is currently fully developed with existing buildings and associated parking, lighting, landscaping, and utilities. The proposed project provides for the redevelopment of an approximately 26,600 square-foot portion of the Five Points Shopping Center previously permitted and occupied by a commercial Big Lots store in the northeast area of the existing building. The area is currently unused and has been so since the prior inhabitants ceased operations at this location. The proposed pickleball development will include eight (8) pickleball courts, a reception area with connected front office, a communal seating area, and men's and women's locker rooms. The development will utilize the existing main entrance along the façade. The proposed changes to the existing development are limited to internal changes only. The development will utilize the existing parking, site lighting, and landscaping. The site is currently served by underground electric and telecommunications and public water and sewer. The proposed development will utilize the existing utilities. The proposed change of use will not alter the existing demand on municipal utilities. The Applicant is not proposing any façade changes at this time and there is no anticipated change to the existing site stormwater requirements".

The Applicants are not proposing any exterior modifications to the building or site. The proposal is for an interior remodel from a retail store for an "Amusement Center". The City's Land Use Code defines "Amusement Centers as:

AMUSEMENT CENTER: Any private, commercial premises which are maintained or operated primarily for the amusement, patronage, or recreation of the public, containing four or more table sports, pinball machines, video games, or similar mechanical or electronic games, whether activated by coins, tokens, or discs, or whether activated through remote control by the management.

2024.14 Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.
Planning Board Meeting Date: March 20, 2024

2. PROJECT DATA/INFORMATION

1.	Applicant:	BHV Biddeford, LLC 2 Livewell Drive Kennebunk, ME 04043
2.	Owner of Property:	Same as Applicant
3.	Agent:	Kyle Mason Sebago Technics 75 John Roberts Road, Suite \$a South Portland, ME 04106
4.	Surveyor:	N/A
5.	Project Location:	420 Alfred Street
6.	Project Tax Map #/Lot #:	Tax Map 20, Lot 26-1
7.	Lot Size:	24 Acres
8.	Base Zoning:	I3
9.	Overlay Zoning:	N/A
10.	Existing Use:	
11.	Proposed Use:	Create Pickle Ball Recreation Center
12.	Approvals Required:	
13.	Uses in the Vicinity:	Commercial
14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	
23.	LDR Attachment A: Fees Paid:	All Paid
25.	Planning Board Review History: Preliminary Site Plan/Conditional Use Review 3-20-24	

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan and Conditional Use (Land Development Regulations, Article VII - Conditional Use, Section 5 – Amusement Centers; Article VII Conditional Uses - Section 6 Standards & Site Plan review Article XI) review and approval by the Planning Board.

Site Plan Review Article XI, Section 4 – Applicability, Subsection II – Activities Subject to Major Review, Item D – Changes of Use that effect 10,000 square feet or more of floor area.

Article VII - Conditional Use, Section 5 – Amusement Centers

- A. In addition to the automobile parking spaces required by this ordinance, all amusement centers shall provide facilities for the parking of bicycles. Bicycle racks shall be located off the sidewalk or other pedestrianway, and away from automobile traffic lanes. A minimum of one bicycle space for every two amusement devices shall be provided.
- B. Rest room facilities for the patrons shall be provided on the premises, of the type and number required by applicable local, state and federal codes and regulations.
- C. Additional permits may be required from the municipal officers.

2024.14 Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.
Planning Board Meeting Date: March 20, 2024

Article VII Conditional Uses, Section 6 Standards: The proposed use shall meet the following standards:

A. Applications for conditional use permits must meet the standards specified in Article VI of this ordinance as well as the standards of subdivision or site review. In addition, because of the unique nature and particular concern that the general public may have relating to a conditional use in a particular zone, the Planning Board shall consider each of the applications in light of the guidelines presented below.

B. The Planning Board shall approve, approve with conditions, or deny all applications for a conditional use permit. The applicant shall have the burden of proving that his or her application is in compliance with the requirements of this ordinance and that none of the conditions listed below would result from the approval of the conditional use permit. Failure of the applicant to submit required information shall constitute a basis for denial without a review of the remainder of the application. After the submission of a complete application and a review of the required submissions, the Planning Board shall approve the application or approve it with conditions if the application meets the following standards:

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;
2. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;
3. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;
4. The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;
5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;
6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;

2024.14 Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.
Planning Board Meeting Date: March 20, 2024

7. The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;
8. The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;
9. The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;
10. The proposed use would be in compliance with Biddeford's Comprehensive Plan;
11. The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;
12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;
13. Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;
14. Adequate provision has been made to control erosion or sedimentation;
15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;
16. The proposed water supply would meet the demands of the proposed use for fire protection purposes;
17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;
18. The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;

2024.14 Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.
Planning Board Meeting Date: March 20, 2024

19. When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.

4. WAIVERS REQUESTED / REQUIRED: Article XI, Full Site Plan Review.

Staff Recommendation: Given there are no building expansions proposed and not increase in impervious surface proposed Staff recommend the Board grant this waiver which says that sufficient information has been provided to consider this application for review.

5. STAFF RECOMMENDATION

This application is for Preliminary Site Plan Review & Conditional Use Application. This is the first time this application has been presented to the Board. Following the review of the submitted application materials, the Planning Board should provide the applicant feedback on the project and a list of items to be provided in the Final Application.

6. SAMPLE MOTIONS:

- I. Motion to waive Article XI, Full Site Plan Review. I motion to waive Article XI, full site plan review, as no site improvements are being made.
- II. Motion to approve the Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone.
- III. Motion to Table the Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone, for the following reasons: .

- a) _____
- b) _____
- c) _____

- IV. Motion to deny Preliminary Site Plan/Conditional Use Review for BVH Biddeford, LLC to change the use and develop a pickle ball recreation center located within the Five Points Shopping Center located at 420 Alfred Road (Tax Map 20, Lot 26-1) / in the I3 Zone, based upon the following reasons:

- a) _____
- b) _____
- c) _____



Major Site Plan Application

Pickleball Facility Five Points Shopping Center Biddeford, ME

Prepared for:
BVH Biddeford, LLC
2 Livewell Drive
Kennebunk, ME 04043

Prepared by:
Sebago Technics
75 John Roberts Rd., Suite 4A
South Portland, ME 04106

March 2024



February 27, 2024
05142-01

Mr. David Galbraith
City Planner
205 Main Street
Biddeford, ME 04005

Site Plan Review – Internal Change of Use
Pickleball Facility
Five Points Shopping Center, Biddeford

Dear David:

On behalf of BVH Biddeford, LLC, Sebago Technics Inc. is pleased to submit the attached Major Site Plan Application for review. The Applicant proposes an internal change of use for a portion of the Five Points Shopping Center located at 420 Alfred Road in Biddeford. The proposed project site is located in the I3 Commercial Industrial Zone and further identified as Lot 26-1 on the City of Biddeford Tax Map 20. The proposed project involves the redevelopment and internal change of use of a portion of the building currently uninhabited for the development of a commercial pickleball facility.

The project site is currently fully developed with existing buildings and associated parking, lighting, landscaping, and utilities. The proposed project provides for the redevelopment of an approximately 26,600 square-foot portion of the Five Points Shopping Center previously permitted and occupied by a commercial Big Lots store in the northeast area of the existing building. The area is currently unused and has been so since the prior inhabitants ceased operations at this location.

The proposed pickleball development will include eight (8) pickleball courts, a reception area with connected front office, a communal seating area, and men's and women's locker rooms. The development will utilize the existing main entrance along the façade. The proposed changes to the existing development are limited to internal changes only. The development will utilize the existing parking, site lighting, and landscaping. The site is currently served by underground electric and telecommunications and public water and sewer. The proposed development will utilize the existing utilities. The proposed change of use will not alter the existing demand on municipal utilities. The Applicant is not proposing any façade changes at this time and there is no anticipated change to the existing site stormwater requirements.

We look forward to discussing the proposed development in more detail with the Planning Board at the next meeting. Upon reviewing this application, please reach out with any questions or requests for additional information. Thank you for your time and consideration.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Kylie S. Mason". The signature is fluid and cursive, with the first name "Kylie" and last name "Mason" clearly legible.

Kylie S. Mason, R.L.A., LEED-AP
Chief Operations Officer
Maine Licensed Landscape Architect

KSM/JTG

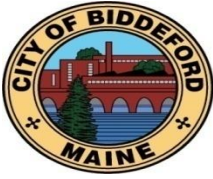
Enc.

Table of Contents

Application

Exhibit 1	Right Title and Interest
Exhibit 2	Location Map
Exhibit 3	Financial and Technical Capacity
Exhibit 4	Abutters
Exhibit 5	Natural Resources
Exhibit 6	Stormwater Management
Exhibit 7	Landscaping
Exhibit 8	Traffic
Exhibit 9	Standards
Exhibit 10	Site Photographs

Site Plan

**City of Biddeford – Planning Department****Planning Board Application**

P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

- | | | |
|--|--|--------------------------------------|
| ☐ Shoreland Zoning Permit | ☒ Site Plan Review | ☐ Extraction |
| ☐ Conditional Use Permit | ☐ Subdivision | ☐ Private Way |
| ☐ Other: _____ | | |

Applicant Information:

Name: BVH Biddeford, LLC
 Mailing Address: 2 Livewell Drive, Kennebunk, ME 04043
 Telephone: 207-985-5132
 Email: tony@atlantichospitality.net

What is your legal interest in the property?

- ☒ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: Same as Applicant
 Mailing Address: _____
 Telephone: _____
 Email: _____

Agent's Information:

Name: Kylie Mason, RLA
 Mailing Address: 75 John Roberts Road, Suite 4A, South Portland, ME 04106
 Telephone: 207-200-2071
 Email: kmason@sebagotechnics.com

Engineer/Surveyor's Information:

Name: _____
 Mailing Address: _____
 Telephone: _____
 Email: _____

Project Location and Lot Information:

Street Address: 420 Alfred Road Drainage Watershed: _____
Tax Map: 20 Lot: 26-1
Current Zoning: I3 Commercial Industrial Shoreland Zoning: N/A
 Size of Lot: 24 ☒ acres ☐ s.f. Lot Frontage: 775 ft
 Existing Use of Property: _____

Property currently serviced by:

- | | | | |
|---|--|--|--|
| ☒ City Road | ☒ Public Sewer | ☒ Public Water | ☒ Public Trash |
| ☐ Private Road | ☐ Septic System | ☐ Private Well | ☐ Private Hauler |

Slope Conditions in Area of Construction (if applicable):

- ☒ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? ☐ (Yes) ☒ (No) if yes attach information

Is the project within the 100-year floodplain? ☐ (Yes) ☒ (No) if yes attach information

Do you plan to bring fill onto the lot? ☐ (Yes) ☒ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

Internal use change for development of a pickleball recreation center.

Property to be Serviced by:

☒ City Road ☒ Public Sewer ☒ Public Water ☒ Public Trash
☐ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Limits of Disturbance: 0 _____ ☐ acres ☒ s.f.

Net change in impervious cover: 0 _____ ☐ acres ☒ s.f.

Is this project part of a larger project? ☐ (Yes) ☒ (No)

Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)

Is this project within the Urbanized Area/MS4 (see [City Drainage Map](#)) ☐ (Yes) ☒ (No)

Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)

Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)

☐ **If in a Shoreland Zone:**

Percent of residential lot coverage (Max 20%): _____

Percent of structure expansion (Max 30%): _____

☐ **If Subdivision Review, number of lots proposed:** _____

☐ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: 0 _____

Total new square feet paving/parking: 0 _____

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval
 - ☒ Fire Department – Contact Chief or Deputy Chief – 282-9986
 - ☒ Ability to Serve for Water Service – Maine Water – 282-1543
 - ☒ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
 - ☒ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to “Attachment A Fees and Charges” of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: ☐ (Yes) ☒ (No)

- If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of Applicant:

Anthony J. Curo SR

Date

2/19/24

Signature of Property Owner:

Anthony J. Curo SR

Date

2/19/24

CITY Development OFFICER

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME\INDIVIDUAL DRAWING NAME.pdf'
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINWORK)
 - All drawings & CAD reference files must be to-scale and within the following coordinate systems:
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

Exhibit 1

Right Title and Interest

Exhibit 1 - Title, Right or Interest

The subject parcel is owned by BVH Biddeford, LLC as evidenced by warranty deed and quitclaim deed recorded with the York County Registry of Deeds. Please see this Exhibit for a copy of the applicable deeds.

2

QUITCLAIM DEED

Biddeford Shopping Center Limited Partnership, a Maine limited partnership, with a mailing address c/o Picerne Real Estate Group, 75 Lambert Lind Highway, Warwick, Rhode Island 02886 (the "Grantor"), for consideration paid, grants to BVH Biddeford, LLC, a Maine limited liability company, (the "Grantee") with a mailing address of 184 Marlborough Street, Boston, Massachusetts 02116, with QUITCLAIM COVENANTS:

That certain tract or parcel of land, together with the buildings and improvements thereon, located at 416-420 Alfred Street in the Town of Biddeford, County of York, State of Maine, and more fully described on Exhibit A attached hereto and by this reference incorporated herein.

Subject to restrictions, easements, covenants and other matters of record, if any, to the extent the same are in force and effect.

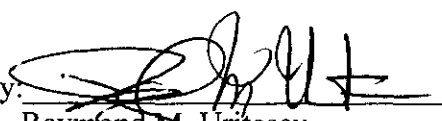
Subject to taxes assessed April 1, 2004, not yet due and payable.

IN WITNESS WHEREOF, Biddeford Shopping Center Limited Partnership has caused this Quitclaim Deed to be executed as of this 23rd day of June, 2004, by its general partner duly authorized.

MAINE R.E. TRANSFER TAX PAID

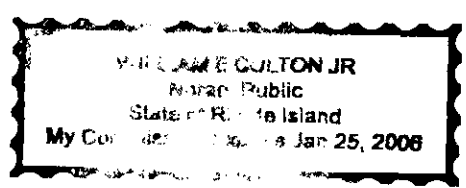
Biddeford Shopping Center Limited Partnership

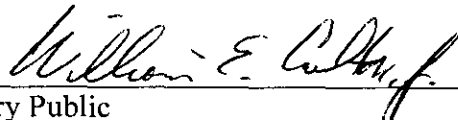
By: Kelly & Picerne, Inc.,
its General Partner

By: 
Raymond M. Uritescu
Executive Vice President

STATE OF RHODE ISLAND
COUNTY OF KENT

In WARWICK, in said County on the 23rd day of June, 2004, before me personally appeared the within named Raymond M. Uritescu, Executive Vice President of Kelly & Picerne, Inc., a Rhode Island corporation, general partner of Biddeford Shopping Center Limited Partnership, a Maine limited partnership, to me known and known by me to be the party executing the foregoing instrument and he acknowledged said instrument by him executed to be his free act and deed, the free act and deed of Kelly & Picerne, Inc. and the free act and deed of said Biddeford Shopping Center Limited Partnership.




Notary Public
Printed Name: _____
My Commission Expires: _____

#607715v1

SEAL

EXHIBIT A

) That certain parcel or tract of land with all buildings and improvements situated on the northerly side of Alfred Road in the City of Biddeford, County of York, State of Maine and is bounded and described as follows:

Beginning at a concrete monument situated 70.00 feet northerly of and perpendicular to p.c. station 818+22.01, as shown on Maine State Highway Commission Right of Way Map State Highway "U" Biddeford, York County, Federal Aid Project no. F6360 (2) June 1948 scale 1--50' file no. 16-71;

Thence running S89°-58'-00"W along the northerly street line of Alfred Road for a distance of 109.23 more or less feet to a corner in the southerly line of property now or formerly belonging to Boston and Maine Railroad;

Thence running northeasterly bounding northwesterly by property now or formerly belonging to Boston and Maine Railroad, curving to the left along the arc of a circle having a radius of 9204.62 feet, a central angle of 2°-30'-48" for an arc distance of 403.76 feet to a point of tangency, the chord of said arc forming an interior angle of 41°-21'-53" with the previously described line;

Thence running N47°-20'-43"E bounding northwesterly by said Boston and Maine Railroad property for a distance of 614.94 feet to a point of curvature;

Thence running northeasterly bounding northwesterly by said Boston and Maine Railroad property, curving to the right along the arc of a circle having a radius of 8013.63 feet, a central angle of 04°-55'-15" for an arc distance of 688.25 feet to a point of tangency;

) Thence running N52°-15'-58"E bounding northwesterly by said Boston and Maine Railroad property for a distance of 237.04 feet to an iron pipe at a corner;

Thence running S39°-00'-32"E bounding northeasterly in part by property now or formerly belonging to the Central Maine Power Company, in part by property now or formerly belonging to Richard P. And Joan A. Camire and in part by property now or formerly belonging to Leo P. and Gertrude L. Michaud for a distance of 581.20 feet more or less to a concrete monument at a corner;

Thence running S50°-58'-35"W bounding southeasterly in part by property now or formerly belonging to owners unknown, in part property now or formerly belonging to Pauline C. Berry or owner unknown, in part by property now or formerly belonging to Michael J. And Deidre Donovan, in part by property now or formerly belonging to Sandra A. Girard and in part by property now or formerly belonging to Albert F. and Rowena F. Gardella for a distance of 565.99 feet to an angle;

Thence running S20°-48'-01"W bounding southeasterly by property now or formerly belonging to Richard E. and Mary Moore for a distance of 169.69 feet to an iron pipe at an angle;

Thence running S00°-30'-55"E bounding easterly by said Moore property for a distance of 300.28 feet to remains of an iron pipe at a corner in the northerly street line of Alfred Road;

) Thence running S87°-23'-33"W along the northerly street line of Alfred Road for a distance of 301.99 feet to a corner;

EXHIBIT A - continued

) Thence running N02°-59'-00"W along the northerly street line of Alfred Road for a distance of 4.00 feet to a corner;

Thence running S87°-01'-00"W along the northerly street line of Alfred Road for a distance of 337.99 feet to a corner;

Thence running S87°-40'-00"W along the northerly street line of Alfred Road for a distance of 258.00 feet to a corner;

Thence running N48°-51'-26"E along the northerly street line of Alfred Road for a distance of 55.83 feet to a corner;

Thence running S89°-16'-30"W along the northerly street line of Alfred Road for a distance of 372.34 feet to the point and place of beginning;

Said parcel being further shown on a plan entitled "*ALTA/ACSM Land Title Survey, 5 Points Shopping Center, Route 111, Biddeford, Maine, made for Piceme Real Estate,*" dated August 13, 2002, prepared by Owen Haskell, Inc.

) **EXCEPTING** such portion of the above premises as was taken by the State of Maine, Department of Transportation pursuant to a Notice of Layout and Taking, dated February 24, 2003 and recorded in the York County Registry of Deeds in Book 12616, Page 54.

However bounded and described, meaning and intending to convey and hereby conveying the same premises conveyed by Flash Island, Inc. to Biddeford Shopping Center Limited Partnership by Warranty Deed dated October 2, 2003 and recorded with the York County Registry of Deeds in Book 13553, Page 166.

Received York SS
07/01/2004 2:00PM
REGISTER OF DEEDS

Debra L. Anderson

Todd H. Whilton, Esq.
Eckert Seamans Cherin & Mellott, LLC
One International Place, 18th Floor
Boston, MA 02110

↗
3p40



BK 17257 PGS 561 - 564
INSTR # 2016022971
RECEIVED YORK SS

06/20/2016 03:57:04 PM
DEBRA ANDERSON
REGISTER OF DEEDS

Space above for recording information

**QUITCLAIM DEED
(With Covenant)**

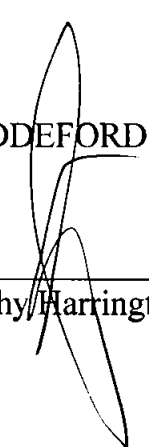
KNOW ALL PERSONS BY THESE PRESENTS, that **BVH BIDDEFORD, LLC**, a Maine limited liability company with a principal place of business located in Kennebunk, County of York and State of Maine, in consideration of One Dollar and other valuable considerations, hereby grants to **BIDDEFORD REALTY HOLDINGS, LLC**, a Maine limited liability company, with a principal place of business in Charlestown, Suffolk County, Commonwealth of Massachusetts (with a mailing address of One Thompson Square, Suite 205, Charlestown, Massachusetts 02129) with **QUITCLAIM COVENANTS**, the following described real estate, situated in the City of Biddeford, in the County of York and State of Maine:

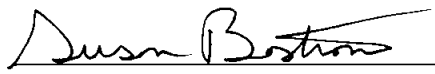
A thirty-seven percent (37%) interest in and to that certain lot or parcel of land, together with the buildings and improvements thereon, located at 416-420 Alfred Street, in Biddeford, York County, Maine, said lot or parcel of land being more particularly described in Exhibit A attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF the said BVH BIDDEFORD, LLC has caused this instrument to be executed by Timothy Harrington, its Manager, duly authorized, this

27, day of May, 2016.

BVH BIDDEFORD, LLC

By: 
Timothy Harrington, Manager


WITNESS

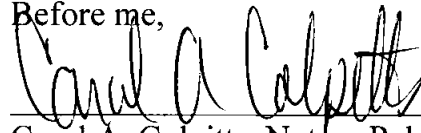
No R.E. Transfer Tax Paid

STATE OF MAINE
YORK, ss.

May 27, 2016

Then personally appeared the above-named Timothy Harrington, Manager of BVH BIDDEFORD, LLC and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said Company, before me,

Before me,



Carol A. Colpitts, Notary Public

My commission expires: _____

SEAL

Carol A. Colpitts
NOTARY PUBLIC
State of Maine
My Commission Expires
January 1, 2021

Exhibit A
(416-420 Alfred Street, Biddeford)

A certain lot or parcel of land with all buildings and improvements situated on the northerly side of Alfred Road in the City of Biddeford, County of York and State of Maine, and is bounded and described as follows:

Beginning at a concrete monument situated 70.00 feet northerly of and perpendicular to p.c. station 818+22.01, as shown on Maine State Highway Commission Right of Way Map State Highway "U" Biddeford, York County, Federal Aid Project No. F6360(2) June 1948 scale 1—50 file no. 16-71;

Thence running S 89° 58' 00" W along the northerly street line of Alfred Road for a distance of 109.23 more or less feet to a corner in the southerly line of property now or formerly belonging to Boston and Maine Railroad;

Thence running northeasterly bounding northwesterly by property now or formerly belonging to Boston and Maine Railroad, curving to the left along the arc of a circle having a radius of 9204.62 feet, a central angle of 2° 30' 48" for an arc distance of 403.76 feet to a point of tangency, the chord of said arc forming an interior angle of 41° 21' 53" with the previously described line;

Thence running N 47° 20' 43" E bounded northwesterly by said Boston and Maine Railroad property for a distance of 614.94 feet to a point of curvature;

Thence running northeasterly bounding northwesterly by said Boston and Maine Railroad property, curving to the right along the arc of a circle having a radius of 8013.63 feet, a central angle of 04° 55' 15" for an arc distance of 688.25 feet to the point of tangency;

Thence running N 52° 15' 58" E bounding northwesterly by said Boston and Maine Railroad property for a distance of 237.04 feet to an iron pipe at a corner;

Thence running S 39° 00' 32" E bounding northeasterly in part by property now or formerly belonging to the Central Maine Power Company, in part by property now or formerly belonging to Richard P. and Joan A. Camire and in part by property now or formerly belonging to Leo P. and Gertrude L. Michaud for a distance of 581.20 feet more or less to a concrete monument at a corner;

Thence running S 50° 58' 35" W bounding southeasterly in part by property now or formerly belonging to owners unknown, in part by property now or formerly belonging to Pauline C. Berry or owner unknown, in part by property now or formerly belonging to Michael J. and Deidre Donovan, in part by property now or formerly belonging to Sandra A. Girard and in part

by property now or formerly belonging to Albert F. and Rowena F. Gardella for a distance of 565.99 feet to an angle;

Thence running S 20° 48' 01" W bounding southeasterly by property now or formerly belonging to Richard E. and Mary Moore for a distance of 169.69 feet to an iron pipe at an angle.

Thence running S 00° 30' 55" E bounding easterly by said Moore property for a distance of 300.28 feet to remains of an iron pipe at a corner in the northerly street line of Alfred Road;

Thence running S 87° 23' 33" W along the northerly street line of Alfred Road for a distance of 301.99 feet to a corner;

Thence running N 02° 59' 00" W along the northerly street line of Alfred Road for a distance of 4.00 feet to a corner;

Thence running S 87° 01' 00" W along the northerly street line of Alfred Road for a distance of 337.99 feet to a corner;

Thence running S 87° 40' 00" W along the northerly street line of Alfred Road for a distance of 258.00 feet to a corner;

Thence running N 48° 51' 26" E along the northerly street line of Alfred Road for a distance of 55.83 feet to a corner;

Thence running S 89° 16' 30" W along the northerly street line of Alfred Road for a distance of 372.34 feet to the point and place of beginning;

Said parcel being further shown on a plan entitled "ALTA/ACSM Land Title Survey, 5 Points Shopping Center, Route 111, Biddeford, Maine, made for Picerne Real Estate" dated August 13, 2002, prepared by Owen Haskell, Inc.

EXCEPTING such portion of the above premises as was taken by the State of Maine, Department of Transportation pursuant to a Notice of Layout and Taking, dated February 24, 2003 and recorded in the York County Registry of Deeds in Book 12616, Page 54.

Being the same premises conveyed to BVH Biddeford, LLC by deed from Biddeford Shopping Center Limited Partnership dated June 23, 2004 and recorded in the York County Registry of Deeds in Book 14143, Page 173.

WOODMAN EDMANDS DANYLIK AUSTIN
SMITH & JACQUES, P.A.
P.O. BOX 468
BIDDEFORD, ME 04005-0468
(207) 284-4581

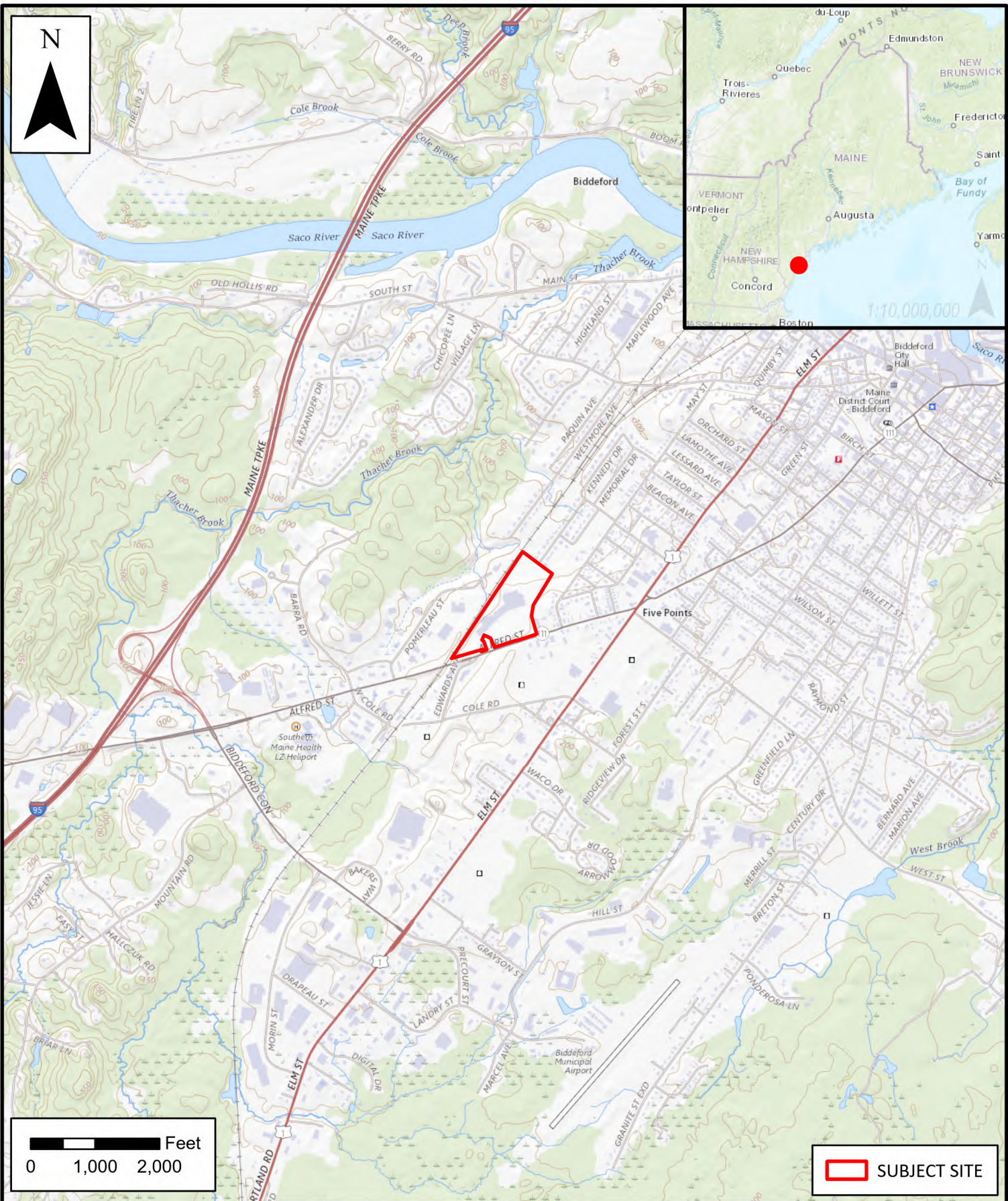
4 pgs →
RWA

Exhibit 2

Location Map

Exhibit 2 – Location Map

Please see the enclosed maps: a location map showing the proposed development in relation to existing streets.



SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

LOCATION MAP 5 POINTS PICKLEBALL

LOCATION:
FIVE POINTS SHOPPING CENTER
BIDDEFORD, ME

INFORMATION:
MAINE GEOLIBRARY
USGS QUADRANGLE

SCALE: 1:24,000
DATE: 3/5/2024

Exhibit 3

Financial Capacity

Exhibit 3 – Financial and Technical Capacity

Financial Capacity

The proposed development will be self-financed by the applicant, BVH Biddeford, LLC. The applicant has the capacity to finance the estimated cost of all proposed on-site development.

Technical Capacity

BVH Biddeford, LLC is a developer with years of experience with commercial development in Southern Maine. Their team has been designing, owning, and operating the Five Points Shopping Center for around 20 years.

Sebago Technics, Inc. (STI) is a multi-disciplinary engineering firm with over 35 years of experience that offers a wide range of services specializing in land development, planning, permitting and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, soil science, wetlands science, land surveying, and environmental services.

Exhibit 4

Abutters

Exhibit 4 – Abutters

Please see below for a map and table of the location and ownership of the abutters within 200 feet of the site.

Owner	Address	City/ State/ Zip
STOOPS, BEVERLY,	406 ALFRED ST,	BIDDEFORD, ME 04005
LABRECQUE, BRYAN P & LISA M,	408 ALFRED ST,	BIDDEFORD, ME 04005
TSFP, FBO CITY OF BIDDEFORD	205 MAIN ST,	BIDDEFORD, ME 04005
BVH BIDDEFORD, LLC &, HD LAWRENCE REALTY, LLC	2 LIVEWELL DRIVE, SUITE 201,	KENNEBUNK, ME 04043
CURRO, SANDRA A.B & ANTHONY S,	182 MAY ST,	BIDDEFORD, ME 04005
KRASSE, JENNIFER EILEEN, STUART, JESSIE LIBBEY	180 MAY ST ,	BIDDEFORD, ME 04005
SALVAS, STEPHANIE A,	17 PLYMOUTH DR,	BIDDEFORD, ME 04005
BATCHELDER, HARLEE A., KEMP, CHRISTOPHER M.	20 PLYMOUTH DR,	BIDDEFORD, ME 04005
BVH BIDDEFORD, LLC &, HD LAWRENCE REALTY, LLC	2 LIVEWELL DRIVE SUITE 201,	KENNEBUNK, ME 04043
DUTREMBLE, ALAN J & NANCY A,	69 WESTMORE AVE,	BIDDEFORD, ME 04005
WESTVIEW PLAZA INC, C/O ROBERGE CONSTRUCTION CO	PO BOX 18,	BIDDEFORD, ME 04005
ZACCAI, ADRIENNE,	74 WESTMORE AVE,	BIDDEFORD, ME 04005
GARDELLA, ALBERT F &, RONALD, A & STEPHANIE A	186 MAY ST,	BIDDEFORD, ME 04005
SPUR PARK, LLC,	2 MARINERS WAY,	KENNEBUNK, ME 04043
419 ALFRED STREET LLC,	PO BOX 1565 ,	BIDDEFORD, ME 04005
JH HOLDINGS, LLC,	42 GRAY RD,	CUMBERLAND, ME 04021
PARK ONE ELEVEN,	409 ALFRED ST,	BIDDEFORD, ME 04005
KAPLAN, MICHAEL TRUSTEE, FIRST EDSONS REALTY TRUST	3 LINDA LN,	NAHANT, MA 01908
GREENWOOD CEMETERY,	PO BOX 1323,	BIDDEFORD, ME 04005
TARDIF, JUSTIN M &, TOURIGNY, CHANTEL E	21 PLYMOUTH DR,	BIDDEFORD, ME 04005
BOISSONNEAULT, JOANNE L &, PETER J	19 PLYMOUTH DR,	BIDDEFORD, ME 04005
KIMBOROWICZ, DAVID W, KIMBOROWICZ, MICHELLE A	24 PLYMOUTH DR,	BIDDEFORD, ME 04005
TAFFE, CALLIE M,	241 HILLS BEACH RD,	BIDDEFORD, ME 04005
CITY OF BIDDEFORD, MEMORIAL PARK MAY ST	PO BOX 586,	BIDDEFORD, ME 04005
NKC, LLC,	25 EDWARDS AVE,	BIDDEFORD, ME 04005
NYANGWARA, GEORGE M &, MORARA, JULIA K	15 EDWARDS AVE,	BIDDEFORD, ME 04005
CENTRAL MAINE POWER CO, C/O AVANGRID MANAGEMENT CO - LOCAL TAX	ONE CITY CENTER 5TH FLOOR,	PORTLAND, ME 04101
STELLA HOLDINGS, LLC,	5 ALFRED ST SUITE 102,	BIDDEFORD, ME 04005

STELLA HOLDINGS, LLC,	5 ALFRED ST SUITE 102,	BIDDEFORD, ME 04005
LINWOOD ENTERPRISES, LLC,	101 EAST AVE,	LEWISTON, ME 04240
SEASIDE REALTY GROUP, LLC,	PO BOX 2563,	KENNEBUNKPORT, ME 04046
PARK ONE ELEVEN INC,	30 KETTLE COVE RD,	CAPE ELIZABETH, ME 04107
NEW HERITAGE BUILDERS, INC.,,	198 SACO AVE,	OLD ORCHARD BEACH, ME 04064

Exhibit 5

Natural Resources

Exhibit 5 – Natural Resources

Flooding

The project site falls entirely outside of FEMA identified flood zones in accordance with the Flood Insurance Rate Map (FIRM) for the City of Biddeford (Community Panel 2301450003B, dated May 15, 1984). Please see the attached flood map.

Wetlands

The proposed development is limited to internal changes to the existing building, and thus does not include any wetland area.



ELEVATION REFERENCE MARKS		
REFERENCE MARK	ELEVATION IN FT. (NGVD) ¹	DESCRIPTION OF LOCATION
RM 1	65.51	Standard disk, stamped TT-40TDA, set on north side of South Street bridge over Swan Pond Brook.
RM 2	84.93	Charcoal X on rim of fire hydrant on north side of South Street, approximately 0.5 mile west along South Street from intersection of Interstate Route 95.
RM 3	62.64	MDOT bench mark, stamped 184, located at south end of Interstate Route 95 southbound over the Saco River.
RM 4	62.64	Railroad spike, set in utility pole No. 7 on south side of Main Street opposite entrance to Biddeford-Saco Rotary Park.

¹ National Geodetic Vertical Datum of 1929

KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations*

100-Year Flood Boundary

500-Year Flood Boundary

Base Flood Elevation Line With Elevation in Feet**

Base Flood Elevation in Feet Where Uniform Within Zone**

Elevation Reference Mark

Zone D Boundary

River Mile

ZONE B

ZONE A1

ZONE A5

ZONE B

51.3

(EL 987)

RM7x

M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS	
ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance and flood plain management purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas. The coastal flooding elevations shown may differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

For adjoining map panels, see separately printed Index To Map Panels.

Coastal base flood elevations shown on this map include the effects of wave action.

Coastal base flood elevations apply only landward of the shoreline shown on this map.

INITIAL IDENTIFICATION:
MAY 24, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
NOVEMBER 5, 1976

FLOOD INSURANCE RATE MAP EFFECTIVE:
MAY 15, 1984

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BIDDEFORD,
MAINE
YORK COUNTY

PANEL 3 OF 11
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230145 0003 B

EFFECTIVE DATE:
MAY 15, 1984

Federal Emergency Management Agency

Exhibit 6

Stormwater Management

Exhibit 6 – Stormwater

The proposed development is limited to internal changes to the existing building, and therefore, not anticipated to affect the overall stormwater drainage of the property and existing drainage systems.

Exhibit 7

Landscaping

Exhibit 7 – Landscaping

The proposed development is limited to internal changes to the existing building. Existing on-site landscaping will remain unchanged.

Exhibit 8

Traffic

Exhibit 8 – Traffic

The proposed development is limited to internal changes to the existing building. The proposed development will utilize the existing site entrances from Alfred Road and Edwards Avenue as well as the existing on-site parking layout. The change of use from the retail Big Lots space to the proposed pickleball facility will create a minimal decrease in traffic impacts on the surrounding area.

Exhibit 9

Standards

Exhibit 9 – Standards

The proposed development is limited to internal changes to the existing building. No changes are proposed to the site design and will remain in accordance with the Site Design Criteria and all other applicable sections of the City of Biddeford Ordinance, Part III Land Development Regulations.

Exhibit 10

Site Photographs

Site Photographs
Five Points Shopping Center – Pickleball Facility
March 2024

#1

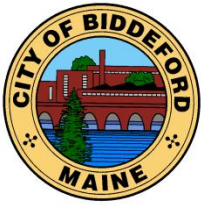


#2



#3





CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Interim Director/City Planner

DATE: March 13, 2024

RE: **2024.01 Preliminary Site Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Sketch Plan.**

MEETING DATE: March 20, 2024 at 6:00 PM

1. INTRODUCTION

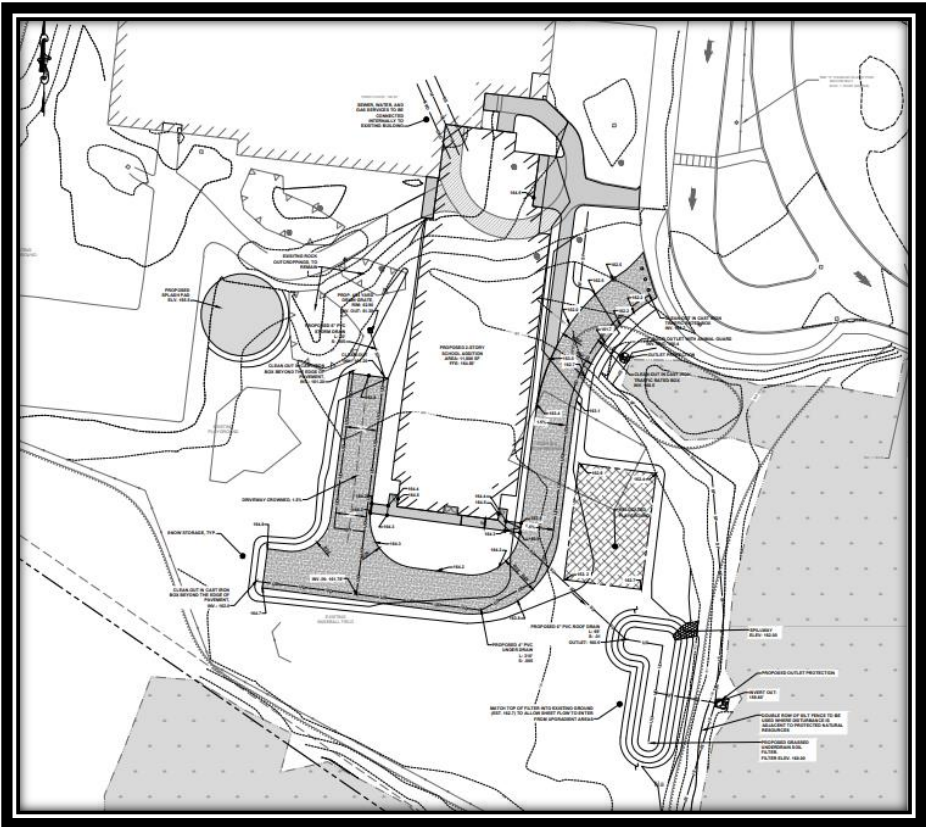


The City is in receipt from the Biddeford School Department who are seeking Preliminary review for the proposed expansion to the Biddeford Primary School located at 320 Hill Street. This project received sketch plan review on January 16, 2024.

As outlined in the submitted sketch plan, *"the expansion will include an 11,806 square foot addition that will provide additional elementary classrooms to the school. Other associated improvements will include an emergency access drive, a playground splash pad, and four to six additional parking spaces. Stormwater management to meet Maine Department of Environmental*

Protection and City standards will be provided by an under-drain soil filter and permeable pavement". The development triggers Maine Site Law Review, for which the City of Biddeford has Municipal Capacity Authority.

2024.01 Preliminary Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review.
Planning Board Meeting Date: March 20, 2024



Proposed Building Addition and Site Improvements

The submitted plans illustrate a two story addition to the left of the existing school, as viewed from the main building entrance and pick-up/drop-off aisle. The application states that the addition is 11,806 square foot in area, but in actuality each of the two (2) floors is 11,806 square feet or a total new addition of 23,612 square feet. The addition will provide additional elementary classrooms to the school. The plans also provide an emergency access fire lane which wraps around the addition on three (3) sides. The plans also provide a new playground splash pad, and four to six additional parking spaces.



Proposed Addition shown left and Existing Building (red brick) at right

2024.01 Preliminary Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review. Planning Board Meeting Date: March 20, 2024



Proposed Addition shown left and Existing Building at right

2. PROJECT DATA/INFORMATION

1.	Applicant:	Biddeford School Department 18 Maplewood Avenue Biddeford, ME 04005
2.	Owner of Property:	Same as applicant
3.	Agent:	Haley Ward, Inc. Drew Olehowski P.E., Project Manager 120 Main Street, Suite 132 Saco, ME 04072
4.	Surveyor:	Same as Agent
5.	Project Location:	320 Hill Street
6.	Project Tax Map #/Lot #:	Tax Map 82, Lot 32
7.	Lot Size:	16 Acres
8.	Base Zoning:	R1-A
9.	Overlay Zoning:	N/A
10.	Existing Use:	Primary School
11.	Proposed Use:	Additional classrooms & parking
12.	Approvals Required:	Preliminary Site Plan Review
13.	Uses in the Vicinity:	Residential
14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	
23.	LDR Attachment A: Fees Paid:	Waived with the exception of third party costs
25.	Planning Board Review History:	Sketch Plan 1-17-24, Preliminary 3-20-24

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan (Land Development Regulations, Article XI) review and approval by the Planning Board.

4. Departmental Review Comments:

A. Planning and Code Enforcement:

1. The application shall be updated to include the square footage of both floors.
2. Parking Calculations (required and provided) shall be provided.

B. Public Works / Engineering:

2024.01 Preliminary Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review.
Planning Board Meeting Date: March 20, 2024

1. No Comments at this time

C. Engineering Peer Review Comments:

1. No Comments at this time

5. STAFF RECOMMENDATION

This application is a for a Preliminary Plan review. The Planning Board should provide the applicant feedback on the project and note any items needed for their Final Application. Staff continues to work with the Applicant related to the stormwater permitting which will need to be finalized prior to Final Plan Review.

6. SAMPLE MOTIONS:

- A. Motion to approve Case # 2024.01 Preliminary Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review.
- B. Motion to Table Case # 2024.01 Preliminary Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review, based upon the following reasons:
- a) _____
- b) _____
- c) _____
- C. Motion to Deny 2024.01 Preliminary Plan Review for Biddeford School Department to create a two-story building addition at the Primary School located at 320 Hill Street (Tax Map 82, Lot 32) / Preliminary Review, based upon the following reasons:
- a) _____
- b) _____
- c) _____

BIDDEFORD PRIMARY SCHOOL EXPANSION

320 HILL STREET
BIDDEFORD, ME , 04005

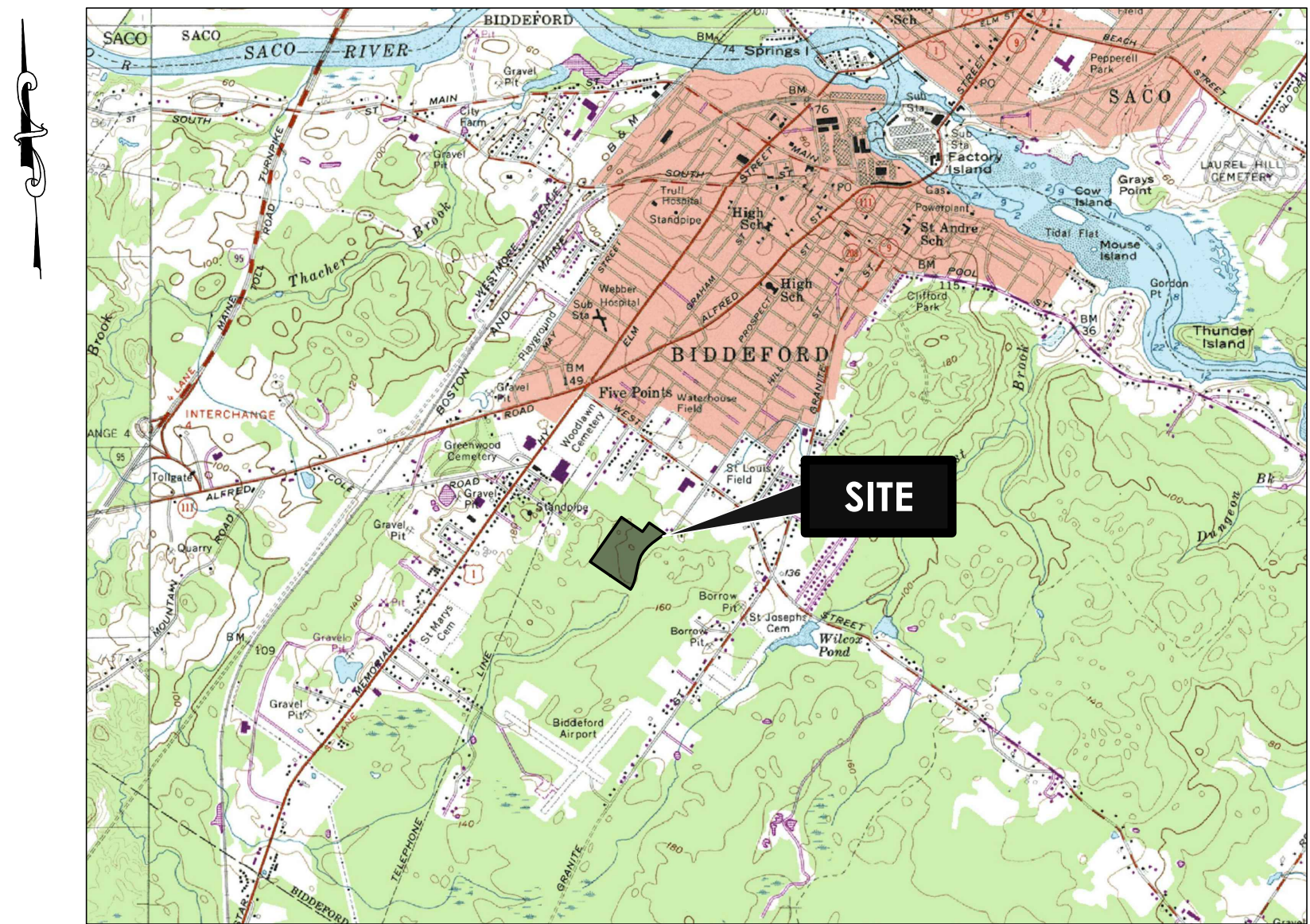
PROJECT INFORMATION

SITE INFORMATION
TAX ID: 82-32, 82-22-26
ACREAGE: 17.09+/- ACRES
ZONE: SINGLE FAMILY RESIDENTIAL 1A
EXISTING USE: EDUCATIONAL
PROPOSED USE: EDUCATIONAL
FLOOD ZONE: N/A
WATER: MAINE WATER COMPANY
SEWER: MUNICIPAL
ELECTRIC: CENTRAL MAINE POWER
STORM DRAIN: N/A
WATERSHED: SACO RIVER
MS4 AREA: YES
100-YEAR FLOOD ZONE: N/A

OWNER/APPLICANT
CITY OF BIDDEFORD
ATTN: BIDDEFORD SCHOOL BOARD
PO BOX 586
BIDDEFORD, MAINE 04005
T: 207.282.8280

CIVIL ENGINEER
HALEY WARD
ATTN: DREW OLEHOWSKI, P.E.
120 MAIN STREET
SUITE 132
SACO, MAINE 04072
T: 207.283.9151

SURVEYOR
HALEY WARD
ATTN: JEFF TEUNISEN, L.S.
ONE MERCHANTS PLAZA
SUITE 701
BANGOR, ME, 04401
T: 207.989.4824



LOCATION MAP

INDEX OF DRAWINGS

C001	GENERAL NOTES & LEGEND
EX	EXISTING CONDITIONS PLAN
C100	SITE DEMOLITION & EROSION CONTROL PLAN
C101	OVERALL SITE PLAN
C102	SITE PLAN
C103	GRADING & UTILITY PLAN
C104	EMERGENCY VEHICLE ACCESS PLAN
C501	CIVIL DETAILS

NOT FOR CONSTRUCTION
FEBRUARY 14, 2024



HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
www.haleyward.com

FILE LOCATION: P:\PROJECTS\ME114\24\MOBILE STUDIO_DESIGN\03 BIDDEFORD PRIMARY SCHOOL SURVEY & WETLAND DELINEATION\AT02.CAD, FILE SURVEY\114123.003 V.XPT DWG, 2024.01.26 7:56 AM

STATE OF MAINE
YORK, SS.
REGISTRY OF DEEDS
RECEIVED AND FILED

20
h m M.

Attest _____ Register
RECORDED AS MAP FILE:

TAX MAP 82 - LOT 30-19
KEVIN D. TRACY
JACQUELINE A. GARRITY
BOOK 17299, PAGE 919
(2016)

TAX MAP 82 - LOT 25
ROGER G. RUEL
BOOK 2908, PAGE 159
(1982)

TAX MAP 82 - LOT 27
GEORGE E. RUEL
BOOK 3928, PAGE 59
(1986)

TAX MAP 82 - LOT 26
KAREN S. RUEL
BOOK 8065, PAGE 216
(1996)

TAX MAP 82 - LOT 35
EASTWOODS RETIREMENT COMMUNITY CONDOMINIUM
PLAN BOOK 474, PAGES 1-4

PORTION OF TAX MAP 82 - LOT 32
CITY OF BIDDEFORD
BOOK 4784, PAGE 138
(1988)

PORTION OF TAX MAP 82 - LOT 32
CITY OF BIDDEFORD
PORTION OF BOOK 1630, PAGE 434
(1964)

TAX MAP 22 - LOT 26
CITY OF BIDDEFORD
PORTION OF BOOK 1630, PAGE 434
(1964)

PLAN REFERENCES:

- BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES
- MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC, RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.

NOTES:

- THIS PLAN DEPICTS CONDITIONS FOUND AND SURVEYED BY HALEY WARD ON JUNE 13, 2023.
- THIS SURVEY IS ORIENTED TO THE MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83 DATUM.
- ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVDB8).
- HALEY WARD HAS NOT INVESTIGATED THE EXISTENCE OR LOCATION OF SUBTERRANEAN UTILITY INFRASTRUCTURE.

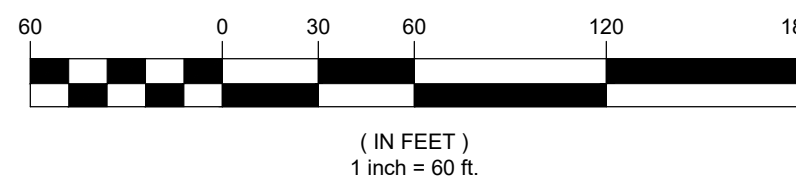
LEGEND:

5/8" CAPPED IRON ROD SET	●
IRON ROD OR PIPE FOUND	●
GRANITE MONUMENT FOUND	□
UTILITY POLE	⊙
GUY WIRE ANCHOR	×
SEWER MANHOLE	⊙
CATCH BASIN	□
DRAINAGE MANHOLE	⊙
LIGHT	☆
GAS VALVE	⊙
WATER VALVE	⊙
FIRE HYDRANT	⊙
SIGNIFICANT DECIDUOUS TREE	⊙
PROPERTY LINE	---
EXTERIOR PROPERTY LINE	---
CENTERLINE	---
WETLAND BOUNDARY	---
CHAINLINK FENCE	---
OVERHEAD UTILITIES	---
TREELINE	---
LEDGE OUTLINE	---
SETBACK LINE	---

RECORD OWNER:

CITY OF BIDDEFORD
320 HILL STREET
BIDDEFORD, MAINE 04005

GRAPHIC SCALE



CERTIFICATION:

THE UNDERSIGNED CERTIFIES TO THE BEST OF HIS KNOWLEDGE AND BELIEF THAT THIS PLAN AND THE SURVEY ON WHICH IT IS BASED WAS COMPLETED IN ACCORDANCE WITH CHAPTER 90 (02-360 CHAPTER 90) OF THE RULES AND STANDARDS OF PRACTICE ADOPTED BY MAINE'S BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS WITH THE FOLLOWING EXCEPTIONS:

- A WRITTEN REPORT HAS NOT BEEN PREPARED.
- PROPERTY DESCRIPTION OF THE SURVEYED PREMISES HAS NOT BEEN PREPARED AS OF THE DATE OF THIS PLAN.

1	2024 01 29	contours expanded	JH	---
REV	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS



PROJECT
BIDDEFORD PRIMARY SCHOOL
320 HILL STREET, BIDDEFORD, YORK COUNTY, MAINE

TITLE
EXISTING CONDITIONS PLAN

DATE	June 20, 2023	SCALE	1" = 60'
DRAWN BY	JH	DESIGNED BY	---
PROJECT No.	14125.003	CHECKED BY	---
DRAWING No.		REV	1

1. THE UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR.
2. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, AND EMERGENCY SERVICES.
3. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
4. THE WORK SHALL INCORPORATE EROSION CONTROL MEASURES WHICH ARE COMPLIANT WITH THE LATEST VERSION OF "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES".
5. THE LOCATION, TYPE AND SIZE OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND STRUCTURES SHOWN ON THE DRAWINGS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND STRUCTURES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. DEPTH OF SERVICES ARE UNKNOWN AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. EXCAVATING TEST PITS AS NECESSARY TO VERIFY UTILITY LOCATIONS AND DEPTHS SHALL BE INCIDENTAL TO THIS PROJECT.
6. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE UTILITY COMPANIES, DIG SAFE, AND EMERGENCY SERVICES WHERE APPLICABLE. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF ALL BURIED UTILITIES. CONTRACTOR SHALL ALSO CONTACT "DIG SAFE", TELEPHONE NO 800-225-4977. REPAIR OF ANY DAMAGED UTILITY WILL BE INCIDENTAL TO THIS PROJECT.
7. CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN CONTINUOUS TRAFFIC FLOW DURING CONSTRUCTION. THE ROADS SHALL NOT BE CLOSED TO TRAFFIC WITHOUT PERMISSION FROM THE OWNER.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT EQUIPMENT FLUIDS FROM REACHING ANY WATER COURSE. ANY INADVERTENT FLUID DISCHARGES SHALL BE IMMEDIATELY CLEANED FROM THE WATERS USING WHATEVER MEANS NECESSARY. AS DETERMINED BY THE ENGINEER.
9. RESTORE ALL AREA DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL CONDITION (GRAVEL, PAVEMENT, GRASS, ETC.) UNLESS NOTED OTHERWISE ON PLANS. RESTORATION OF GRAVEL ROAD AND DRIVEWAY SURFACES AND LAWNS DAMAGED BY CONTRACTOR SHALL BE INCIDENTAL TO THE PROJECT.
10. EXISTING FACILITIES AND IMPROVEMENTS (I.E. TREES, LIGHT POLES, SIGNS, ETC.) SHALL BE REMOVED AND REPLACED OR PROTECTED AS REQUIRED DURING CONSTRUCTION. THE ASSOCIATED COSTS ARE INCIDENTAL TO THE PROJECT. BRACING OF UTILITY POLES, WHERE REQUIRED, SHALL BE INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
11. WHENEVER POSSIBLE, EXISTING PLANTINGS SHALL BE PRESERVED BY WHATEVER METHOD NECESSARY INCLUDING TRANSPLANTING AND/OR TEMPORARY RELOCATION.
12. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, GATES, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRAFFIC SHALL BE LEFT OFF DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
14. EXISTING FLOODS VARY SIGNIFICANTLY FROM HOUR TO HOUR AND SEASON TO SEASON. PEAK FLOWS ARE INFLUENCED BY RAIN EVENTS AND GROUNDWATER DEPTHS. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO BE PREPARED FOR THESE VARIABLE FLOW CONDITIONS.
15. ALL WORK OF ITEMS SCHEDULED FOR EITHER REMOVAL, DISPOSAL, PLUG, OR ABANDON SHALL BE PERFORMED AS INDICATED ON THE DRAWINGS AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO OTHER PAYMENT SHALL BE MADE.
16. ALL FINISH SURFACES SHALL BE INSTALLED TO PROMOTE POSITIVE DRAINAGE. IN NO WAY SHALL THE NEW FINISH SURFACES AND CATCH BASINS CREATE DRAINAGE PROBLEMS THAT DID NOT EXIST PRIOR TO CONSTRUCTION.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON DRAWINGS.
18. HOURS FOR THE PROJECT WILL BE MONDAY THROUGH FRIDAY, FROM 7:00 AM TO 7:00 PM, UNLESS OTHERWISE AUTHORIZED BY THE OWNER.
19. THE CONTRACTOR SHALL PROVIDE A SEDIMENT BASIN FOR ALL WATER PUMPED FROM EXCAVATIONS. BASIN SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES". THE CONTRACTOR SHALL SUBMIT FOR REVIEW/APPROVAL PRIOR TO BEGINNING ANY PROJECT WORK.

1. THIS PROJECT GENERATOR CONSISTS OF A BUILDING EXPANSION, INSTALLATION OF STORMWATER DRAINAGE SYSTEM, CONSTRUCTION OF A NEW ACCESS ROAD, AND THE DEMOLITION & RELOCATION OF EXISTING SITE FEATURES.
2. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE CITY OF BIDDEFORD, UTILITY COMPANIES, DISA, AND EMERGENCY SERVICES WHERE APPLICABLE. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF ALL BURIED UTILITIES. CONTRACTOR SHALL ALSO CONTACT "DIG SAFE", TELEPHONE NO 811 OR 888-DIG-SAFE. REPAIR OF ANY DAMAGED UTILITY WILL BE INCIDENTAL TO THIS PROJECT.
3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IN WRITING OF ANY CONDITION OR OCCURRENCE THAT REPRESENTS A CHANGE IN PROJECT SCOPE. VERBAL NOTIFICATION IS REQUIRED PRIOR TO PROCEEDING WITH THE WORK OF THE PROJECT AND WRITTEN NOTIFICATION MUST BE PROVIDED. REQUESTS FOR FEE ADJUSTMENTS WILL NOT BE CONSIDERED UNLESS PRIOR NOTICE IS GIVEN
4. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
6. THE CONTRACTOR SHALL SUPERVISE AND INSPECT THE WORK OF THIS PROJECT IN AN EFFICIENT AND COMPETENT MANNER. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO COMPLETE THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE WORK IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. A REPRESENTATIVE OF THE GENERAL CONTRACTOR SHALL BE PRESENT DURING ALL PHASES OF THE WORK.
7. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. PERFORM ALL WORK IN ACCORDANCE WITH SAFETY STANDARDS OF APPLICABLE LAWS, BUILDING AND CONSTRUCTION CODES, THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND THE REQUIREMENTS OF TITLE 9 OF THE CODE OF FEDERAL REGULATIONS, PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION"
8. THE LOCATIONS OF ALL PROPERTY LINES AND RIGHT OF WAYS ARE APPROXIMATE (SHOWN FOR REFERENCE ONLY), UNLESS NOTED OTHERWISE. PROPERTY LINES AND RIGHT OF WAYS SHOWN ARE NOT INTENDED TO REPRESENT LEGAL BOUNDARIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING TOPOGRAPHY AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING PIPE SIZES, INVERTS, AND LOCATIONS, AND SHALL INCLUDE IN SUBMITTAL PRIOR TO ORDERING.
11. LAYOUT OF THE PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL GRADE AND LAYOUT CONTROL. LAYOUT SHOULD BE PERFORMED WITH SURVEY EQUIPMENT AND OVERSEEN BY A LICENSED SURVEYOR. A CAD FILE WILL BE AVAILABLE TO THE CONTRACTOR.
12. THE WORK SHALL INCORPORATE EROSION CONTROL MEASURES WHICH ARE COMPLIANT WITH THE LATEST VERSION OF "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES".
13. CONTRACTOR SHALL BE REQUIRED TO PROVIDE DUST CONTROL FOR PROJECT WHICH CAN INCLUDE, BUT IS NOT LIMITED TO, WATER AND CALCIUM CHLORIDE. COST IS INCIDENTAL TO THE PROJECT.
14. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, GATES, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO ACCESS SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
15. CONTRACTOR SHALL BACKFILL TRENCH FOLLOWING EACH DAYS CONSTRUCTION. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT UNLESS APPROVED BY ENGINEER AND PROPERLY BARRICADED (E. SNOW FENCING, CHAIN LINK FENCING, JERSEY BARRIER OR APPROVED EALD. CAUTION RIBBON AND EQUIPMENT PLACEMENT WILL NOT BE APPROVED AS BARRICADING. CONTRACTOR IS RESPONSIBLE TO MAINTAIN TRENCH AS DIRECTED BY THE ENGINEER
16. ALL FINISH SURFACES SHALL BE INSTALLED TO PROMOTE POSITIVE DRAINAGE. IN NO WAY SHALL THE NEW FINISH SURFACES CREATE DRAINAGE PROBLEMS THAT DID NOT EXIST PRIOR TO CONSTRUCTION.
17. EXISTING FACILITIES, PLANTINGS AND IMPROVEMENTS (I.E. TREES, LIGHT POLES, SIGNS, CONCRETE SIDEWALK, ETC.) SHALL BE REMOVED AND REPLACED OR PROTECTED AS REQUIRED DURING CONSTRUCTION. THE ASSOCIATED COSTS ARE INCIDENTAL TO THE PROJECT.
18. ALL MATERIALS SCHEDULED FOR REMOVAL SHALL BE DISPOSED OF IN A LEGAL MANNER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY DEMOLITION MATERIALS.
19. DISPOSAL OF SURPLUS SOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SURPLUS MATERIAL SHALL NOT BE DISPOSED OF ON THE PROJECT SITE. DISPOSAL SHALL BE MADE ONLY AT WASTE AREAS WHICH ARE LICENSED TO ACCEPT SUCH MATERIALS, UNLESS THE MATERIAL IS ACCEPTABLE FOR USE AS FILL IN OTHER AREAS OF THE PROJECT. THE OWNER HAS THE FIRST RIGHT AND REFUSAL FOR ANY SURPLUS SOIL MATERIALS.

9. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENTATION CONTROL BMPs, PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION.
20. SILT FENCE WILL BE INSPECTED, REPLACED AND/OR REPAIRED IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR LOSS OF SERVICEABILITY DUE TO SEDIMENT ACCUMULATION. AT A MINIMUM, ALL EROSION CONTROL DEVICES WILL BE OBSERVED WEEKLY.
21. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO CONSTRUCTION SITE.
22. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPLOUSE ARE STABILIZED BY A SUITABLE GROWTH OF GRASS. ONCE A SUITABLE GROWTH OF GRASS HAS BEEN OBTAINED, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BY THE CONTRACTOR. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THEY ARE REMOVED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, SEEDED, AND MULCHED IMMEDIATELY.
23. ALL DISTURBED AREAS WILL BE SEEDED WITH 2.5 LBS. RED FESCUE AND 0.5 LBS. RYE GRASS PER 1,000 SQUARE FEET AND MULCHED AT A RATE OF 90 LBS. PER 1,000 SQUARE FEET OR EQUIVALENT APPLICATION OF SEED AND MULCH.
24. A SUITABLE BINDER SUCH AS CURASOL OR TERRTACK WILL BE USED ON THE HAY MULCH FOR WIND CONTROL.
25. IF FINAL SEEDING OF DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15th OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SEEDED WITH WINTER RYE AT THE RATE OF 112 POUNDS PER ACRE OR 3 POUNDS PER 1,000 SQUARE FEET. THE RYE SEEDING WILL BE PRECEDED BY AN APPLICATION OF 3 TONS OF LIME AND 800 LBS. OF 10-20-20 FERTILIZER OR ITS EQUIVALENT. MULCH WILL BE APPLIED AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET.
26. IF THE RYE SEEDING CANNOT BE COMPLETED BY OCTOBER 1st OR IF THE RYE DOES NOT MAKE ADEQUATE GROWTH BY DECEMBER 1st, THEN ON THOSE DATES, HAY MULCH WILL BE APPLIED AT 150 POUNDS PER 1,000 SQUARE FEET.
27. ALL CATCH BASINS ARE TO BE PROTECTED BY STRAW BALE OR SILT FENCE IN ACCORDANCE WITH SECTION 8-3.3 STORM DRAIN INLET PROTECTION OF THE MAINE BMP HANDBOOK. SURROUNDING AREAS CAN BE EXCAVATED OR LEFT LOW AS A SEDIMENT TRAP. CURB INLET SHALL BE PROTECTED BY GUTTERGRASS, OR APPROVED EQUIVALENT.
28. INTERIOR SILT FENCES ALONG CONTOUR DIVIDING FLAT AND STEEP SLOPES, AREAS WITH DIFFERENT DISTURBANCE SCHEDULES, AROUND TEMPORARY STOCKPILES OR IN OTHER UNSPECIFIED POSSIBLE CIRCUMSTANCES SHOULD BE CONSIDERED BY THE CONTRACTOR. THE INTENT OF SUCH INTERIOR SILT FENCES IS TO LIMIT EROSION AND SEDIMENTATION FROM THE SITE TOWARD THE PROTECTED CATCH BASIN INLAYS TO MINIMIZE SEDIMENT REMOVAL REQUIRED BY THE EROSION CONTROL. NOTE 9 PROTECTIONS AND EXTEND LIFE OF SUCH DEVICES.

CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES, IF NECESSARY, THE INSPECTING ENGINEER WILL INTERPRET THE POND'S CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT THE POND HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS OBSERVED. IN EACH CASE, THE TEST DATA AND SITE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPECIFIED IN THE PLANS AND USED ON SITE.

30. UNDERDRAINED FILTER BASINS:

CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION MEASURE. RUNOFF FROM THE DRAINAGE AREA MUST BE CONTINUEDLY DIVERTED TO THE FILTER. BUILT UP TO THE COMPLETION OF THE **COMPACTION OF SOIL FILTER:** FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 6 INCHES TO 8 INCHES DEPTH. POINTS OF LOOSE MEDIA:

CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:

- AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE IN PLACE.
- AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
- AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED. BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.

• AFTER ONE YEAR TO ONE YEAR AND ONE MONTH OF THE CONSTRUCTION OF THE FILTER BASIN, AND ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL.

- SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT PLACES. THE SAMPLES OF THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
- PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF SOILS AND COARSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
- PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

31. LOT GRADING AND DRIVEWAY LOCATION:

INSPECTIONS BY A PROFESSIONAL ENGINEER WILL CONSIST OF A VISIT TO THE SITE PRIOR TO CONSTRUCTION TO CONSULT WITH THE EARTHWORK CONTRACTOR AND A POST CONSTRUCTION MEETING TO CONFIRM GRADING ON LOTS AND FOR ALL DRIVEWAYS TO ENSURE RUNOFF IS DIRECTED ACCORDING TO PLANS AND TO OVERSEE THE RE-STABILIZATION OF THE LOT INTO A VEGETATED COVER.

32. PERVIOUS PAVEMENT:

INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE CONSTRUCTION AND STABILIZATION OF THE PROPOSED PERVIOUS PAVEMENT AND ITS FILTER COURSE MATERIAL TO BE BUILT ON THE SITE. INSPECTIONS SHALL CONSIST OF AN APPROPRIATE NUMBER OF VISITS TO THE SITE TO INSPECT THE FILTER BED MATERIAL, PLACEMENT AND COMPACTION, STORAGE COURSE, PAVEMENT INTERLAYER, DRAINAGE LAYER, FABRIC LAYMENT, AND STORMWATER OVERFLOW BYPASS CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO FINAL PAVEMENT COMPACTION.

RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE MONITORED AND MAINTAINED UNTIL THE SITE IS FULLY STABILIZED. MAINTENANCE OF FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.

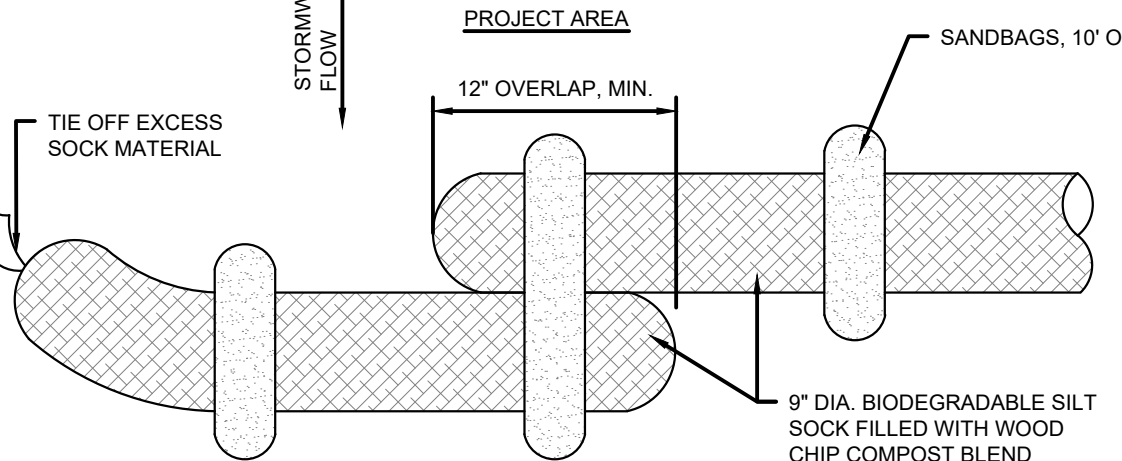
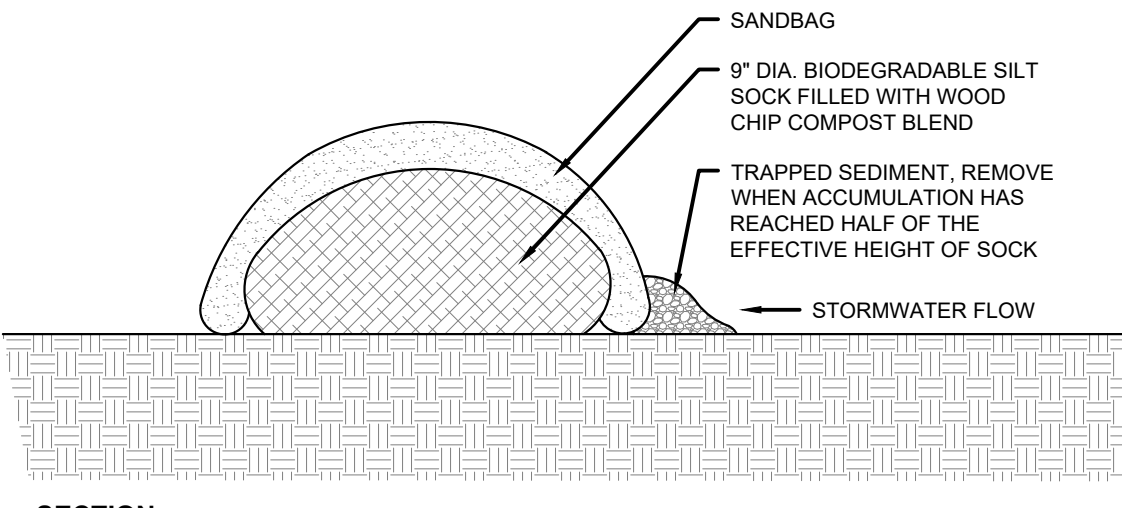
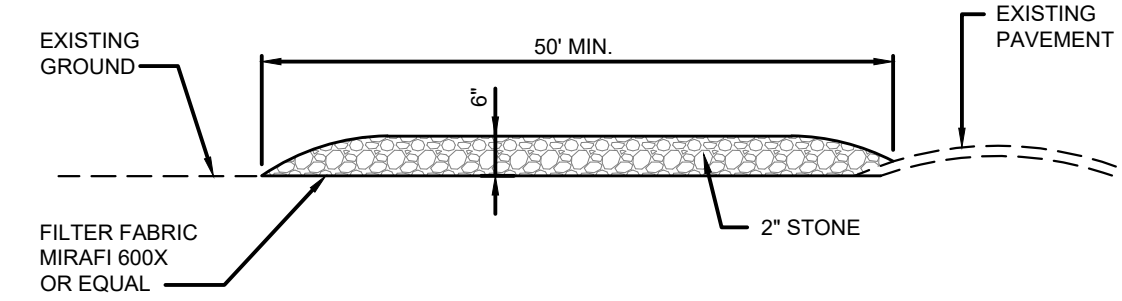
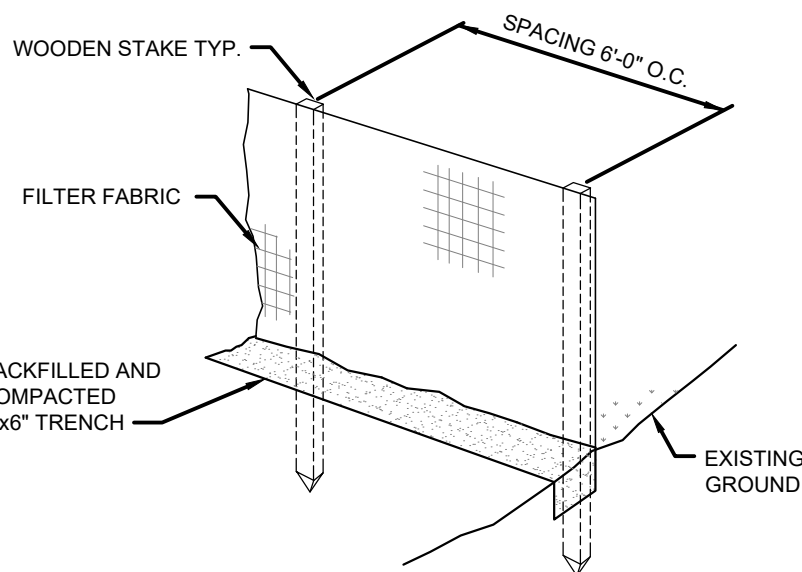
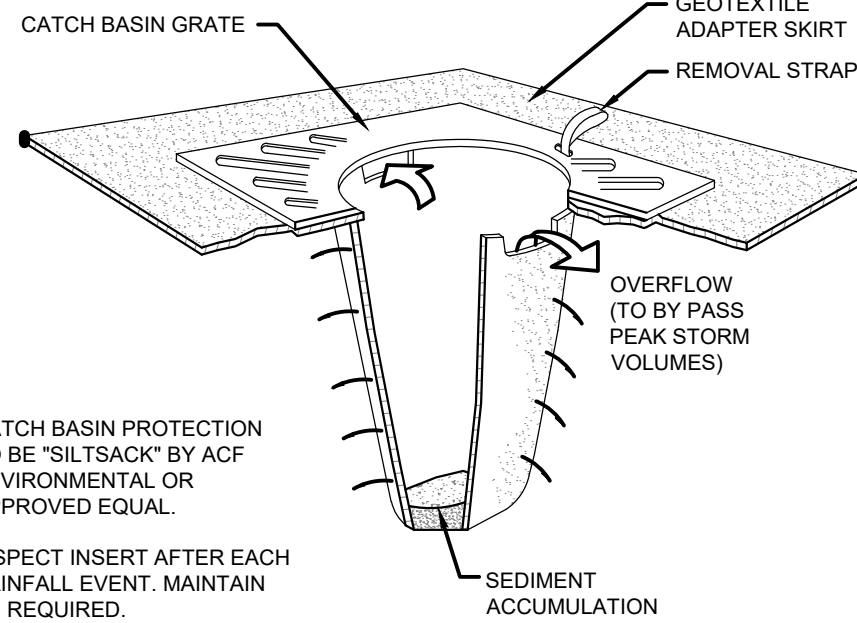
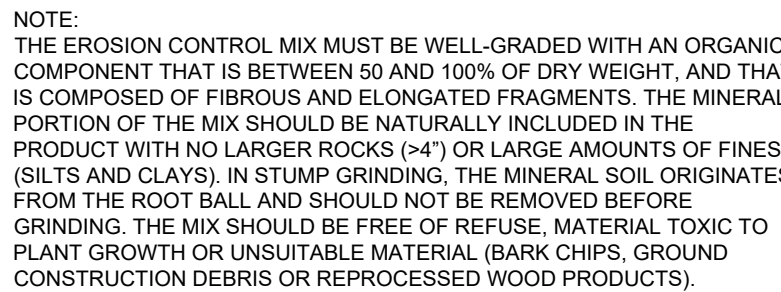
CONTRACTOR WILL BE RESPONSIBLE FOR FOLLOWING PROCEDURES FOUND IN THE "MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS" (PUBLISHED 2018). THE PUBLICATION CAN BE FOUND AT: [HTTP://WWW.MAINE.GOV/DEPLAND/EROSION/ESCMSP5/INDEX.HTML](http://www.maine.gov/DEPLAND/EROSION/ESCMSP5/INDEX.HTML)

1. PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SITE PLAN APPROVAL FROM THE CITY OF BIDDEFORD. THE CONSTRUCTION WILL BE GOVERNED BY THE CITY OF BIDDEFORD LAND USE ORDINANCE.
2. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A MAJOR SITE PLAN APPROVAL FROM THE CITY OF BIDDEFORD.
3. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

NTS (MAY BE USED AS AN ALTERNATE TO SILT FENCE)

NTS (MAY BE USED AS AN ALTERNATE TO HAY BALES)

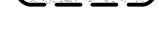
NTS



ITEMS SHOWN MAY NOT APPEAR ON PLANS

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
BENCHMARK		
SURVEY STATION		
IRON PIN		
DRILL HOLE		
BOUND		
TEST PIT		
SEWER MANHOLE		
GAS VALVE		
UTILITY POLE		
GUY ANCHOR		
ELECTRICAL MANHOLE		
TRANSFORMER		
PULLBOX		
WELL		
WATER VALVE		
WATER SHUTOFF		
HYDRANT		
AIR RELIEF VALVE		
DRAINAGE MANHOLE		
CATCH BASIN		
CURB INLET		
PARKING LIGHT		
FLOOD LIGHT		
SITE LIGHT		
SIGN		
TRASH CAN		
FLAGPOLE		
MONITORING WELL		

EDGE OF GRAVEL		
EDGE OF PAVEMENT		
CURBING		
MAJOR FOOT CONTOUR	----- 100 -----	
MINOR FOOT CONTOUR	----- 98 -----	
WATERLINE	----- W -----	
STORM DRAIN	----- SD -----	
UNDER DRAIN	----- UD -----	
SANITARY SEWER	----- SS -----	
FORCE MAIN		
OVERHEAD UTILITIES	----- OHU -----	
UNDERGROUND UTILITIES	----- UGU -----	
GAS LINE	----- GAS -----	
CHAIN LINK FENCE	----- X -----	
GUARDRAIL		
SILT FENCE		
TREE LINE		

GRAVEL SURFACE	
PAVED SURFACE	
CONCRETE SURFACE	
BUILDING FOOTPRINT	
WETLANDS	
RIPRAP	
FILTER SURFACE	

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

NOT FOR CONSTRUCTION



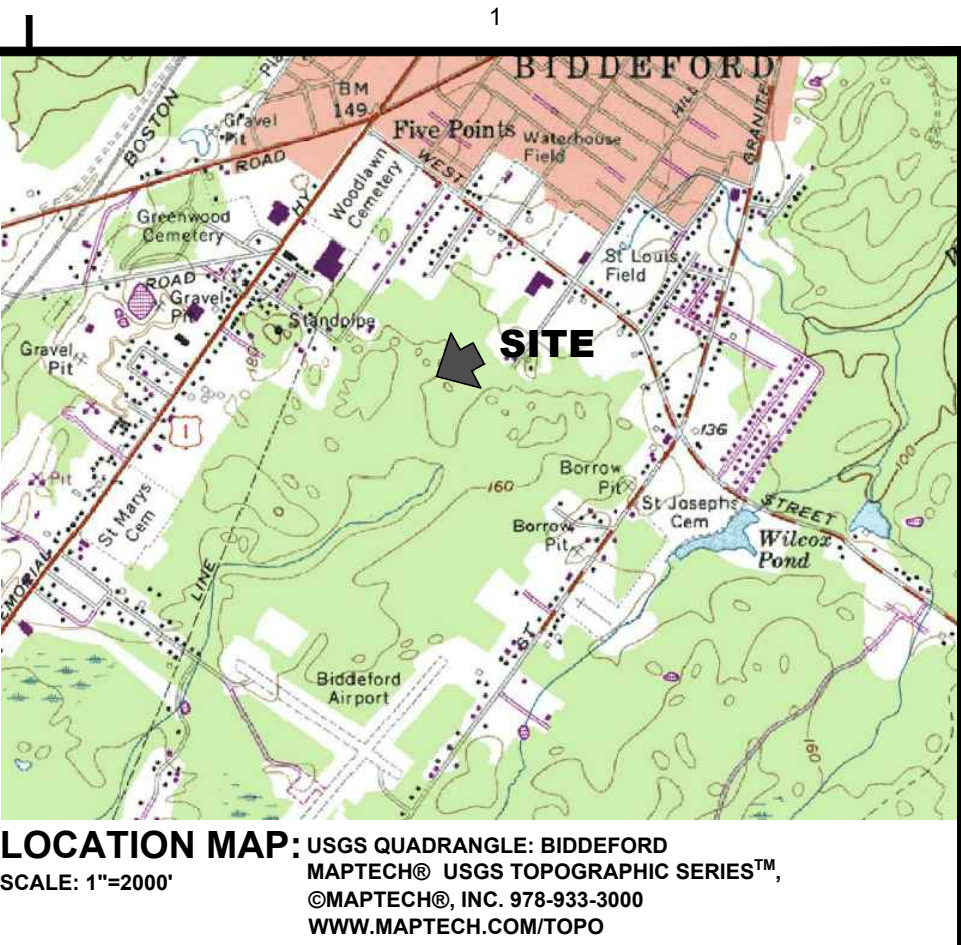
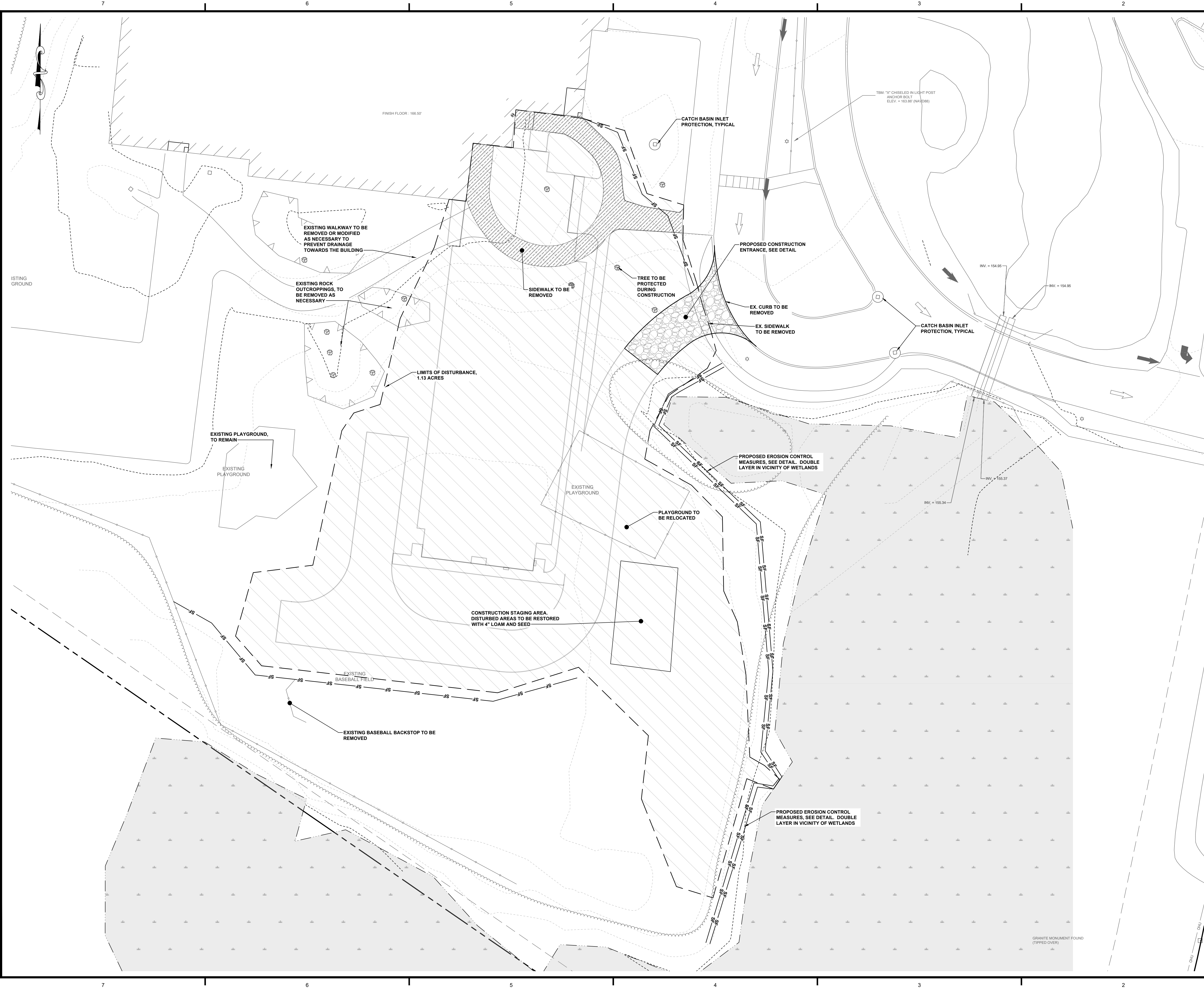
PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

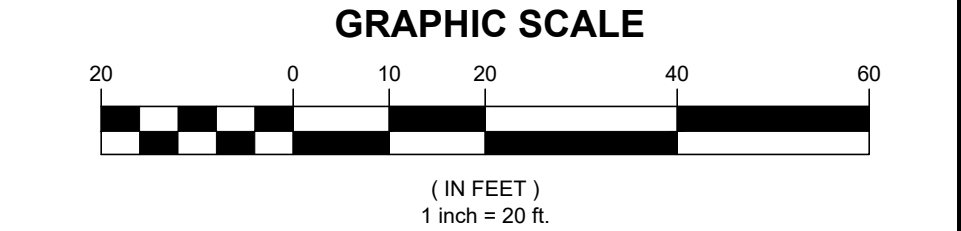
STATE OF MAINE
DREW JOHN
OLEHOWSKI
No. 16372
02/14/2024
LICENSED
PROFESSIONAL ENGINEER

DATE 2024.02.13		SCALE NTS	
DRAWN BY PJM	DESIGNED BY DJO	CHECKED BY PAM	
PROJECT No. 14125.003			
DRAWING No. C001			REV.

FILE LOCATION: P:\ME110102-MOBILE-STUDIO-DESIGN\03-BIDDEFORD-PRIMARY-SCHOOL-SURVEY-6-WETLAND-DEMOLITION-AV02-CAD-FILES\CAD\114125-003-C-SP.DWG, 2024.02.14, 8:53 AM

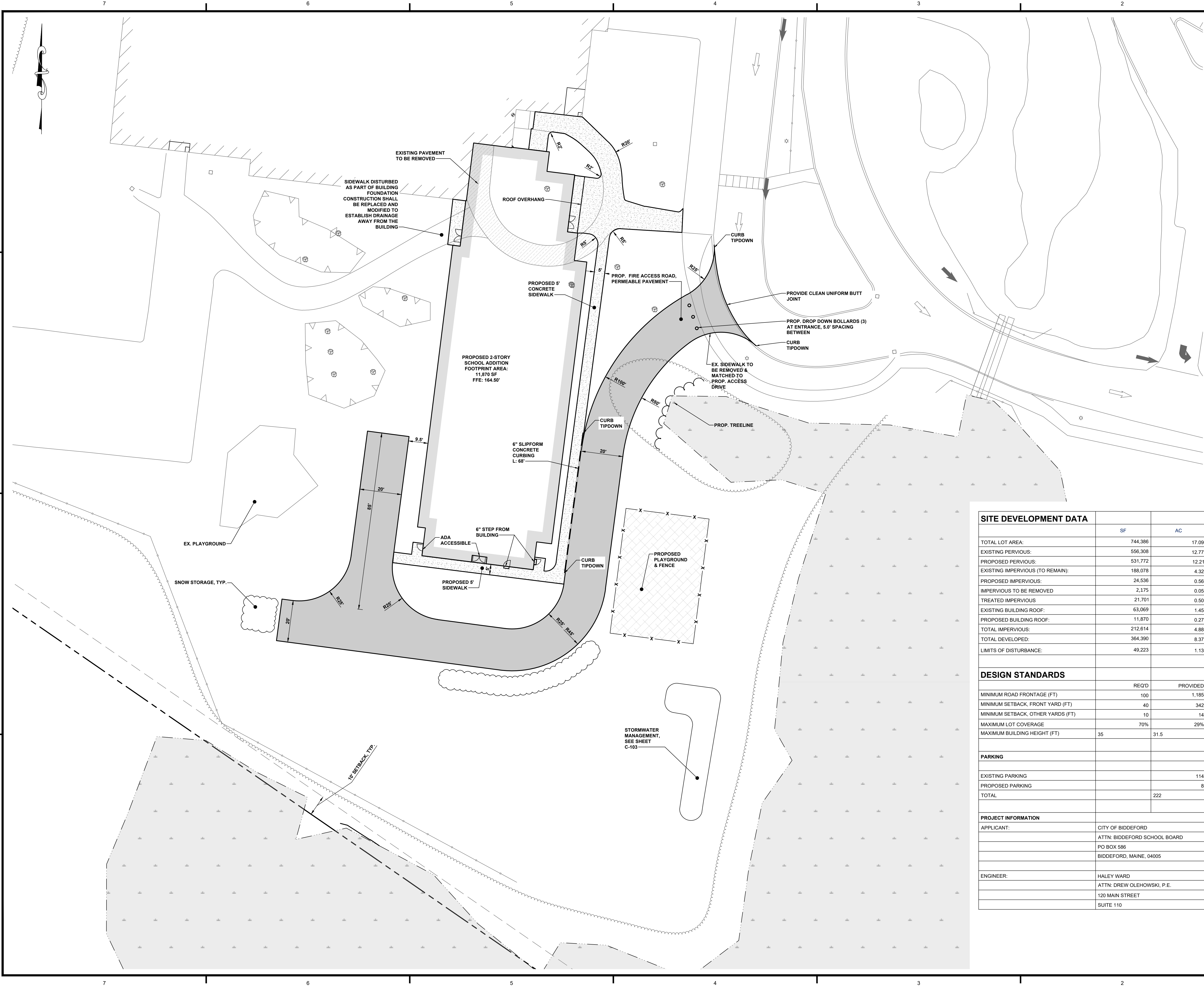


- PLAN REFERENCE:**
- BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
 - MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC, RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
 - EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.



REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				
NOT FOR CONSTRUCTION				
 HALEY WARD ENGINEERING ENVIRONMENTAL SURVEYING WWW.HALEYWARD.COM One Merchants Plaza, Suite 701 Bangor, Maine 04401 207.989.4824				
PROJECT				
BIDDEFORD PRIMARY SCHOOL EXPANSION 320 HILL STREET, BIDDEFORD, MAINE				
TITLE				
SITE DEMOLITION & EROSION CONTROL PLAN				
DATE		SCALE		
2024.02.13		1" = 20'		
DRAWN BY		DESIGNED BY	CHECKED BY	
PJM		DJO	PAM	
PROJECT No.		14125.003		
DRAWING No.			REV.	
C100				

FILE LOCATION: P:\ME11012-MOBILE STUDIO DESIGNS\BIDDEFORD PRIMARY SCHOOL SURVEY & WETLAND DELINEATION\AT02.CAD /FILESCAL114125.003.C-SP.DWG, 2024.02.14, 9:18 AM

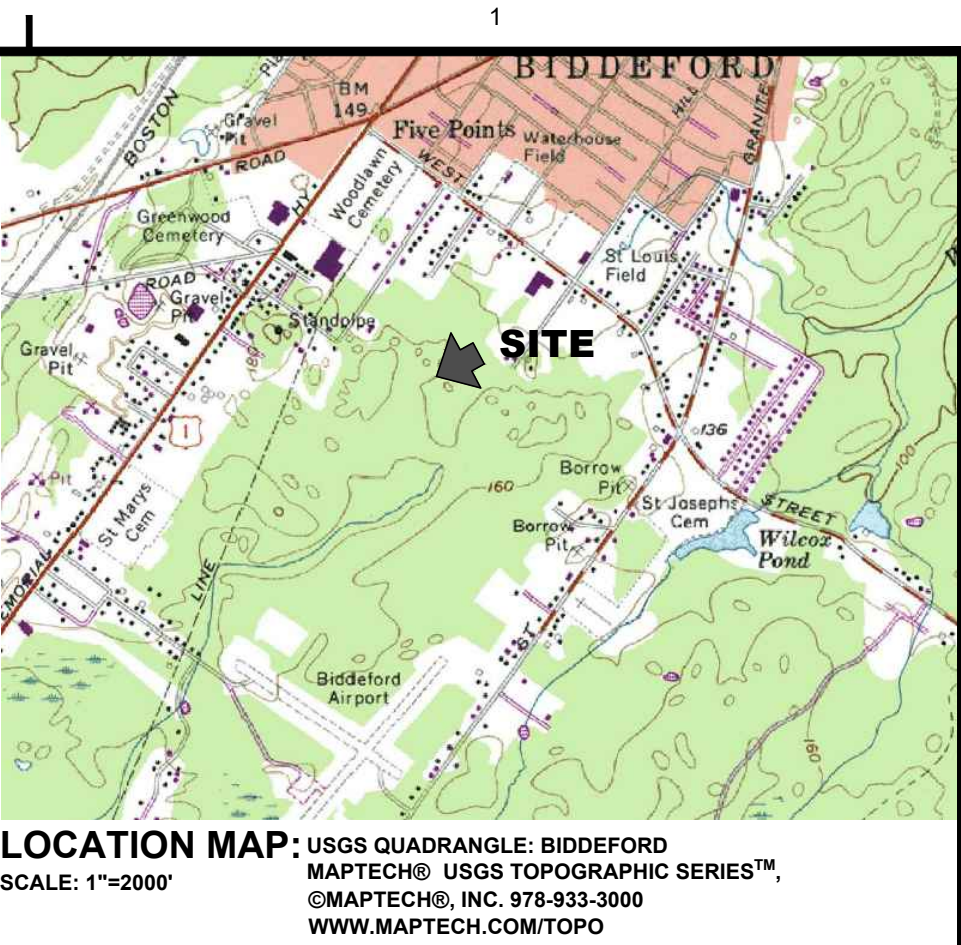


SITE DEVELOPMENT DATA		
	SF	AC
TOTAL LOT AREA:	744,386	17.09
EXISTING PERVIOUS:	556,308	12.77
PROPOSED PERVIOUS:	531,772	12.21
EXISTING IMPERVIOUS (TO REMAIN):	188,078	4.32
PROPOSED IMPERVIOUS:	24,536	0.56
IMPERVIOUS TO BE REMOVED	2,175	0.05
TREATED IMPERVIOUS	21,701	0.50
EXISTING BUILDING ROOF:	63,069	1.45
PROPOSED BUILDING ROOF:	11,870	0.27
TOTAL IMPERVIOUS:	212,614	4.88
TOTAL DEVELOPED:	364,390	8.37
LIMITS OF DISTURBANCE:	49,223	1.13

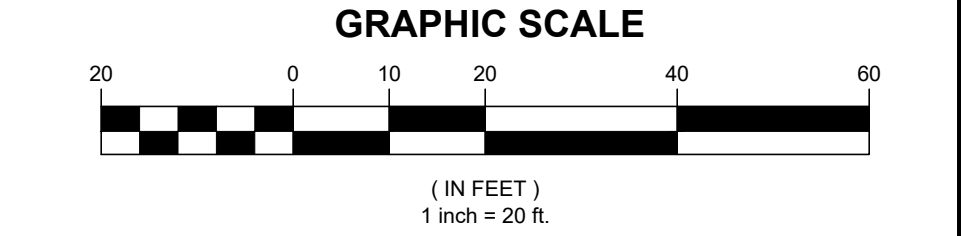
DESIGN STANDARDS		
	REQ'D	PROVIDED
MINIMUM ROAD FRONTAGE (FT)	100	1,185
MINIMUM SETBACK, FRONT YARD (FT)	40	342
MINIMUM SETBACK, OTHER YARDS (FT)	10	14
MAXIMUM LOT COVERAGE	70%	29%
MAXIMUM BUILDING HEIGHT (FT)	35	31.5

PARKING	
EXISTING PARKING	114
PROPOSED PARKING	8
TOTAL	222

PROJECT INFORMATION	
APPLICANT:	CITY OF BIDDEFORD
	ATTN: BIDDEFORD SCHOOL BOARD
	PO BOX 586
	BIDDEFORD, MAINE, 04005
ENGINEER:	HALEY WARD
	ATTN: DREW OLEHOWSKI, P.E.
	120 MAIN STREET
	SUITE 110



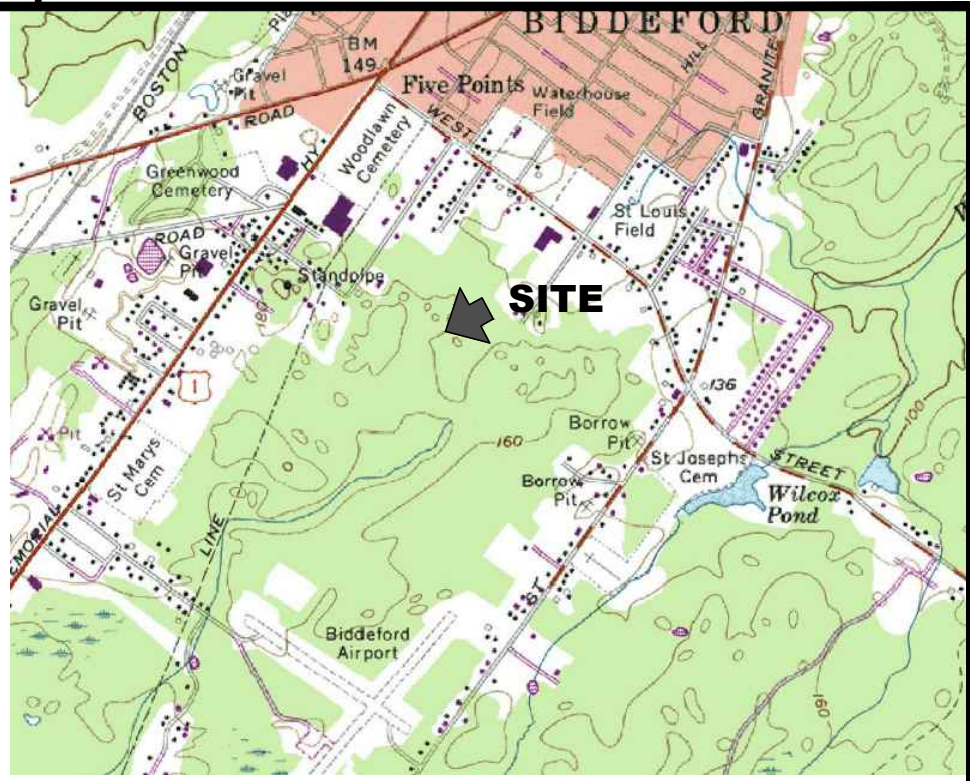
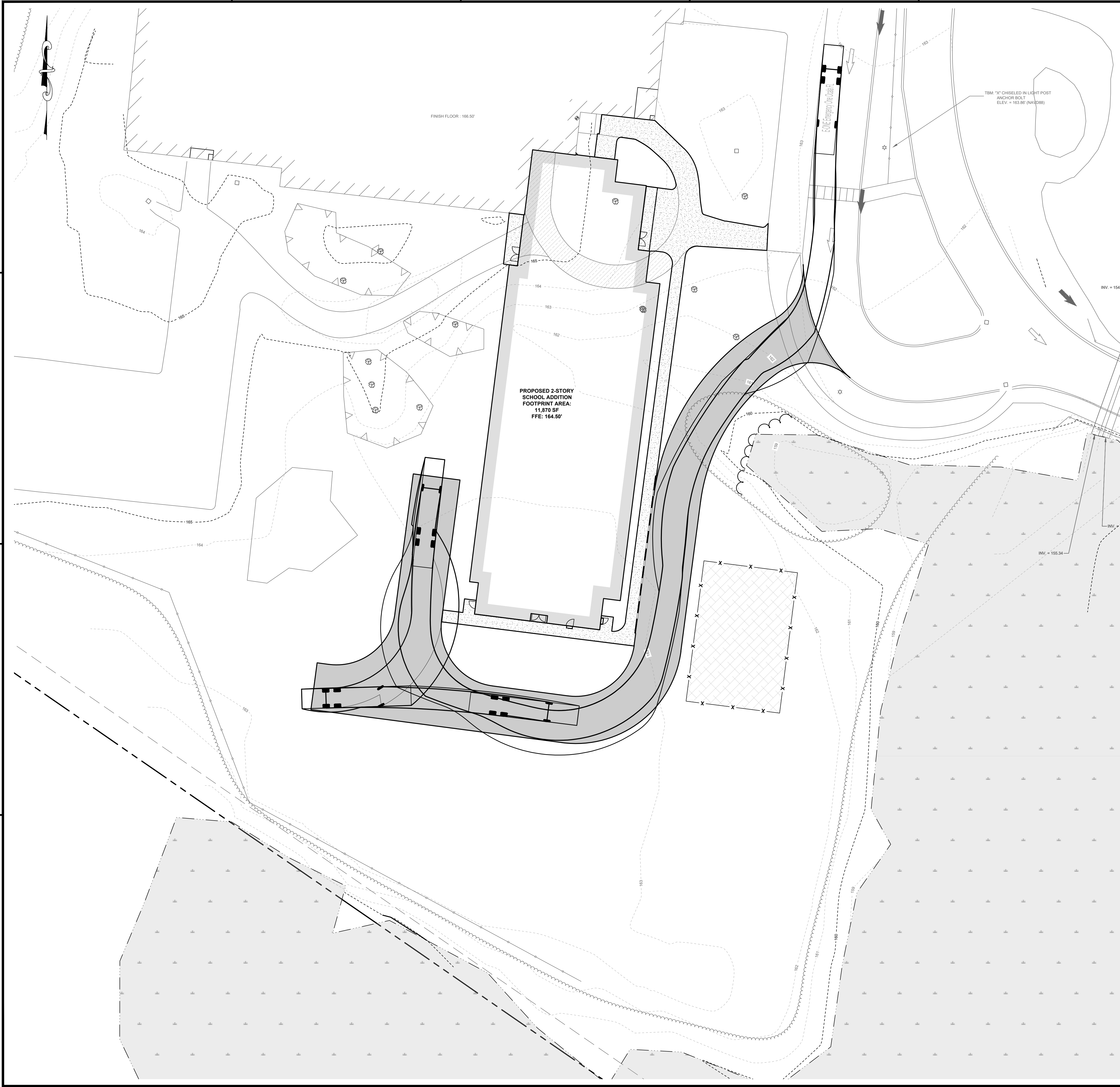
- PLAN REFERENCE:**
- BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
 - MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC, RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
 - EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.



REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				
NOT FOR CONSTRUCTION				
HALEY WARD ENGINEERING ENVIRONMENTAL SURVEYING One Merchants Plaza, Suite 701 Bangor, Maine 04401 207.989.4824				
PROJECT				
BIDDEFORD PRIMARY SCHOOL EXPANSION 320 HILL STREET, BIDDEFORD, MAINE				
TITLE				
SITE PLAN				
DATE		2024.02.13		SCALE
DRAWN BY		PJM		1" = 20'
DESIGNED BY		DJO		
CHECKED BY		PAM		
PROJECT No.		14125.003		
DRAWING No.		C102		REV.

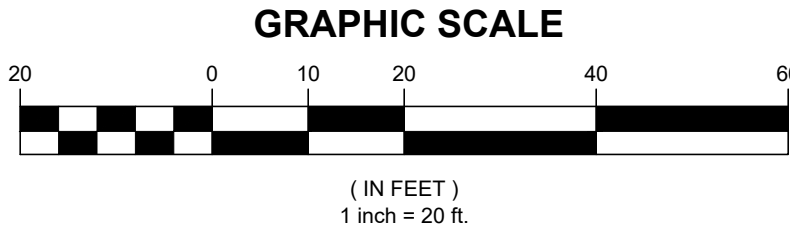


FILE LOCATION: P:\ME11102-MOBILE-ETUDES\DESIGN\BIDDEFORD PRIMARY SCHOOL SURVEY & WETLAND DEMARCATION\A202-CAD\FILESCAL\14125-003-C-SP.DWG, 2024.02.14, 9:40 AM



LOCATION MAP: USGS QUADRANGLE: BIDDEFORD
MAPTECH® USGS TOPOGRAPHIC SERIES™,
©MAPTECH®, INC. 978-933-3000
WWW.MAPTECH.COM/TOPO

- PLAN REFERENCE:**
- BIDDEFORD PRIMARY SCHOOL, BIDDEFORD, MAINE, ROADWAY & PARKING GEOMATICS, DATED DECEMBER 7, 1988, PREPARED BY DeLUCA - HOFFMAN ASSOCIATES.
 - MAJOR SUBDIVISION OF LAND: WINTERBERRY ACRES SUBDIVISION SOUTHEASTERLY OF BIRCHWOOD LANE, BIDDEFORD, MAINE, DATED AUGUST 15, 2005, PREPARED BY JAMES D. NADEAU, LLC, RECORDED IN PLAN BOOK 308, PAGE 47 OF THE YORK COUNTY REGISTRY OF DEEDS.
 - EXISTING CONDITIONS PLAN PREPARED BY HALEY WARD, DATED JUNE 20, 2023.



REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				
NOT FOR CONSTRUCTION				



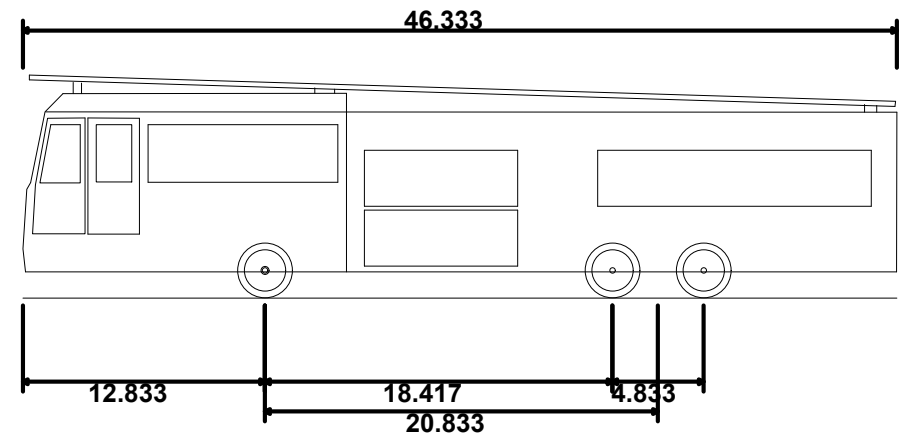
PROJECT

BIDDEFORD PRIMARY SCHOOL EXPANSION
320 HILL STREET, BIDDEFORD, MAINE

TITLE

EMERGENCY VEHICLE ACCESS PLAN

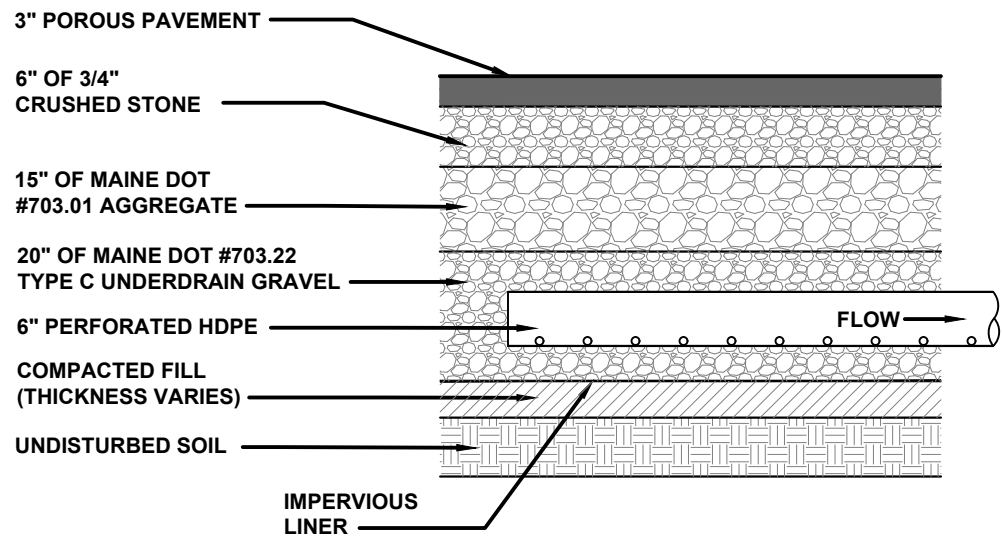
DATE 2024.02.13		SCALE 1" = 20'	
DRAWN BY PJM	DESIGNED BY DJO	CHECKED BY PAM	
PROJECT No. 14125.003		DRAWING No. C104	
PROJECT No. 14125.003		REV.	



E-ONE Emergency One Ocala FL
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Max Wheel Angle

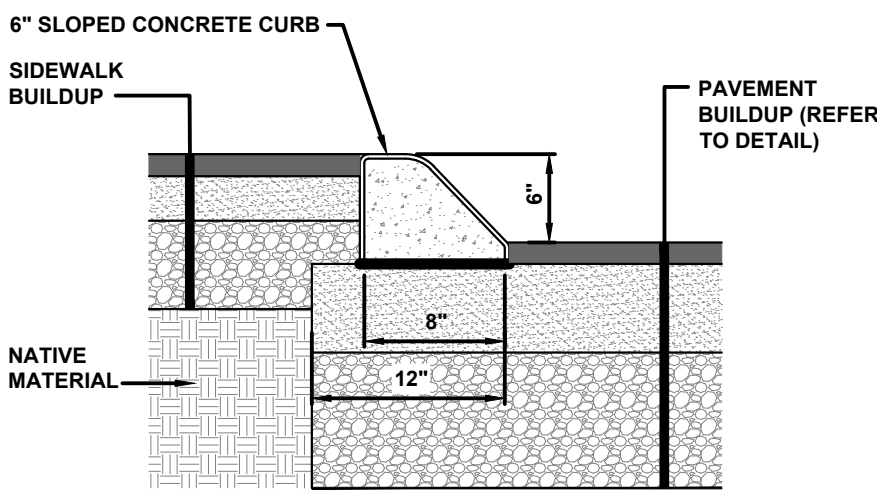
46.333ft
8.333ft
11.833ft
1.393ft
8.333ft
6.00s
45.00°

POROUS ASPHALT GRADATION		MAINE DOT #703.01 SPECIFICATIONS		MAINE DOT #703.22 TYPE C UNDERDRAIN SPECIFICATION	
SIEVE SIZE	% PASSING	SIEVE SIZE	% BY WEIGHT	SIEVE SIZE	% BY WEIGHT
1/2"	100	3/8"	100	1"	100
3/8"	95	#4	95-100	3/4"	90-100
#4	35	#8	80-100	3/8"	0-75
#8	15	#16	50-85	#4	0-25
#16	10	#30	25-60	#10	0-5
#30	2	#60	10-30		
		#100	2-10		
		#200	0-5 (8-10% PREFERRED)		



- NOTES:
- CONTRACTOR TO PROTECT POROUS ASPHALT FROM CONTAMINATION WITH SEDIMENT DURING CONSTRUCTION.
 - IF POROUS ASPHALT BECOMES CONTAMINATED DURING CONSTRUCTION, CONTRACTOR SHALL REMOVE AND REPLACE AT NO ADDITIONAL COST TO THE OWNER.

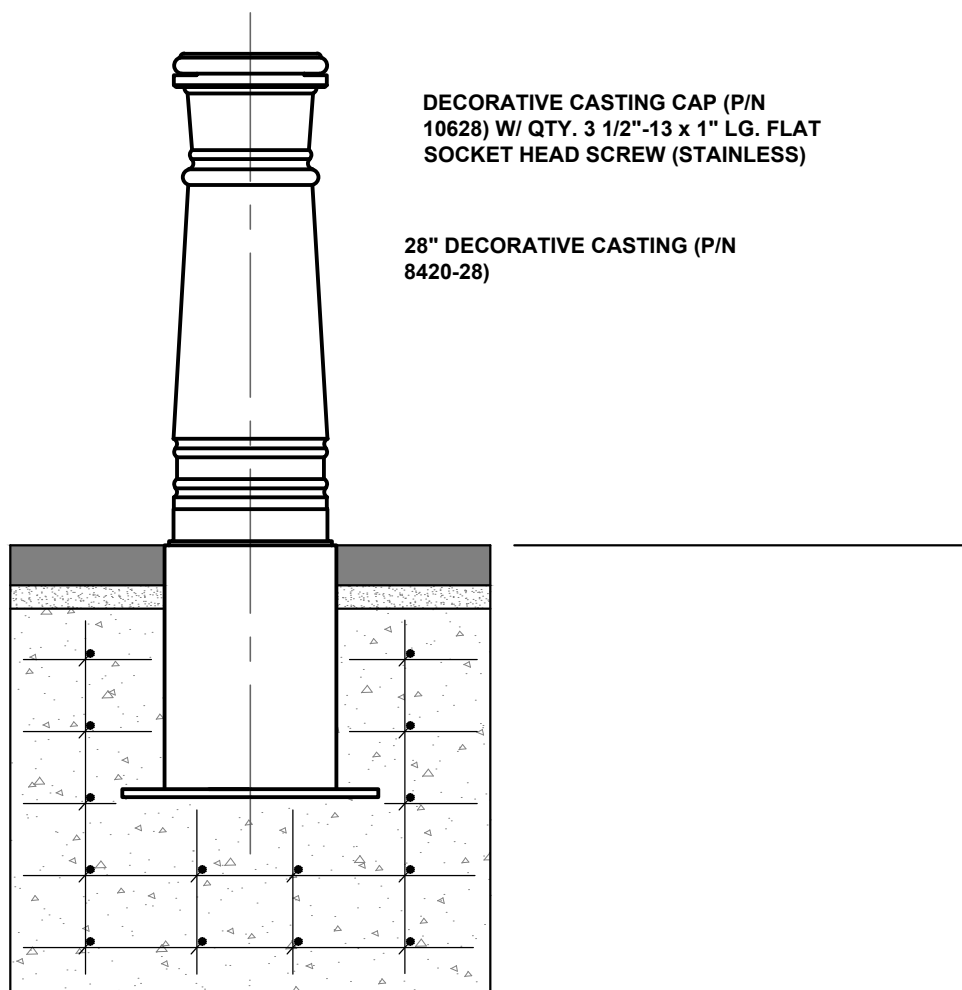
POROUS PAVEMENT DETAIL
N.T.S.



- NOTES:
- ALL CURBING AND TERMINATION IN CONJUNCTION WITH SIDEWALKS MUST MEET ADA REQUIREMENTS.

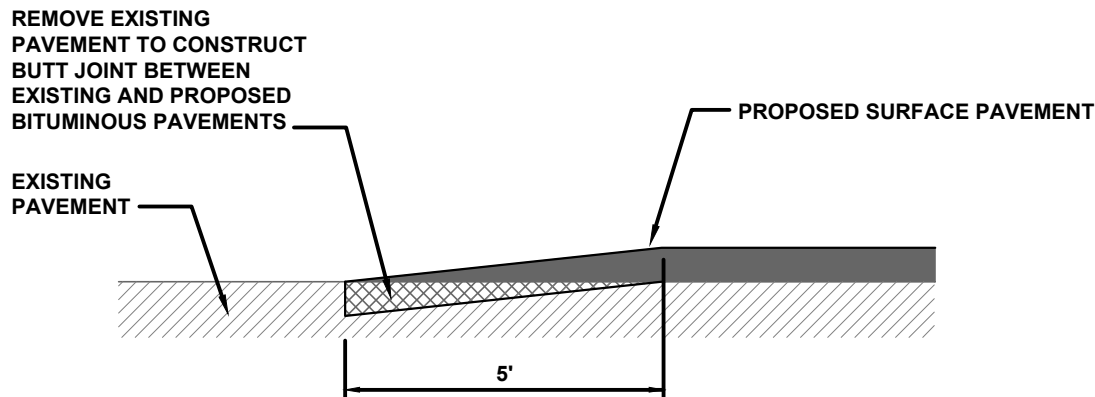
SIDEWALK

SLIP FORM CONCRETE CURB DETAIL
N.T.S.

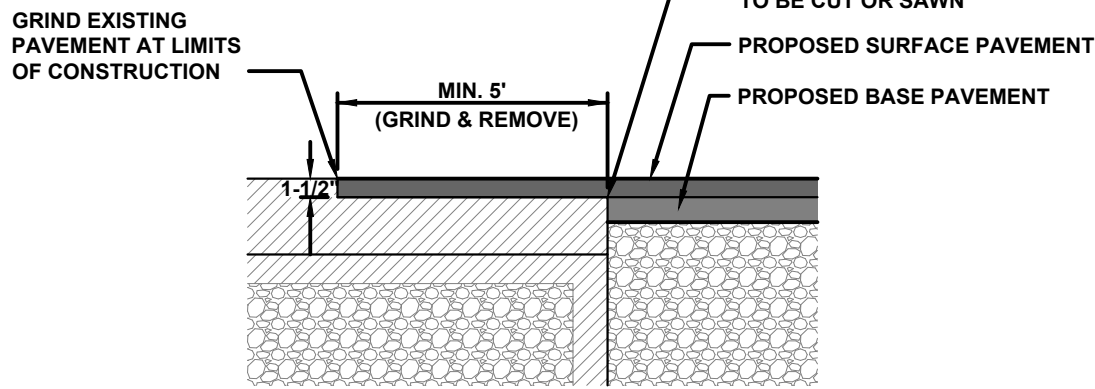


#4 REBAR (TYP.)
ALL REBAR TO BE TIED (TYP.)

RAM BOLLARD DETAIL
NTS

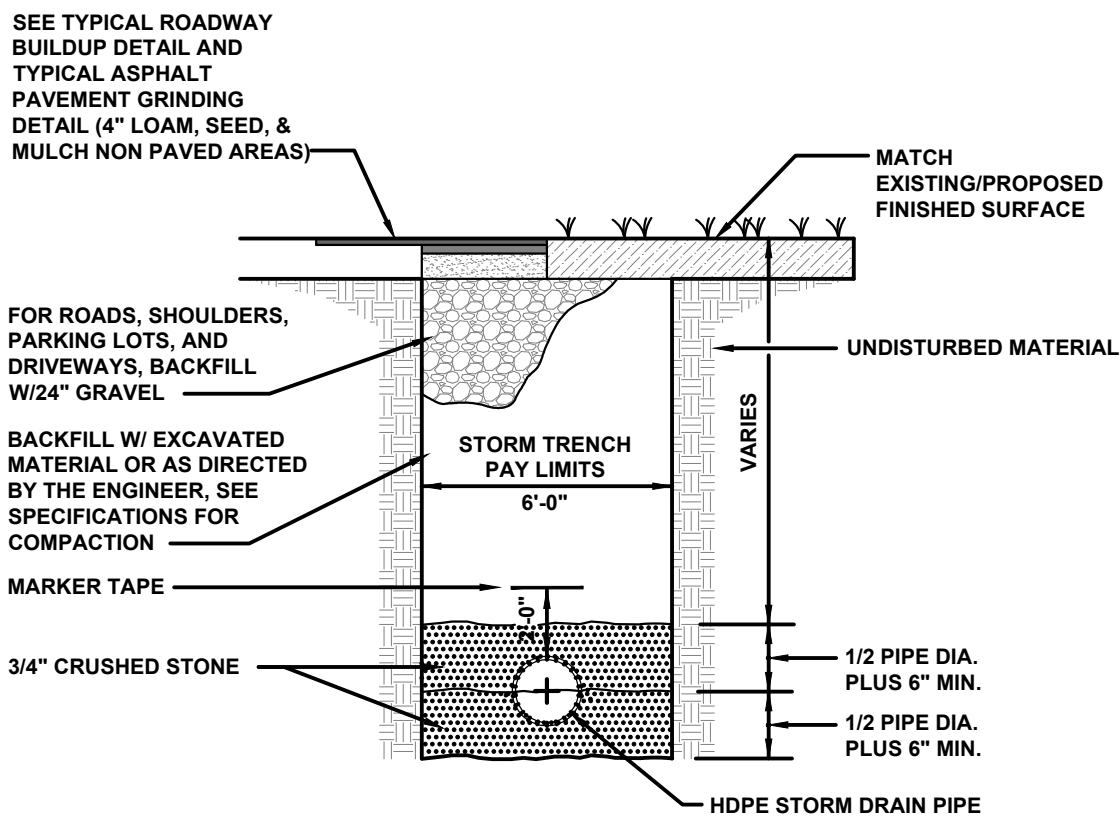


TYPICAL ASPHALT PAVEMENT BUTT JOINT DETAIL
N.T.S.



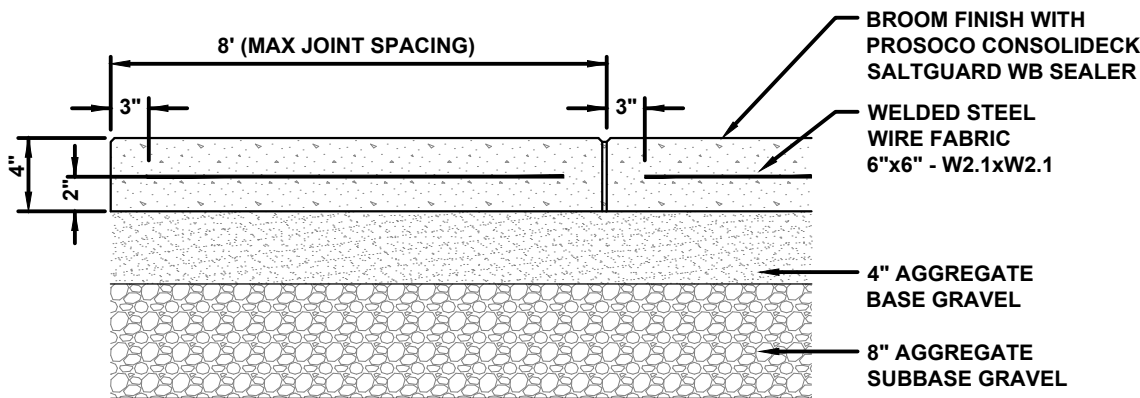
- NOTES:
- EXTEND NEW SURFACE PAVEMENT ACROSS BUTT JOINT IN BASE COURSE.
 - PROVIDE TACK COAT ON ALL SURFACES OF EXISTING PAVEMENT TO BE COVERED.

TYPICAL ASPHALT PAVEMENT GRINDING DETAIL
NTS

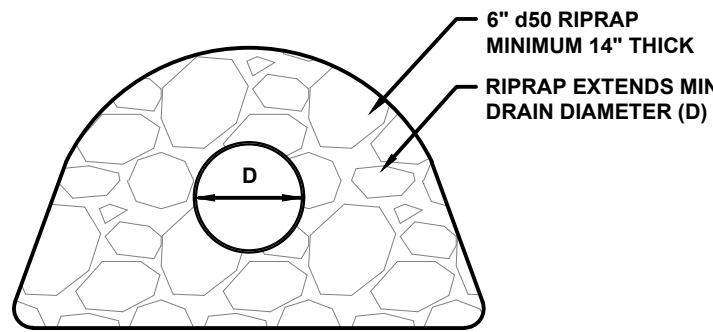


- NOTE:
- MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

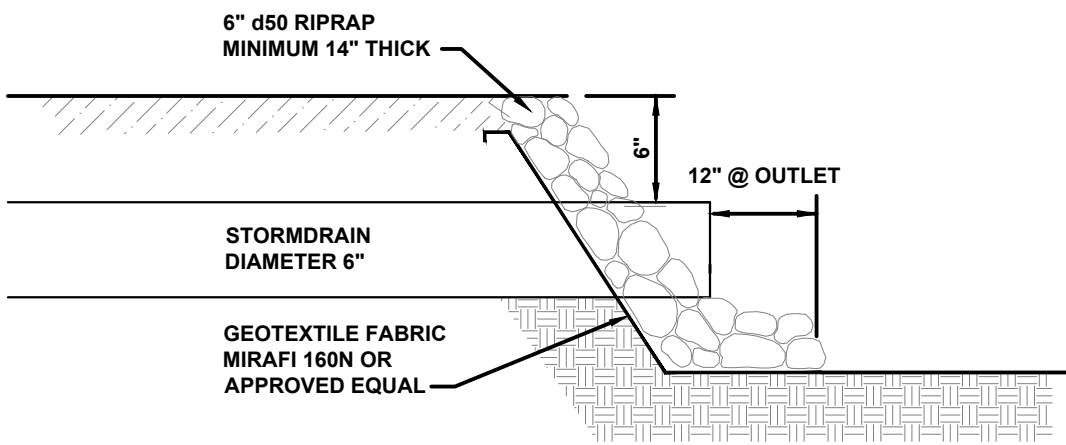
TYPICAL STORM DRAIN TRENCH DETAIL
NTS



TYPICAL CONCRETE SIDEWALK DETAIL
NTS

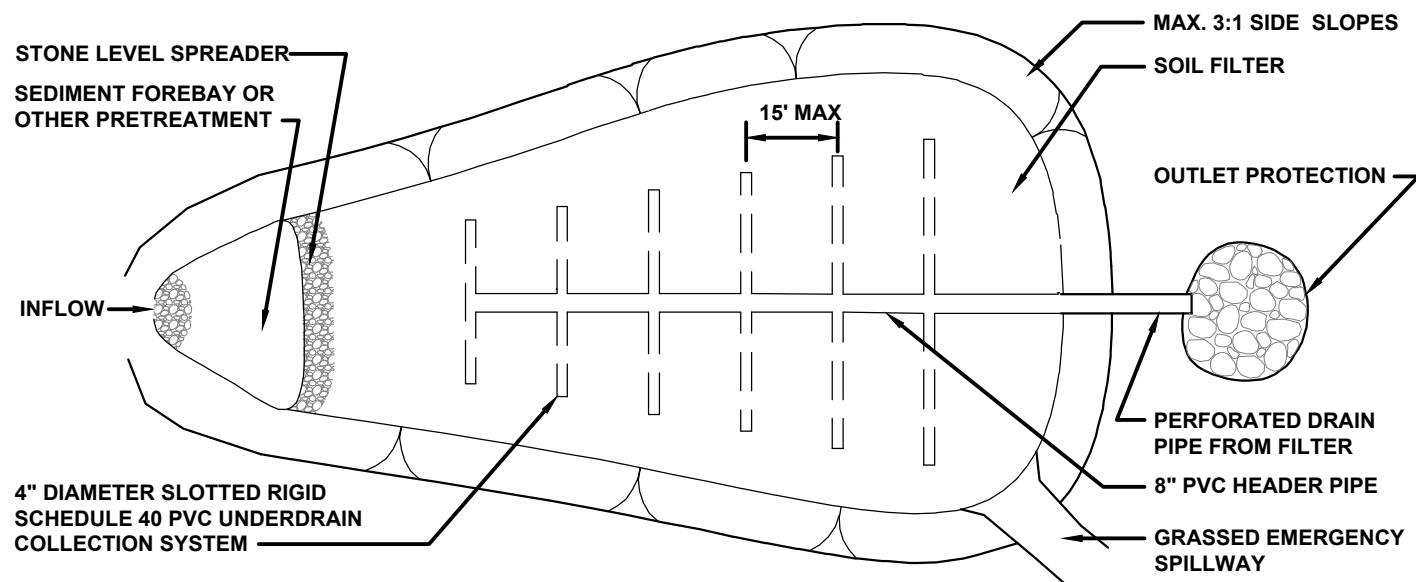


ELEVATION

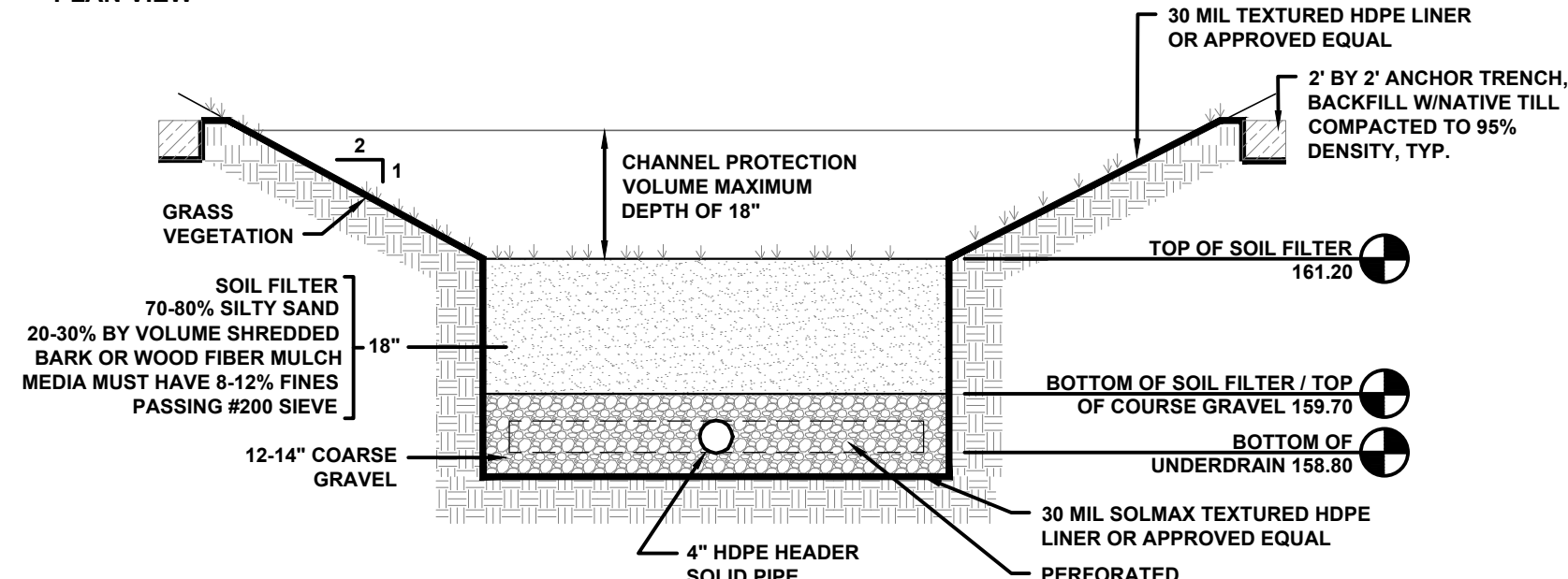


PROFILE VIEW

TYPICAL STORMDRAIN OUTLET PROTECTION DETAIL
NTS



PLAN VIEW



SECTION

- NOTES:
- GUSF (INCLUDING FOREBAYS) SHALL NOT BE USED FOR SNOW STORAGE.
 - VEHICLES ARE PROHIBITED FROM GUSF.
 - VEGETATION: THE SOIL FILTER SURFACE SHOULD BE PLANTED WITH A GRASS SPECIES THAT IS TOLERANT OF FREQUENT INUNDATION AND WELL DRAINED SOILS. UPON SEEDING, THE SOIL FILTER SHOULD BE MULCHED WITH HAY OR AN EROSION CONTROL MIXTURE. A CONSERVATION TYPE SEED MIXTURE IS APPROPRIATE (OR A 48 LBS/ACRE MIXTURE CONTAINING 20 LBS/ACRE OF CREEPING RED FESCUE AND TALL FESCUE EACH PLUS 8 LBS/ACRE OF BIRDSFOOT TREFOIL).

USF LABEL	EXISTING ELEVATION (+/-) (FT)	EMERGENCY SPILLWAY ELEVATION (FT)	PROPOSED TOP OF SOIL FILTER (FT)	PROPOSED BOTTOM OF SOIL FILTER/TOP OF COARSE GRAVEL (FT)	PROPOSED ELEVATION OF PIPE BED (FT)	PROPOSED BOTTOM OF COARSE GRAVEL (FT)	TOP OF BERM (FT)	TREATMENT AREA REQ'D/PROVIDED (SF)	TOTAL STORAGE VOLUME REQ'D/PROVIDED (CF)
A	162	162.55	161.20	159.70	158.95	158.70	162.75	840/890	1402/1945

UNDERDRAIN SOIL FILTER DETAILS
N.T.S.

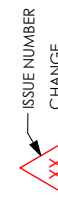
REV	DATE	DESCRIPTION	BY	CHK
DRAWING ISSUE STATUS				
NOT FOR CONSTRUCTION				
HALEY WARD ENGINEERING ENVIRONMENTAL SURVEYING One Merchants Plaza, Suite 701 Bangor, Maine 04401 207.989.4824 PROJECT BIDDEFORD PRIMARY SCHOOL EXPANSION 320 HILL STREET, BIDDEFORD, MAINE TITLE SITE DETAILS				
DATE 2024.02.13		SCALE 1" = 20'		
DRAWN BY PJM	DESIGNED BY DJO	CHECKED BY PAM		
PROJECT No. 14125.003		REV		
DRAWING No.		C501		

KEY NOTES (THIS SHEET ONLY)

XX

GENERAL PLAN NOTES

1. ALL WORK IS TO BE COMPLETED IN CONFORMANCE WITH ALL LOCAL, STATE AND FEDERAL BUILDING CODES.
2. ALL DIMENSIONS FOR WALLS ARE TO ROUGH FRAMING OR FACE OF CONCRETE/MASONRY UNO.
3. SEE SHEET G-101 FOR ALL PARTITION TYPES AND ADDITIONAL NOTES.
4. SEE SHEET A-XXX FOR ROOM & MATERIAL SCHEDULES.
5. PROVIDE CONTROL JOINTS IN GYP. PARTITIONS AT A MAX SPACING OF 30'-0" (28'-0" FOR ABUSE-RESISTANT PARTITIONS). LOCATE CONTROL JOINT AT EDGES OF DOOR FRAMES UP TO CEILING, WHERE PRACTICAL. REVIEW LOCATIONS WITH ARCHITECT. SEE DETAIL XX/AXXX FOR ADDITIONAL INFORMATION.
6. ALL INTERIOR SWING DOORS TO BE SET 4" FROM ROUGH OPENING TO ROUGH FRAMING OF PERPENDICULAR WALLS/CORNER UNLESS DIMENSIONED OTHERWISE ON PLANS.



PRELIMINARY
NOT FOR CONSTRUCTION

CHANGES THIS ISSUE:	
ISSUE NO.	DESCRIPTION

SUBMISSIONS:	
ISSUE NO.	DATE

BIDDEFORD PRIMARY SCHOOL ADDITION

BIDDEFORD SCHOOL DEPARTMENT
320 Hill Street Biddeford, ME 04005

MOBILE STUDIO DESIGN
128 Main Street, Suite 201
Biddeford, ME 04002
office: 207.499.4208

DATE OF ISSUE: 2/11/24

PROJECT STATUS:
CD

ARCHITECT:
Leah Schaffer
leah@mobilestudiodesign.com
757-927-5324
ORIGINAL SHEET SIZE: 30x42

CONSULTANTS:

CIVIL ENGINEER:
HALEY WARD
207-889-4824
haleyward@haleyward.com

STRUCTURAL ENGINEER:
HALEY WARD
207-889-4824
haleyward@haleyward.com

MEP ENGINEER:
HALEY WARD
207-889-4824
haleyward@haleyward.com

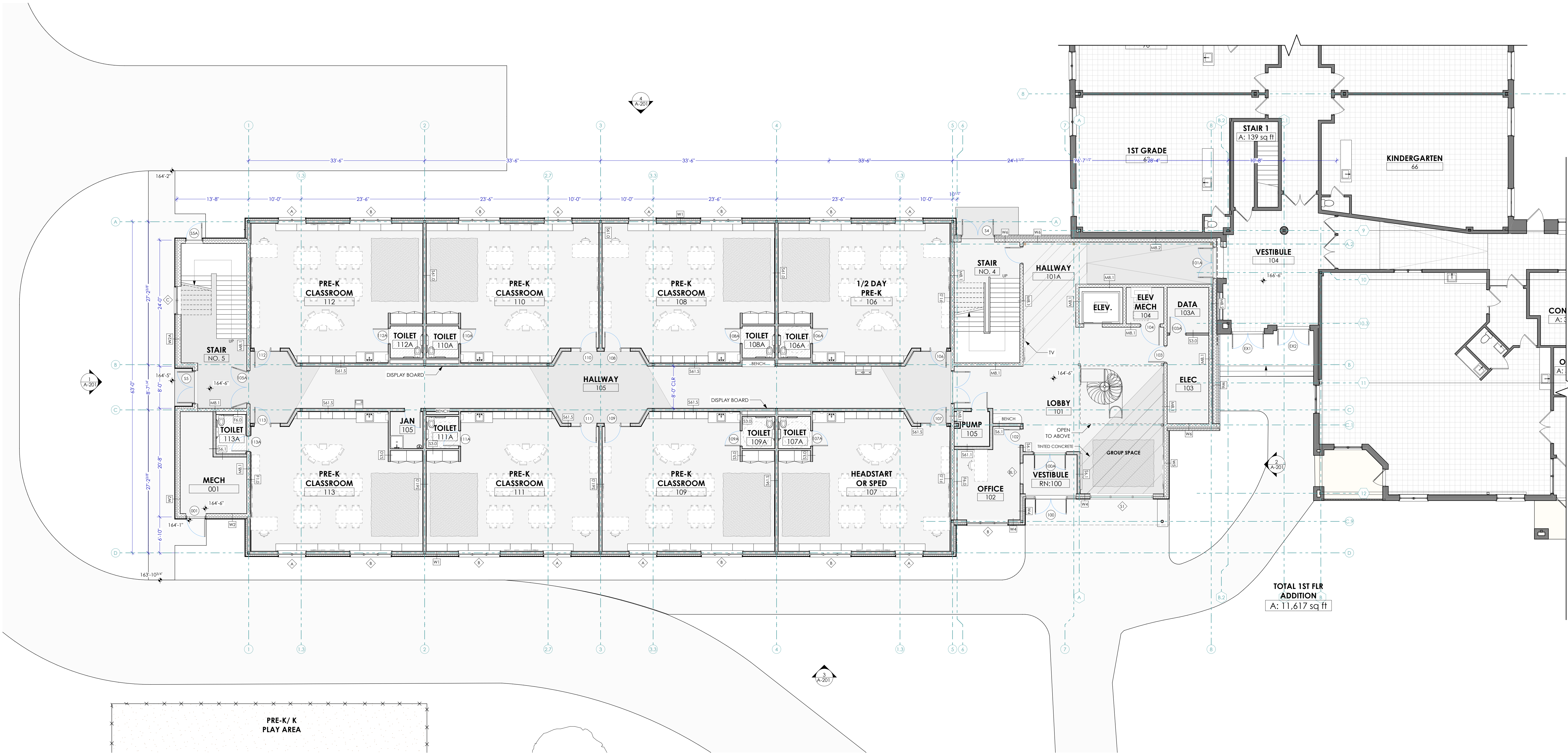
GEOTECHNICAL ENGINEER:
Summit Engineering
203 Main Street, Farmingdale, ME 04544
207-576-3317

CONTRACTOR:
TBD

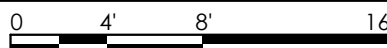
PROPOSED
PLANS- 1ST
FLOOR

A-101

mobile
studio
design

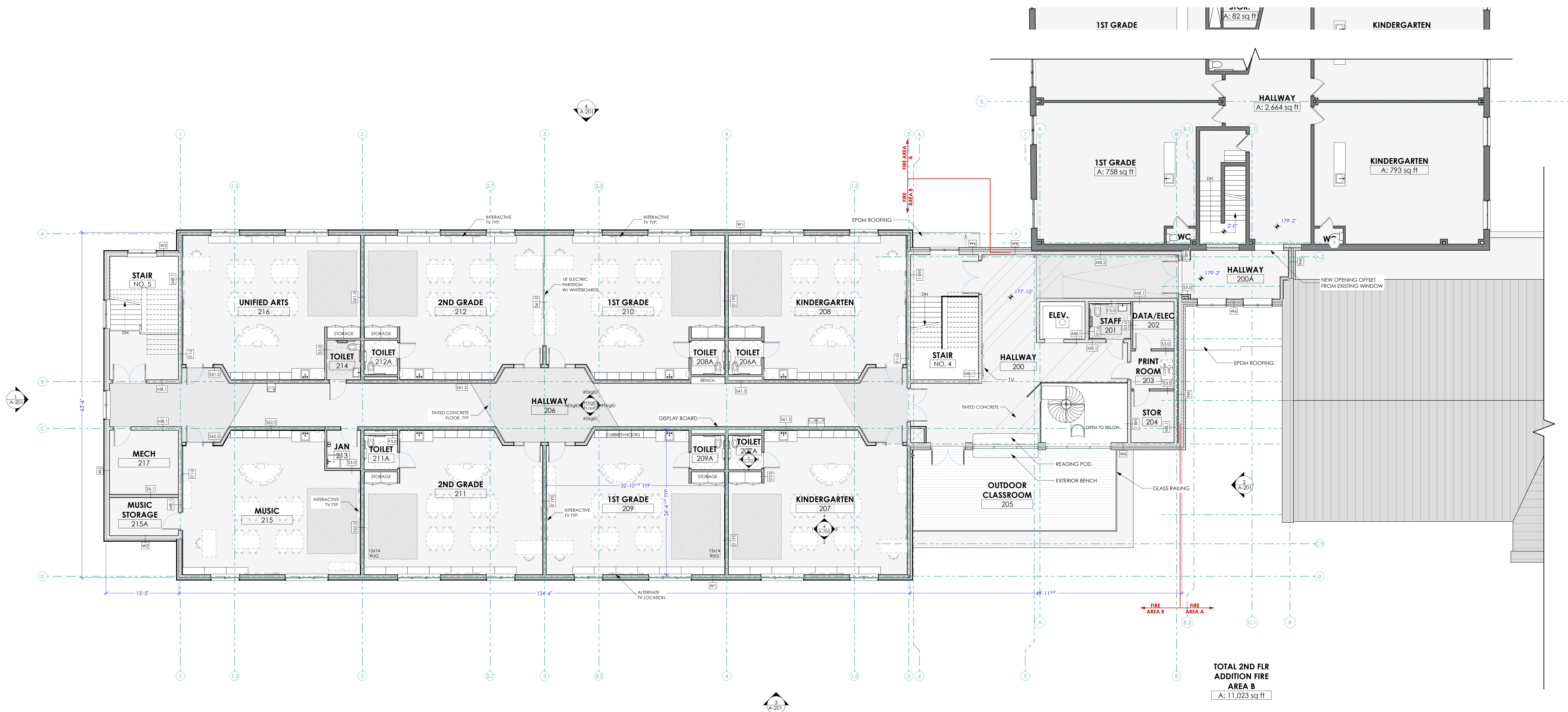


1 PROPOSED PLAN ADDITION- 1ST FLOOR
SCALE: 1/8" = 1'-0"



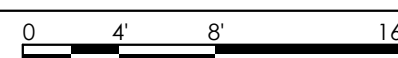
xx

1. ALL WORK IS TO BE COMPLETED IN CONFORMANCE WITH ALL LOCAL, STATE AND FEDERAL BUILDING CODES.
2. ALL DIMENSIONS FOR WALLS ARE TO ROUGH FRAMING OR FACE OF CONCRETE/MASONRY UNO.
3. SEE SHEET G-003 FOR ALL PARTITION TYPES AND ADDITIONAL NOTES
4. SEE SHEET X-XXX FOR ROOM & MATERIAL SCHEDULES.
5. PROVIDE CONTROL JOINTS IN GYP. PARTITIONS AT A MAX SPACING OF 30'-0" (28'-0" FOR ABUSE-RESISTANT PARTITIONS).
LOCATE CONTROL JOINT AT EDGES OF DOOR FRAMES UP TO CEILING WHERE PRACTICAL. REVIEW LOCATIONS WITH ARCHITECT. SEE DETAIL XX/XXXX FOR ADDITIONAL INFORMATION.
6. ALL INTERIOR SWING DOORS TO BE SET 4" FROM ROUGH OPENING TO ROUGH FRAMING OR PERPENDICULAR WALLS/CORNER UNLESS NOTED OTHERWISE.



1

PROPOSED PLAN ADDITION- 2ND FLOOR
SCALE: 1/8" = 1'-0"



/Users/leahschaffner/Desktop/BPS Addition/24.01.31_BPS_WORKING_OPTION #1_BRICK ACCENT.pjn



1 WEST ELEV



2 APPROACH VIEW



3 REAR STAIR ENTRY



4 EAST ELEVATION



5 ENTRY ELEV



6 AERIAL VIEW

PRELIMINARY
NOT FOR CONSTRUCTION

CHANGES THIS ISSUE:	
ID	DESCRIPTION

SUBMISSIONS:	
ISSUE ID	DESCRIPTION

BIDDEFORD PRIMARY SCHOOL ADDITION
BIDDEFORD SCHOOL DEPARTMENT
320 Hill Street Biddeford, ME 04005

MOBILE STUDIO DESIGN
128 Main Street, Suite 201
Biddeford, ME 04002
office: 207.499.4208

DATE OF ISSUE: 2/11/24
PROJECT STATUS: CD

ARCHITECT:
Leah Schaffner
leah@mobilestudiodesign.com
757-927-5324

ORIGINAL SHEET SIZE: 30X42

CONSULTANTS:

CIVIL ENGINEER:
HALEY WARD
207.889.4824
Drew Chalkowski
dchalkowski@haleyward.com

STRUCTURAL ENGINEER:
HALEY WARD
207.889.4824
Scott Kibler, P.E.
skibler@haleyward.com

MEP ENGINEER:
HALEY WARD
207.889.4824
Ron Wiley, P.E.
rwiley@haleyward.com

GEOTECHNICAL ENGINEER:
Summit Engineering
210 Marine Ave, Farmingdale, ME 04544
207.576.3313

CONTRACTOR:
TBD

3D VIEWS

A-900

mobile
studio
design



HALEY WARD®

ENGINEERING | ENVIRONMENTAL | SURVEYING

February 14, 2024

Biddeford City Hall
Attn: Planning Department
205 Main Street
Biddeford, Maine 04005

Re: Preliminary Site Plan Application | Biddeford Primary School Expansion

Dear Planning Staff & Board,

On behalf of the Biddeford School Department, Haley Ward, Inc. (Haley Ward) is pleased to submit a Preliminary Site Plan Application for the proposed expansion to the Biddeford Primary School located at 320 Hill Street for review. The expansion will include an 11,806 square foot building footprint addition to the existing school with the purpose of providing additional classrooms and learning space. Also included in the sitework will be an emergency access drive, eight additional parking spaces on the lower parking areas, and the relocation of an existing playground. The project underwent sketch plan review with the Biddeford Planning Board on January 17, 2024.

We request that the project be accepted for Preliminary Site Plan review by City Staff and the Planning Board. Please find the preliminary site plan checklist and application materials attached.

Thank you for your time and assistance. Please do not hesitate to call if you have any questions or need additional information.

Sincerely,
Haley Ward, Inc.

Drew Olehowski, P.E.
Project Manager

DJO/awg/tal
Attach.

Biddeford City Hall | 02.14.2024 | 14125.003

10975 SE Federal Hwy, Hobe Sound, FL 33455
T: 772.223.8850 | [HALEYWARD.COM](https://www.haleyward.com)





HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

PRELIMINARY SITE PLAN APPLICATION

TO
CITY OF BIDDEFORD

APPLICANT
BIDDEFORD SCHOOLS

18 Maplewood Avenue, Biddeford, Maine 04005



Corporate Office

One Merchants Plaza
Suite 701
Bangor, ME 04401
T: 207.989.4824
F: 207.989.4881

HALEYWARD.COM

FEBRUARY 2024
JN: 14125.003

Report Prepared By:
Haley Ward

One Merchants Plaza | Bangor, Maine 04401



TABLE OF CONTENTS

APPLICATION

Application
Agent Authorization
Site Plan Drawing Checklist

ATTACHMENTS

Attachment A Project Narrative
Attachment B Letters of Approval/Ability to Serve
Attachment C Financial Capacity / Bond
Attachment D Deed
Attachment E Photographs of Site
Attachment F Geotechnical Report
Attachment G Natural Resource Report
Attachment H Stormwater Report
Pre-Development Hydrology Map & Calculations
Post-Development Hydrology Map & Calculations
Attachment I Erosion Control and Maintenance Plan
Attachment J Architectural Plans & Renderings

PLANS

C001 General Notes & Legend
EX Existing Conditions Plan
C100 Site Demolition & Erosion Control Plan
C101 Overall Site Plan
C102 Site Plan
C103 Grading & Utility Plan
C104 Emergency Vehicle Access Plan
C501 Civil Details

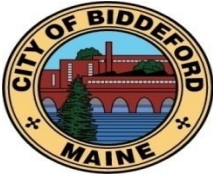


APPLICATION

Application

Agent Authorization

Site Plan Drawing Checklist

**City of Biddeford – Planning Department****Planning Board Application**

P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

☐ Shoreland Zoning Permit ☒ Site Plan Review ☐ Extraction
☐ Conditional Use Permit ☐ Subdivision ☐ Private Way
☐ Other: _____

Applicant Information:

Name: CITY OF BIDDEFORD, BIDDEFORD SCHOOLS
 Mailing Address: 18 MAPLEWOOD AVENUE, BIDDEFORD, ME
 Telephone: _____
 Email: _____

What is your legal interest in the property?

☒ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: SAME AS APPLICANT
 Mailing Address: _____
 Telephone: _____
 Email: _____

Agent's Information:

Name: HALEY WARD, INC. ATTN: DREW OLEHOWSKI, PE
 Mailing Address: 120 Main St #132, Saco, ME 04072
 Telephone: 207-898-4824
 Email: DOLEHOWSKI@HALEYWARD.COM

Engineer/Surveyor's Information:

Name: SAME AS AGENT
 Mailing Address: _____
 Telephone: _____
 Email: _____

Project Location and Lot Information:

Street Address: 320 HILL STREET Drainage Watershed: SACO RIVER
 Tax Map: 82 Lot: 32
 Current Zoning: R1A Shoreland Zoning: NO
 Size of Lot: _____ () acres () s.f. Lot Frontage: _____
 Existing Use of Property: SCHOOL

Property currently serviced by:

☒ City Road ☒ Public Sewer ☐ Public Water ☒ Public Trash
☐ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? ☒ (Yes) ☐ (No) if yes attach information

Is the project within the 100-year floodplain? ☐ (Yes) ☒ (No) if yes attach information

Do you plan to bring fill onto the lot? ☒ (Yes) ☐ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

SCHOOL EXPANSION

Property to be Serviced by:

☒ City Road ☒ Public Sewer ☒ Public Water ☒ Public Trash
☐ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Limits of Disturbance: **1.13** (X)acres ()s.f.

Net change in impervious cover: **0.51** (X)acres ()s.f.

Is this project part of a larger project? ☐ (Yes) ☒ (No)

Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)

Is this project within the Urbanized Area/MS4 (see [City Drainage Map](#)) ☒ (Yes) ☐ (No)

Is the project proposing any Stormwater facilities/BMPs? ☒ (Yes) ☐ (No)

Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)

If in a Shoreland Zone:

Percent of residential lot coverage (Max 20%): _____

Percent of structure expansion (Max 30%): _____

If Subdivision Review, number of lots proposed: _____

If a Private Way is proposed, number of lots served: _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: **11,806 SF**

Total new square feet paving/parking: **9,831 SF**

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval
 - ☒ Fire Department – Contact Chief or Deputy Chief – 282-9986
 - ☒ Ability to Serve for Water Service – Maine Water – 282-1543
 - ☒ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
 - N/A** Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to “Attachment A Fees and Charges” of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: X(Yes) (No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant:  (Agent) Date 02/14/2024

Signature of Property Owner: _____ Date _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - *Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'*
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
 - *All drawings & CAD reference files must be to-scale and within the following coordinate systems:*
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

mobile studio design

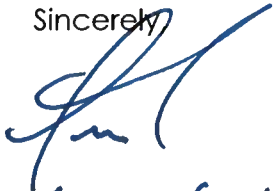
12 February 2024

Project: Biddeford Primary School Addition
Project Address: 320 Hill Street, Biddeford Maine 04005
Map 82, Lot 32

To Whom It May Concern:

I hereby authorize Mobile Studio Design and Haley Ward to act as my agent for the permitting process for the new construction of a 2-Story addition at Biddeford Primary School.

Sincerely,



Superintendent

Mobile Studio Design, Inc.
128 Main Street, Unit 201
Biddeford, Maine 04005
207.494.4208

CITY OF BIDDEFORD - SITE PLAN APPLICATION DRAWING CHECKLIST

LAST REVISED: 05/17/23

CHECKLIST DIRECTIONS:

- 1. The following checklist must be **completely** filled out by the applicant for any Site Plan submittal to the Planning Department.
- 2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
- 3. City to review applicant's submittal and checklist responses. Projects missing submittal information with non-acceptable reasoning will be rejected.
- 4. Items in **BLACK** are required for 'Preliminary Site Plan' approval & 'Final Site Plan' approval.
- 5. Items in **BLUE** are only required for 'Final Site Plan' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	Biddeford Primary School Expansion
Planning Board # (if available):	
Applicant Name/Info:	City of Biddeford, Biddeford Schools
Submittal #/Type (Prelim/Final):	
Submittal Date:	

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE		CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	GENERAL PLAN REQUIREMENTS				
A	Drawing specific legends (linetypes, hatches, etc.)	Yes			
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	Yes			
C	North arrows, standard engineering scale viewports, dated revision blocks	Yes			
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	Yes			
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	Yes			
2	COVER SHEET				
A	Project Name & Property Address	Yes			
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	Yes			
C	Site Location Map	Yes			
D	Sheet Set List of Drawings	Yes			
E	Tax Map and Lot ID	Yes			
F	Zoning & Shoreland Zone Information	Yes			
G	Existing Use Description	Yes			
H	Proposed Use Description	Yes			
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variiances requesting	No			
J	Name of Drainage Watershed	Yes			
K	Within the MS4 Urbanized Area (Yes/No)	Yes			
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	Yes			
M	Within the 100-year Flood Zone (Yes/No)	No			
N	Public Road Proposed (Yes/No)	No			
O	Private Road Proposed (Yes/No)	No			
P	Public Sewer Connection (Yes/No); if yes, need to include a proposed sewer flow calculation per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	Yes			
Q	Public Storm Drain Connection (Yes/No)	No			
R	Limits of Disturbance in acres	Yes			
S	Pervious Land Cover square footage, existing and proposed	Yes			
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	Yes			
U	Building Roof square footage, existing and proposed	Yes			
V	Assigned Planning Board Number				
W	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)				
3	EXISTING CONDITIONS PLAN				
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	Yes			
B	Survey Benchmark Locations (with XYZ Coordinates annotated)	Yes			
C	Property & Right-of-Way Lines	Yes			
D	Boundary line information (bearings, distances, etc.)	Yes			
E	Property pin and monumentation locations	Yes			
F	Existing easements with proper ownership identified	Yes			
G	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	Yes			
H	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
I	100-year Flood Zone Limits & Elevation	No	Not applicable		
J	USDA-NRCS Soil Boundaries and Labels	Yes			

	K	Existing contours with adequate contour labelling; minimum 1' contour interval	Yes			
	L	Existing building FFEs annotated	Yes			
	M	Spot elevations for existing building corners, door entrances, accessible parking/walkways, road centerlines, and bottom/top of curbs	Yes			
	N	Existing buildings & structures	Yes			
	O	Existing pavement areas & number of parking spaces	Yes			
	P	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	Yes			
	Q	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	Yes			
	R	Existing signage and striping	Yes			
	S	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	Yes			
	T	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	Yes			
	U	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	Yes			
	V	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	Yes			
	W	Location of any borings, drinking wells, and monitoring wells	Yes			
4		SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN				
	A	Limits-of-disturbance outlined and acreage annotated	Yes			
	B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
	C	100-year Flood Zone Limits	No	Not applicable		
	D	Callout existing site features to be demolished/removed/replaced	Yes			
	E	Callout existing utilities to be demolished/removed/abandoned-in-place	Yes			
	F	Hatch existing buildings and pavement to be removed	Yes			
	G	Construction Entrance location(s)	Yes			
	H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	Yes			
	I	Stockpile and staging area(s) identified (with proper perimeter control)	Yes			
	J	Inlet protection location(s)	Yes			
	K	Note requiring contractor to implement dust control measures throughout construction	Yes			
	L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	No	Not applicable		
	M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing				
	N	If large development is proposed with an extensive underground stormwater conveyance network, show sediment trap/basin location(s) needed for constructability/phasing; provide sizing calculations				
5		SITE PLAN/SUBDIVISION PLAN				
	A	Partial Site Plans needed for any viewport scale greater than 1"=20'				
	B	Existing property and right-of-way lines	Yes			
	C	Proposed subdivision lot lines and labels	No	Not applicable		
	D	Required Zoning Setbacks shown with dimensions and annotation	Yes			
	E	Bulk requirement summary table (zoning/parking calculations)	Yes			
	F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
	G	100-year Flood Zone Limits	No	Not applicable		
	H	Proposed building outlines, door entrances and loading docks	Yes			
	I	Proposed building labels	Yes			
	J	Proposed road extents; provide clear annotation if roads will be public or private	No	Not applicable		
	K	Proposed parking and accessible parking locations; annotate parking space counts	Yes			
	L	Proposed signage, parking striping, and traffic striping	Yes			
	M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	No	Not applicable		
	N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	Yes			
	O	Separate hatching for buildings, sidewalks, pavement, landscaping	Yes			
	P	Proposed landscaping; detailed landscaping design should be on separate plans	Yes			
	Q	Designated snow storage areas	Yes			
	R	Proposed dumpster locations and trash removal access	Yes			
	S	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	Yes			
	T	Radial dimensions for all curbs, landscaped islands, sidewalks	Yes			
	U	Road centerline stationing shown, labelled every 0+50' with curve data	No	Not applicable		
	V	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	No	Not applicable		

	W	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	No	Not applicable		
	X	Planning Board signature block for final recording				
6		GRADING PLAN				
	A	Partial Grading Plans needed for any viewport greater than 1”=20’				
	B	Limits-of-disturbance outlined and acreage annotated	Yes			
	C	Proposed Building Labels with Individual Finished Floor Elevations (FFE)s	Yes			
	D	Existing contours with adequate contour labelling, screened; minimum 1’ contour interval	Yes			
	E	Proposed contours with adequate contour labelling; minimum 1’ contour interval	Yes			
	F	Detailed grading for all ditches, swales, outfalls, and riprap	Yes			
	G	All proposed contours tie-into existing contours at limits-of-disturbance outline	Yes			
	H	Existing spot elevations for all asphalt and curb tie-in locations	Yes			
	I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	Yes			
	J	100-year Flood Zone Limits	No	Not applicable		
	K	Proposed spot elevations for all important roadway geometric points and/or on a 50’ maximum interval: low/high points, PC/PT, road centerline, edge-of-asphalt				
	L	Proposed spot elevations for all curblines (bottom/top-of-curb) and sidewalks				
	M	Proposed spot elevations for all parking and drive aisle geometry points				
	N	Proposed spot elevations for all building corners and door-entry locations				
	O	Proposed retaining wall/loading dock elevations (bottom/top of wall)				
	P	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points				
	Q	Proposed % slope arrows for all ADA parking spaces and sidewalks				
	R	Proposed longitudinal % slope arrows for drainage ditch centerlines				
	S	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas				
	T	Estimated cut/fill earthwork volumes; if disturbing within Flood Zone, separate set of earthwork volumes required (site vs. within flood zone)				
7		ROAD PROFILES (if public/private road proposed)				
	A	Existing surface; dashed and screened	No	No public or private road		
	B	Proposed surface; continuous and bold	No	No public or private road		
	C	Corresponding centerline stationing and curve data annotation	No	No public or private road		
	D	Road cross-section including proposed surface cross slopes; include multiple sections for various road cross slope conditions proposed (crowned, superelevated)	No	No public or private road		
	E	Horizontal and vertical scale bars	No	No public or private road		
	F	Clear annotation if proposed road will be public or private	No	No public or private road		
	G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	No	No public or private road		
	H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	No	No public or private road		
8		UTILITY PLAN				
	A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	Yes			
	B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	Yes			
	C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	Yes			
	D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	Yes			
	E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	Yes			
	F	Proposed storm culverts, outfalls, and riprap locations and sizes	Yes			
	G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	Yes			
	H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	Yes			
	I	Flow directional arrows for storm & sewer pipes	Yes			
	J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	Yes			
	K	All storm drains must be sized to convey the 25-year storm				
	L	Sewer force main sizes and invert elevations				
	M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W)				
	N	Grease trap & oil-water separator locations, sizes, elevations				
	O	Water, gas, electric, and telecom sizes labelled				
9		UTILITY PROFILES				

	A	Utility profiles for all gravity storm drains and sewer pipes, including all laterals, catch basins, culverts, and outfalls; profiles preferred to be aligned on the pipe centerline (not superimposed on the road centerline)				
	B	Existing surface; dashed and screened				
	C	Proposed surface; continuous and bold				
	D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)				
	E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope				
	F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated				
	G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated				
	H	Known ledge or groundwater elevations				
	I	For all storm drains, 25-year HGL must be shown on profiles with starting tailwater condition identified				
	J	For storm outfalls, include riprap sizing and grading extents				
	K	Horizontal and vertical scale bars				
10	DETAILS					
	A	Road section detail, including pavement & gravel depths	No	Access Drive sections and depths provided		
	B	Sidewalk, paver, crosswalk, and any other pavement section details	Yes			
	C	Pavement sawcut detail	Yes			
	D	Utility trench/backfill detail	Yes			
	E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	Yes			
	F	Signage, striping, and ADA details	Yes			
	G	E&S notes and details; only show applicable/proposed measures	Yes			
	H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	Yes			
	I	Storm outfall & riprap details	Yes			
	J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	No			
	K	Pump station, grease trap, and oil-water separator details				
	L	Conduit section details				
	M	Miscellaneous details (as needed)				
11	LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS					
	A	As required by ordinance; at a minimum: locations, counts, and species/models must be identified				
	B	Landscaping & lighting details				
12	DOCUMENTS/REPORTS/CALCULATIONS					
	A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction	No	Planning department to provide required fees to the school district		
	B	Predevelopment & Post-development Drainage Area Maps, including: i. Subdrainage areas delineated and labeled ii. Points of Interest/Analysis shown and labeled iii. Hatching for different land cover areas (impervious, pervious, gravel) iv. Time of concentration (Tc) paths & durations iv. Four City standardized stormwater summary tables	Yes			
	C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	Yes			
	D	A Performance Guarantee Cost Estimate utilizing Planning's template	No	Planning department to provide required fees to the school district		
	E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	No	Not applicable		
	F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches) via the rational method; starting tailwater conditions/documentation must be clearly identified				

G	If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies				
H	Sizing calculations for any SWM water quality BMP or detention facility				
I	A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: i. Annual maintenance requirements ii. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on going maintenance has occurred and what remedial repairs are needed iii. Signed Property Owner Agreement: including the current property owner’s contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership				
J	Salt Management Plan				
K	Sewer pump station sizing calculations				
L	Sewer pump station maintenance plan				
M	Grease trap sizing calculations				
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more				
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals				



ATTACHMENT A

PROJECT NARRATIVE



PROJECT NARRATIVE

PROJECT DESCRIPTION

The proposed two-story school expansion located at 320 Hill Street will include an 11,806 square foot addition to primarily house elementary classrooms. The sitework will also include an emergency access drive, eight additional parking spaces on the lower parking areas, and relocating an existing playground.

EXISTING CONDITIONS

The subject property is the current site of the Biddeford Primary School. The expansion will take place within the developed footprint of the school grounds including over part of an un-used baseball diamond. A natural resources survey was conducted on the property by Haley Ward, Inc. in the spring of 2023; wetlands were identified adjacent to the project area. The site is dominated by sandy loams.

ZONING

The project parcel is identified as Map 82 Lot 32 on the City of Biddeford's municipal tax maps and is located within the R1A zoning district. The parcel is within the Saco River watershed.

This development is in conformance with all space and bulk standards of the zone. Please see the Site Development Data Table provided on the Site Plans for more information.

SITE ACCESS

Traditional site access will not change due to the addition of the school. A 20-foot-wide driveway has been provided for access around the expansion for emergency vehicles. This driveway will have removal bollards blocking its entrance at all times except for maintenance and emergencies. Sidewalks for pedestrian circulation have been provided around the expansion. The proposed parking spaces in the lower parking lot will not change the circulation of traffic through the site.

PARKING

The current parking requirements, including those of the expansion, are already being exceeded by the amount of parking spaces on site. However, the school is requesting that an additional eight parking spaces be added for observed demand during the school days. These parking spaces will be added to the lower parking lot in areas that are currently landscaped. Please see a breakdown of the parking requirements and provisions on the Site Plan.

STORMWATER

The site is subject to an existing Site Law Permit (#L-015965-22-A-N) but meets the criteria for an exemption from an amendment as a modification to an educational institution because it does not exceed an additional 40,000 square feet of disturbed area not to be revegetated in a calendar year.



We are proposing to utilize grass under-drained soil filters and porous pavement to manage stormwater runoff quantity and quality. Please see the provided Stormwater Report in **Attachment H** for more information.

EROSION AND SEDIMENTATION CONTROL

An Erosion and Sedimentation Control Plan has been provided in **Attachment I**.

ARCHITECTURE / LANDSCAPING / LIGHTING

Architectural Renderings and Floorplans of the proposed building have been provided in **Attachment J**. A landscape and lighting plan will be provided for the Final plan submission.

SOLID WASTE

The dumpsters existing on site in the north corner of the property will be sufficient to handle the excess waste created by the expansion.

UTILITIES

Utilities will be provided through the existing school. Please see the Ability to Serve letters provided by the respective utilities in **Attachment B**.

SNOW STORAGE

Snow will be stockpiled in areas around the perimeter of the new access drive and expansion building as shown on the Site Plan, and removed by a contractor retained by the applicant, if storm conditions warrant.

STATE REVIEW

The project will require a notice to the Maine Department of Environmental Protection (MDEP) proving that the development will oblige by the existing Site Location of Development Permit.



ATTACHMENT B

LETTERS OF APPROVAL/ABILITY TO SERVE



January 10, 2024

Attn: Andrew Godfrey, EI
120 Main Street, Suite 132
Saco, ME

Re: Ability to Serve Determination – Biddeford Primary School Expansion

Greetings,

The Maine Water Company (MWC) has received your request for an Ability to Serve Determination for the property located at 320 Hill Street, Biddeford, Maine for your change of use to include the primary schools expansion.

The request specifies a plan for approximately 12,000 SF in additional building area, and an extension of existing water services. Including the static pressure in the area is approximately **35 psi**.

Based on the criteria you provided, via email on November 16th, 2023, the expected water usage is within the water system's available capacity. The Maine Water Company does have sufficient capacity in the area from the existing 12-inch DIP main on Hill St to serve this project. Additional infrastructure improvements may be required at the expense of the developer to meet the overall needs of this project.

Criteria

Proposed plan for an 11,806 square foot addition to the Biddeford Primary School at 320 Hill Street.

*Fixture Count:
18 sinks
16 water closets
4 water fountains
2 hose bibs
1 mop sink*

Additional 4" fire service to be sized in accordance with NFPA and approved by Maine Fire Marshal or applicable other.

Conditions of Service

- MWC has the understanding that the existing service lines may not be adequately sized or currently in the incorrect location, and may need modifications.
- The developer is required to pay for the cost of any modifications, renewal of impacted service lines, and retirement of unused or discontinued services to Maine Water Co's standards of best practice.
- MWC has the understanding fire service demand is not to be included in this request, or accounted for in this Ability to Serve Determination.
- Notify Maine Water of any changes to the existing service line connections.
- Additional or a change in backflow devices may be needed to comply with existing cross connection rules.

Should a request for service or completion of the project not be executed within one year of the date of this letter, the Maine Water Co reserves the right to reevaluate its ability to serve this project.

All work must be completed in accordance with MWC Terms and Conditions as well as material specifications. All appropriate paperwork must be completed and deposit paid prior to the start of construction. Please forward all design plan revisions as the project develops to prevent construction delays. Water service will be provided in accordance with Maine Public Utility Commission rules. If you have any additional questions, please do not hesitate to contact our office at 1-800-287-1643 or by email at Evan.Vashon@mainewater.com. We look forward to working with you throughout design and construction.

Sincerely,
The Maine Water Company

Evan Vashon
Engineer



City of Biddeford, Maine

City of Biddeford

Public Works Department / Engineering Division
P.O. Box 586 • 205 Main Street, Suite 301
Biddeford, ME 04005
Phone: (207) 284-9118 • Fax: (207) 571-0662

Letter of Wastewater Treatment Plant Capacity to Serve, **Biddeford Primary School Expansion, Hill Street**

Andrew Godfrey, EI
Civil Engineer
Haley and Ward
120 Main Street, Suite 132
Saco, ME 04072

December 06, 2023

Brief description of project: **Biddeford Primary School Expansion, Hill Street**, Estimated new flows: 1444 gpd.

Determination

The applicant is proposing to build an 11,000 +/- square foot expansion to the Biddeford Primary School on Hill Street.

The City of Biddeford Wastewater Department has reviewed the request to serve the above described project and the supporting information provided by your team. It has been determined that at this time the City has sufficient capacity at the City's Wastewater Treatment Facilities to serve the above described project. It is estimated that 1444 gpd of new flow will be generated from the project. Changes to the project from that presented to this department may require a new review of the request for ability to serve. This determination will be effective for a period of one year from the date above. No roof drains shall be connected into the system.

Upon approval of the Planning Board, the applicant must make application for sewer service. Flow amounts for the project will be determined at the time application is made and may or may not be the amount stated above. The applicant will be required to pay all fees including all impact fees based on the flow amount calculated at the time application is made and prior to the issuance of any building permits.

This Capacity to Serve Letter is intended only to state that the City of Biddeford Wastewater Treatment Plant Facility's has the ability to treat the flow from the above stated project once it is received at the treatment facility.

Project design plans must be submitted to the City for review and comment. The Planning Department, Engineering Department or other persons from the Wastewater Department may require further studies, calculations or documentation to determine any actions that may need to be taken to address any impacts/capacity issues. System upgrades may be required in order to address any impacts this project may have on the City's sewage collection and conveyance system(s) or its components.

Thomas Milligan, PE
City Engineer Emeritus
City of Biddeford Engineering Department
Tom.milligan@biddefordmaine.org
207-284-9118

CC: Jeff Demers, Public Works/Wastewater Director
Craig Chekan, City Engineer
Roby Fecteau, Code Enforcement
David Galbraith, City Planner
Alex Buechner, Superintendent WWTF

205 Main Street, Biddeford, ME 04005 P: 207.284.9313 F: 207.571.0678 www.biddefordmaine.org

*The City of Biddeford is an equal opportunity provider. To file a complaint, write to
Human Resource Director, 205 Main Street Biddeford, ME 04005, or call (207) 286-0593.*

On Oct 18, 2023, at 4:24 PM, Dexter, Edward <Edward.Dexter@Biddefordmaine.org> wrote:

Good afternoon Leah:

In review of your initial drawing I have a concern with the lack of access to the building from the exterior. There does not appear to be any drivable area across the front, side or back that would give fire department access with an aerial ladder truck. I would be more than happy to discuss this with you and how to work this into your plans.

Sincerely,
Ed Dexter



December 6, 2023

Andrew Godfrey, EI
Haley Ward

Re: Ability to Serve for 320 Hill St Biddeford, ME 04005.

Dear Andrew,

Thank you for your interest in using natural gas for the above referenced project.

This is to confirm that natural gas can be made available from our distribution system to serve your proposed project.

Any improvements to the existing distribution system that are necessary to provide this service, as well as the design of the gas system in the project itself, will be established as the overall design and scope of your project progresses.

All work necessary to provide service will be performed in accordance with the Maine Public Utilities Commission requirements.

If you have any further questions or require additional information, please contact me directly at (207) 541-2578 or email at velezc@unitil.com.

Sincerely,

Chasity Velez-Manley

Chasity Velez-Manley

Senior Business Development Representative

(T) 207-541-2578 (F) 207-541-2578

On Oct 18, 2023, at 4:24 PM, Dexter, Edward <Edward.Dexter@Biddefordmaine.org> wrote:

Good afternoon Leah:

In review of your initial drawing I have a concern with the lack of access to the building from the exterior. There does not appear to be any drivable area across the front, side or back that would give fire department access with an aerial ladder truck. I would be more than happy to discuss this with you and how to work this into your plans.

Sincerely,
Ed Dexter



ATTACHMENT C

FINANCIAL CAPACITY/BOND



FINANCIAL CAPACITY

A bond for the project has been passed by voters and the City has the capacity to fund the project.



ATTACHMENT D

DEED

Know All Men by these Presents,

I.R.S. \$30.80

That We, Paul H. Lauzon and Cecelia J. Lauzon both of Biddeford in the County of York and State of Maine -----

in consideration of One dollar and other valuable considerations

paid by THE INHABITANTS OF THE CITY OF BIDDEFORD, a body corporate and politic

the receipt whereof we do hereby acknowledge, do hereby give, grant,

bargain, sell and convey, unto the said THE INHABITANTS OF THE CITY OF BIDDEFORD

their successors ----- Heirs and Assigns, forever,

the following described property: All our right, title and interest in and to a certain lot or parcel of land situated in said Biddeford, and bounded and described as follows, viz:

Beginning at the easterly corner of land now or formerly of one Gauthier on the southwesterly side of West Street, at an iron pipe driven into the ground; thence S 52°W by said land of Gauthier eight hundred eighty-five (885) feet to a stone bound; thence the same course by land of owners unknown two hundred fifty-two and 1/10 (252.1) feet to an iron pipe driven into the ground and to Lot No. 2, Range F, on a "Plan of Lots of land in Biddeford, formerly belonging to the Estate of Jeremiah Hill, Esq." said plan being recorded in York County Registry of Deeds in Plan Book 162, Page 284; thence S 37 3/4°E by said Lot No. 2 four hundred thirty and 2/10 (430.2) feet to an iron pipe driven into the ground one (1) rod northwesterly of the Middle Line, so-called; thence northeasterly by a line which is one (1) rod northwesterly of and parallel to said Middle Line seven hundred ninety-four and 1/10 (794.1) feet to an iron pipe driven into the ground and the southwesterly side of land conveyed by Thomas F. Foss to Walter Foss July 23, 1894, recorded in said Registry in Book 462, Page 309, now of Ernest Foss; thence northwesterly by said Walter Foss lot one hundred fifteen and 5/10 (115.5) feet to an iron pipe driven into the ground, said line makes an included angle of 91°19' with the last described line; thence northeasterly by said Walter Foss lot three hundred thirty (330) feet to an iron pipe driven into the ground and to West Street; said line being parallel with and eight (8) rods northwesterly from said Middle Line; thence northwesterly by said West Street making an included angle of 91°19' with the last described line three hundred twenty-four and 2/10 (324.2) feet to the point of beginning.

EXCEPTING AND RESERVING such portions as were conveyed by deed of Andre Boivin, et al, to Arsene J. and Alma Huot under date of February 20, 1958, recorded in said Registry in Book 1362, Page 167.

ALSO EXCEPTING herefrom that portion conveyed as described in a certain Indenture as recorded in said Registry on December 8, 1959, in Book 1424, Page 169 and also as taken by said City of Biddeford in their Instrument dated June 14, 1938, recorded in said Registry in Book 925, Page 185.

ALSO EXCEPTING AND RESERVING any rights of way now in existence along said Middle Line and any other rights of way of record.

ALSO all our right, title and interest in and to a certain other lot or parcel of land in said Biddeford, situated on the northwest side of the Middle Line and being the southwesterly half part of that part of Lot No. 2, Range F, lying northwest of said Middle Line on a Plan of the Hill Estate drawn by Tristram Jordan, Jr. to which reference is hereby made and containing five (5) acres, and one hundred (100) ^{square} rods and being the same premises described in deed of





ATTACHMENT E

PHOTOGRAPHS OF SITE



BIDDEFORD SCHOOLS SKETCH PLAN REVIEW

Photo No. 1

Site Location:
Biddeford School

Description:
Overview of school,
looking southwest.
Proposed expansion
to occur in the south,
plan left.



Photo No. 2

Site Location:
Biddeford School

Description:
Area south of the
existing school
where the proposed
expansion will
connect.





**BIDDEFORD SCHOOLS
SKETCH PLAN REVIEW**

Photo No. 3

Site Location:
Biddeford School

Description:
Looking further south
at open area for
proposed expansion
and emergency
access.



Photo No. 4

Site Location:
Biddeford School

Description:
Rock outcroppings
to remain between
the existing and
proposed buildings.





ATTACHMENT F

GEOTECHNICAL REPORT

The key to success starts with a solid foundation.
ENGINEERING | EXPLORATION | EXPERIENCE

Geotechnical Report

*Primary School Addition
320 Hill Street, Biddeford, Maine*



Client

Biddeford School Department
18 Maplewood Avenue
Biddeford, ME 04005

Project #: 23175
Date: 8/9/2023

Table of Contents

1.0 PROJECT DESCRIPTION	3
2.0 EXPLORATIONS.....	3
3.0 SUBSURFACE CONDITIONS	4
3.1 SOIL	4
3.2 GROUNDWATER	4
3.3 BEDROCK	5
4.0 GEOTECHNICAL EVALUATIONS AND CONSIDERATIONS.....	5
5.0 GEOTECHNICAL RECOMMENDATIONS	6
5.1 BEARING CAPACITY AND SUBGRADE PREPARATION.....	6
5.2 FROST PROTECTION	6
5.3 SEISMIC DESIGN.....	6
5.4 GROUNDWATER CONTROL.....	7
5.5 SLABS-ON-GRADE.....	7
5.5.1 Interior Slabs.....	7
5.5.2 Exterior Slabs.....	7
5.5.3 Elevator Slab.....	8
5.6 PAVEMENT SECTION RECOMMENDATIONS.....	8
6.0 EARTHWORK CONSIDERATIONS	8
6.1 EARTHWORK FOR CONSTRUCTION	8
6.2 MATERIALS.....	9
7.0 CLOSURE	10

Appendix A – Exploration Location Plan

Appendix B – Exploration Logs

August 9, 2023
SGS Project #: 23175

Biddeford School Department
18 Maplewood Avenue
Biddeford, ME 04005
Attn: Leah Schafer

Reference: Geotechnical Report – Proposed Primary School Addition
320 Hill Street, Biddeford, Maine

Dear Leah,

Summit Geoengineering Services, Inc. (SGS) has completed a geotechnical investigation in connection with the proposed addition to the Biddeford Primary School at 320 Hill Street in Biddeford, Maine. Our scope of services included the observation of four test borings and the preparation of this geotechnical report summarizing our findings and providing geotechnical recommendations.

1.0 Project Description

The project consists of the construction of a new 2-story addition to the existing primary school. The existing primary school consists of 2-story building with an approximate first floor footprint of 52,250 square feet. The addition will have approximate dimensions 161 feet by 62 feet. An elevator connecting the first and second floor will be constructed in the north end of the building. Existing grades are relatively flat across the site, sloping upwards with closer to the existing building. The site is bordered by a wetland to the east. No structural loads, foundation plans, or site grading plans were available at the time of this report. Recommendations given in this report are made based on an assumed maximum allowable bearing pressure of 3,000 psf and a maximum column load of 100 kips. If loads and footing sizes differ from the assumed values, SGS should be notified so the conditions may be re-evaluated.

2.0 Explorations

Summit Geoengineering Services (SGS) observed the subsurface conditions on July 12, 2023 with the drilling of 4 borings. The borings were completed by SGS using a rubber tracked AMS PowerProbe 9500 VTR drill rig. The borings were explored to depths ranging from 15.6 feet (refusal) to 22 feet. The borings were completed using both 2 ¼-inch hollow stem augers and 3-inch casing. Standard Penetration Tests (SPT) were performed in increments of 5 feet. Soils were visually classified (*ASTM D2488*) using SPT split spoon sampling (*ASTM D1586*). The exploration locations were determined by SGS and marked out by others prior to the explorations. An exploration location plan and the exploration logs are included in *Appendix A* and *Appendix B*, respectively.

3.0 Subsurface Conditions

3.1 Soil

From the explorations, the soil at this site generally consists of the following:

- **Topsoil** (6 inches to 12 inches thick)
- **Fill** (1 foot thick)
- **Stream Alluvium** (13.5 feet to 21 feet thick)
- **Bedrock** (Present at 13.6 to 17 feet BGS or greater)

The **topsoil** generally consists of dark brown sandy silt with rootlets and trace gravel. The topsoil is present in test borings B-1, B-3, and B-4 and is approximately 6 to 12 inches in thickness. The topsoil is visually classified as ML in accordance with the Unified Soil Classification System (USCS) and is considered stiff and damp.

The **fill** generally consists of tan medium to coarse sand with trace silt. The fill is present in exploration B-2, which is immediately adjacent to the existing structure. Portions of the fill appeared to be re-worked native material, consisting of brown silty sand with trace gravel. The fill is approximately 1 foot thick and is visually classified as SP in accordance with the USCS. The fill is considered loose to compact and damp to humid.

The **stream alluvium** generally consisted of two layers, the top consisting of intermixed sand, silt, and clay, and the underlying consisting of a dense sand. The upper layer is damp to saturated, generally increasing in moisture content with depth. It is 13 feet to 20 feet thick and is classified as either ML or CL, in accordance with the USCS. SPT N-values range from 7 to 18 blows per foot (bpf). The underlying sand layer is present in test borings B-1 and B-4 at depths of 17 feet and 22 feet BGS respectively. The underlying sand layer is described as an olive gray dense sand with some to little silt. The sand layer is classified as SP-SM in accordance with the USCS and is considered saturated. SPT-N values in this layer range from 31 to 33 bpf.

Detailed descriptions of the soil can be found in the exploration logs in *Appendix B*.

3.2 Groundwater

Groundwater was measured at the following depths:

GROUNDWATER DEPTH		
Location	Depth (ft)	Reference
B-1	4.8	Measured in bore hole
B-2	5.5	Measured in bore hole
B-3	2.3	Measured in bore hole
B-4	12.0	Measured in bore hole

In general, groundwater was observed to be present within the upper stream alluvium and is expected to be present during foundation excavation.

3.3 Bedrock

Bedrock was encountered at the depths presented in the bedrock summary table below:

BEDROCK SUMMARY TABLE		
EXPLORATION	DEPTH (ft BGS)	NOTES
B-1	32.3	Probed to dense strata with drill rods
B-2	13.6	Split spoon refusal at 13.6 ft sloping to 15.6 ft
B-3	17	Hollow stem auger refusal

Bedrock outcrops are visible between B-2 and B-3, suggesting the bedrock layer may undulate between the two explorations. Apart from the outcrops, bedrock is not expected to be present within excavations.

4.0 Geotechnical Evaluations and Considerations

No structural loads or foundation plans were available at the time of this report. Settlement computations were made based on an assumed maximum bearing pressure of 3,000 psf and a maximum column load of 100 kips. Based on this and the data collected during the field explorations, the soils present at the assumed footing elevations are suitable for the building to be supported on conventional spread or continuous footings. SGS estimates settlement within the building footprint to be less than 1-inch. If footing sizes or loads are different than the assumed values, SGS should be notified so the conditions may be re-evaluated.

Due to the presence of shallow groundwater, there is potential for subgrade softening to occur within the sand, silt, and clay layer. To increase the stability of the subgrade, SGS recommends constructing footings on an 8-inch minimum layer of Crushed Stone.

SGS did not perform explorations to observe the existing building conditions, including the existing subgrade conditions and the existing footing geometry. SGS anticipates the existing footings to be 4 feet below the existing ground surface. This would place them at or close to the bottom of the new addition exterior footings. In any case, SGS recommends all addition footings adjacent to the existing footings are constructed no higher than the existing building footings. Care should be taken when performing excavations around existing footings to avoid undermining. Stabilization methods such as temporary shoring or other engineered controls are recommended if excavations are expected to be below the bottom of existing footings.

Preliminary concept plans show an elevator located in the northern portion of the building. Assuming an elevator pit depth of 5 feet, bedrock is not expected within the excavation for the elevator pit.

5.0 Geotechnical Recommendations

5.1 Bearing Capacity and Subgrade Preparation

Based on the results of our subsurface explorations, foundations can be supported on conventional spread footing foundations. SGS recommends that the bottom of the footings for the proposed building be constructed on a minimum of 8 inches of $\frac{3}{4}$ -inch Crushed Stone.

Assuming that the recommendations below are followed, the footings can be proportioned using a maximum allowable bearing pressure of 3,000 psf. Total settlement is computed to be less than 1 inch and differential settlement is expected to remain within tolerable limits. The allowable bearing pressure is based on the following construction sequences across the site:

- Remove existing pavement as necessary. Any exposed dry, granular subgrade should be proofrolled using a smooth drum vibratory compactor. Soft, wet, or unstable subgrade should not be proofrolled to avoid further disturbance. SGS recommends excavations to be completed using a smooth-edged bucket to minimize the disturbance of subgrade soils.
- Excavate to 8 inches below the proposed bottom of footing elevation. Remove any large elements, such as cobbles or boulders, if encountered, in the footing subgrade and replace with $\frac{3}{4}$ -inch Crushed Stone. If subgrade below the footing elevation is wet, it should not be proofrolled to avoid disturbing the fine-grained soils. In this case, excavations should be completed using a smooth-edged bucket.
- Place a minimum of 8 inches of Crushed Stone. The Crushed Stone should be compacted to lock the particles together. Footings can be constructed directly on the compacted Crushed Stone. In no case shall footings be constructed in standing water or frozen soil.
- SGS should observe the prepared footing subgrade conditions after excavation and prior to the placement of Crushed Stone.

5.2 Frost Protection

The design air freezing index for the Biddeford, Maine area is approximately 1,190-degree F days (10-year, 90% probability). Based on this, exterior footings and other footings exposed to freezing temperatures should be placed at a minimum depth of **4 feet** in order to provide adequate frost protection. We recommend that all foundations exposed to freezing temperatures be backfilled with Granular Borrow, see *Section 6.2* for gradation requirements. Granular Borrow should be compacted to a minimum of 95% of *ASTM D1557* when under slabs and footings.

5.3 Seismic Design

Based on the present soils, this site can be classified as **Seismic Site Class D** in accordance with ASCE 7-10, 7-16, and 7-22. The following seismic design coefficients should be used:

SUBGRADE SITE SEISMIC DESIGN COEFFICIENTS – ASCE 7			
Seismic Coefficient	ASCE 7-10 (Class D)	ASCE 7-16 (Class D)	ASCE 7-22 (Class D)
S_s	0.252	0.291	0.290
S_1	0.079	0.072	0.063
S_{MS}	0.403	0.456	0.340
S_{M1}	0.190	0.173	0.130
S_{DS}	0.269	0.304	0.220
S_{D1}	0.127	0.115	0.088
PGA_m	0.211 g	0.252 g	0.170 g

No liquefiable soils were encountered in our explorations.

5.4 Groundwater Control

Based on observed groundwater levels, groundwater is anticipated to be at or above the proposed bottom of footing elevations. Based on these conditions, underdrains are recommended. Underdrains, should consist of 4-inch rigid PVC or flexible ADS pipe surrounded by 6 inches of $\frac{3}{4}$ -inch Crushed Stone which is then surrounded by Mirafi 140N or equivalent. Underdrains should be outlet to a free draining location. Where exposed at the ground surface, a screen or other device should be placed over the outlet to prevent the migration of animals into the underdrain system.

In addition, we recommend all exterior grades slope away from the building footprint to reduce runoff water from infiltrating the foundation backfill soils.

5.5 Slabs-on-Grade

All fill should be compacted to a minimum of 95% of *ASTM D1557*. The gradation requirements for Granular Borrow, $\frac{3}{4}$ -inch crushed stone, and Structural Fill can be found in *Section 6.2*.

5.5.1 Interior Slabs

SGS recommends that interior slabs are constructed on 8 inches of Crushed Stone or 12 inches of Structural Fill. Crushed Stone should be tamped to lock the particles together. Fill required to raise the grade to the bottom of the slab should consist of Granular Borrow or Structural Fill. Granular Borrow and Structural Fill should be compacted to a minimum of 95% of their dry density as determined by *ASTM D1557*.

5.5.2 Exterior Slabs

For slabs in unheated entry areas, the following options should be considered for frost protection:

- Construct slab on frost wall foundations, in accordance with *Section 6.1 and 6.2*
- 6-inch slab (minimum thickness) over 2 inches of rigid insulation over 12 inches CS or SF (compacted)

- 6-inch slab (minimum thickness) over 36 inches CS or SF (compacted)

We recommend that insulation, if used, be extended 2 feet beyond the edge of the slabs and that it consist of a rigid polystyrene product.

5.5.3 Elevator Slab

No preliminary elevator slab elevations are available at the time of this report. Based on this, SGS assumes the bottom of the elevator slab will be located 5 feet below the finished floor elevation. Excavation performed for the elevator pit should be performed with a smooth-edged bucket to avoid the disturbance of the subgrade soils. Due to the presence of shallow groundwater, SGS recommends the installation of a sump to prevent water from ponding within the elevator pit. SGS anticipates bedrock will not be present during the excavation of the elevator pit. The elevator foundation should be constructed on a minimum 8-inch layer of Crushed Stone.

5.6 Pavement Section Recommendations

The mean annual freezing index for the Biddeford, Maine area is estimated at 890-degree F days (2-year, 50% probability). Based on the subgrade and mean annual freezing index, the anticipated mean annual frost penetration depth is 36 inches.

For the parking lots and access road, we recommend a minimum total section thickness of **18 inches**. We further recommend that the pavement section consist of the following materials:

PAVEMENT SECTION MATERIALS AND THICKNESSES		
Material	Thickness (in)	Specifications
Asphalt Surface Course	1 1/4	MDOT 703.09 Type 9.5 mm (Light Duty) or 12.5 mm (Heavy Duty)
Asphalt Binder Course	1 3/4	MDOT 703.09 Type 19 mm
Base Soil	3	MDOT 703.06 Type A
Subbase Soil	12	MDOT 703.06 Type D

Reference: MDOT Standard Specifications, 2014

Fill beneath the subbase soil can consist of Structural Fill or Granular Borrow placed and compacted to a minimum of 95% of *ASTM D1557*.

Underdrains are not necessary beneath paved areas. Paved areas should be side sloped to prevent water ponding on the surface.

6.0 Earthwork Considerations

6.1 Earthwork for Construction

The following temporary side slope requirements should be used during construction:

OSHA EXCAVATION STABILITY SOIL CLASSIFICATION		
Soil Type	OSHA Classification	Occupied Excavation >5 feet Temporary Side Slope Requirement
Structural Fill (SF)	Type C	1.5H:1V
³ / ₄ -inch Crushed Stone (CS)		
Granular Borrow (GB)		
Existing Fill	Type B	1H:1V
Stream Alluvium	Type C	1.5H:1V

The permissible slopes noted above are for excavations less than 20 feet deep. Excavations deeper than this should be designed by a professional engineer. If seepage occurs in any occupied excavation deeper than 5 feet, de-watering techniques should be considered and side slopes shall not exceed 1.5H:1V. De-watering in the excavations may also be required if water begins to pond in the excavations. We anticipate that dewatering, if necessary, can be accomplished using shallow sump and pumps. Dewatering is anticipated to be required for the construction of the elevator sump.

Excavations into fine-grained soil should be performed using a smooth-edged bucket. All foundations should be constructed on a minimum of 8 inches of compacted Crushed Stone.

To the extent possible, construction should occur during periods of dry weather to minimize disturbance to excavated subgrade areas. If excavations and construction occur during wet periods, the contractor should employ the necessary measures to eliminate disturbance to the subgrade from heavy rainfall, surface water runoff, freeze/thaw softening, or any other potential weather-related cause of subgrade disturbance.

Once excavation for the footings is initiated, SGS should be contacted to observe the subgrade conditions prior to the placement of any fill.

6.2 Materials

The gradation requirements reflect the portion of soil passing the 3-inch sieve size. The following table presents the recommended grain sizes for the materials to be used at the site:

GRADATION REQUIREMENTS FOR SITE MATERIALS			
Sieve Size	¹ Structural Fill (SF)	² Crushed Stone (CS)	³ Granular Borrow (GB)
4 Inch	---	---	---
3 Inch	100	---	100
2 Inch	---	---	---
1 Inch	---	100	---
¾ Inch	---	90 – 100	---
½ Inch	35 – 80	20 – 55	---
⅜ Inch	---	0 – 15	---
¼ Inch	25 – 65	---	---
No. 4	---	0 – 5	---
No. 40	0 – 30	---	0 – 70
No. 200	0 – 7	---	0 – 7
Maximum Particle Size	6"	1"	6"
⁴ Minimum Compaction Requirement	95%	---	⁵ 95%

¹Maine DOT Specification 703.06, 2014, Type D

²Maine DOT Specification 703.13, 2020, Crushed Stone ¾-Inch

³Maine DOT Specification 703.19, 2020, Granular Borrow

⁴Per ASTM D1557

⁵Compaction requirement for GB can be reduced to 90%, when in landscaping areas.

Crushed Stone should be placed in 12-inch maximum lifts and compacted with a minimum of 4 passes with a vibratory compactor. Granular Borrow should consist of a free draining, granular soil.

7.0 Closure

Our recommendations are based on professional judgment, generally accepted principles of geotechnical engineering and project information provided by others. No other warranty is expressed or implied. Some changes in subsurface conditions from those presented in this report may occur. Should the subsurface conditions, finish grades, or foundation loadings differ materially from those described in this report, SGS should be notified so that we can re-evaluate our recommendations.

We recommend that a qualified third-party testing agency be retained to provide QA/QC services during construction.

SGS should be contacted to observe the footing subgrade before the placement of the geotextile and Crushed Stone to ensure the subgrade conditions are sufficient to support the proposed foundations.

We appreciate the opportunity to serve you during this phase of your project. If there are any questions or if additional information is required, please do not hesitate to call.

Sincerely,
Summit Geoengineering Services, Inc.



Jason Barnes, E.I.
Geotechnical Engineer



William M. Peterlein, P.E.
President & Principal Engineer



Appendix A

Exploration Location Plan

PLAN REFERENCE

AERIAL IMAGE (OCTOBER 2021) WAS
OBTAINED FROM GOOGLE EARTH.

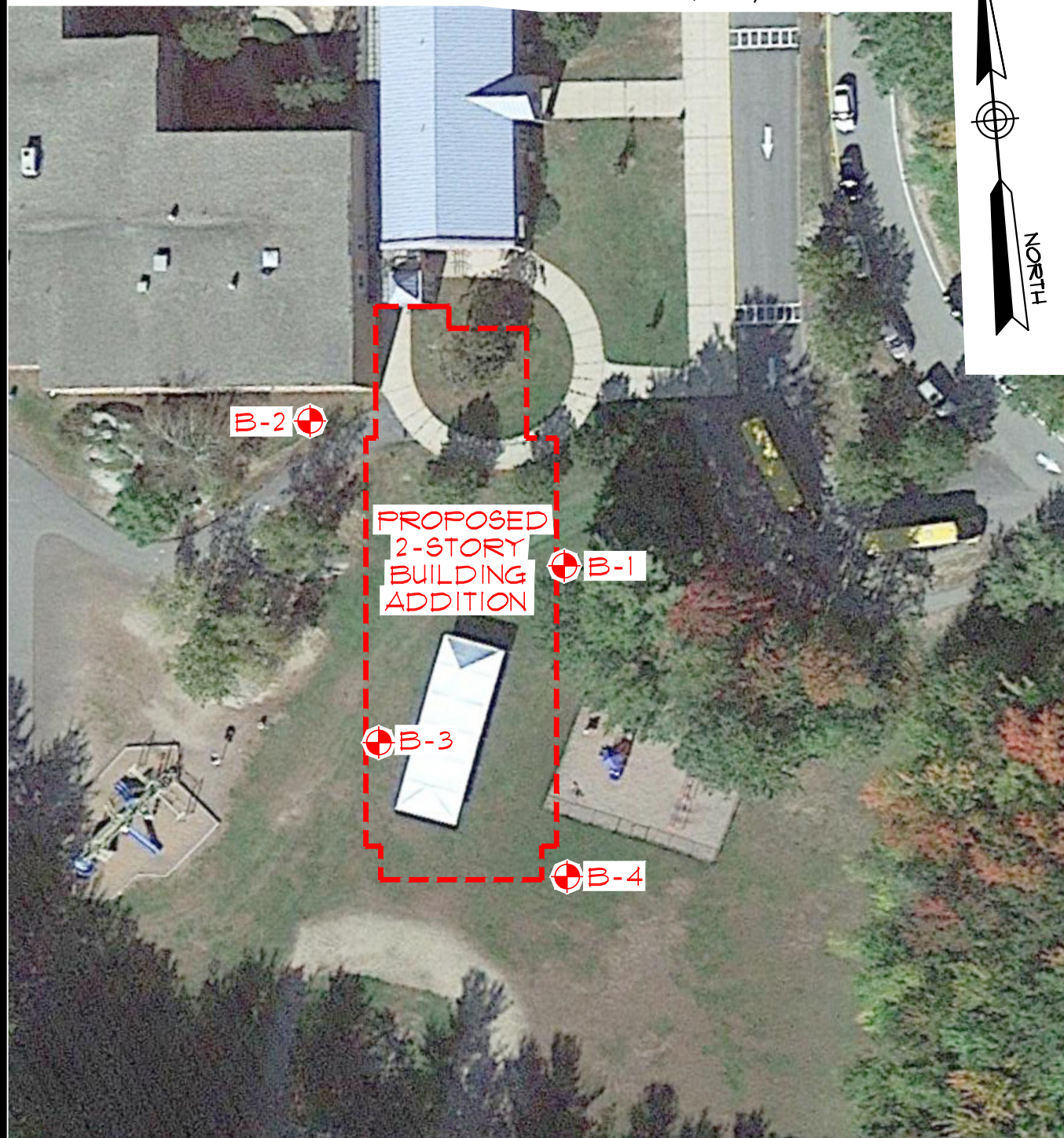
LEGEND



B-1

SUMMIT TEST BORING
(JULY 12, 2023)

N



EXPLORATION LOCATION PLAN PROPOSED BUILDING ADDITION

320 HILL STREET - BIDDEFORD, MAINE
PREPARED FOR

BIDDEFORD SCHOOL DEPARTMENT

OFFICE: 210 MAINE AVENUE
FARMINGDALE, MAINE
TEL.: (207) 446-3360

MAIL: P.O. BOX 515
GARDINER, ME 04345

SUMMIT
GEOENGINEERING SERVICES
www.summitgeoeng.com

DATE: 7-19-2023	DRAWN BY: KRF	CHECKED BY: JNB
JOB: 23175	SCALE: 1" = 50'	FILE: 23175 BOR

Appendix B

Exploration Logs

						SOIL BORING LOG		Boring #: B-1	
Drilling Co: Summit Geoengineering						Project: Biddeford Primary School Addition		Project #: 23175	
Driller: S. Floyd						Location: 320 Hill Street		Sheet: 1 of 1	
Summit Staff: J. Barnes, E.I., R. Osbourne						City, State: Biddeford, ME		Chkd by: WMP	
Boring Elevation:						Reference:			
Date started: 7/12/2023						Date Completed: 7/12/2023			
DRILLING METHOD			SAMPLER			ESTIMATED GROUND WATER DEPTH			
Vehicle: ATV			Length: 24" SS			Date	Depth	Elevation	Reference
Model: 9500 AMS			Diameter: 2"OD/1.5"ID			7/12/2023	4.5'		Measured immediately after completion
Method: 2-1/4" HSA			Hammer: 140 lb			7/12/2023	4.8'		Measured 10 minutes after completion
Hammer Style: Auto			Method: ASTM D1586						
Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION		Geological/ Test Data	Geological Stratum
1	S-1	24/8	0-2	1		Dark brown SAND, some to little Silt, rootlets, compact, damp, SM			TOPSOIL
				13		Cobble in spoon tip			
2				40					
				18					
3	S-2	24/18	2-4	11		Dark brown SAND, some Silt, compact, humid, SM			
				15					
4				8		Olive gray SILT, some to little Clay, slight mottling, stiff, humid, ML			3.3'
				8					STREAM ALLUVIUM
5									
6	S-3	24/22	5-7	3		Olive gray Silty CLAY, slight mottling, stiff, damp to moist, CL			5'
				5					
				5					
7				6					
8									
9									
10									
11	S-4	24/14	10-12	3		Gray SILT, little Clay, firm, moist to wet, ML			10'
				3					
				4					
12				3					
13									
14									
15									
16	S-5	24/16	15-17	2		Gray Clayey SILT, stiff, wet, ML			
				8					
17				9		Olive gray SILT trace Clay, heavily mottled, very stiff, wet, ML			16'
				13					
18						End of Boring at 17' in Running Sands			17'
						Offset probe to 32.3'; Refusal in Dense Strata			
19									
20									
21									
22									
23									
24									
25									
26									
27									

Granular Soils		Cohesive Soils		% Composition ASTM D2487	NOTES: PP = Pocket Penetrometer, MC = Moisture Content LL = Liquid Limit, PI = Plastic Index	Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency			
0-4	V. Loose	<2	V. soft	< 5% Trace 5-15% Little 15-30% Some > 30% With	<u>Bedrock Joints</u> Shallow = 0 to 35 degrees Dipping = 35 to 55 degrees Steep = 55 to 90 degrees Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200	Dry: S = 0% Humid: S = 1 to 25% Damp: S = 26 to 50% Moist: S = 51 to 75% Wet: S = 76 to 99% Saturated: S = 100%
5-10	Loose	2-4	Soft			
11-30	Compact	5-8	Firm			
31-50	Dense	9-15	Stiff			
>50	V. Dense	16-30	V. Stiff			
		>30	Hard			

						SOIL BORING LOG			Boring #: B-2		
						Project: Biddeford Primary School Addition			Project #: 23175		
						Location: 320 Hill Street			Sheet: 1 of 1		
						City, State: Biddeford, ME			Chkd by: WMP		
Drilling Co: Summit Geoengineering						Boring Elevation:					
Driller: S. Floyd						Reference:					
Summit Staff: J. Barnes, E.I., R. Osbourne						Date started: 7/12/2023 Date Completed: 7/12/2023					
DRILLING METHOD			SAMPLER			ESTIMATED GROUND WATER DEPTH					
Vehicle: ATV			Length: 24" SS			Date	Depth	Elevation	Reference		
Model: 9500 AMS			Diameter: 2"OD/1.5"ID			7/12/2023	5.5'		Measured after completion		
Method: 3" Casing			Hammer: 140 lb								
Hammer Style: Auto			Method: ASTM D1586								
Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION			Geological/ Test Data	Geological Stratum	
1	S-1	24/12	0-2	2		Brown Silty SAND trace Gravel, loose, damp, SP Tan medium to coarse SAND, trace Silt, compact, humid SP				FILL/REWORKED NATIVE	
2				3							
3				7							
4				10							
5											
6	S-2	24/16	5-7	5	▼	Brown medium/coarse SAND, some Silt, trace Clay, compact, damp to moist, SM Tan to brown medium to coarse SAND, dense, damp to moist, SP Rock fragment in spoon				2' STREAM ALLUVIUM	
7				6							
8				15							
9				33							
10											
11	S-3	24/24	10-12	3		Same as above Gray to brown Silty CLAY, stiff, wet, CL Tan fine SAND, little Silt, dense, wet, SP				6.8'	
12				10							
13				21							
14				25							
15											
16	S-5	24/0	13.6-15.6	40		No recovery in spoon				10.5'	
17				40							
18				36							
19				33							
20											
21						End of Boring at 15.6', Casing and Spoon Refusal on Sloping Bedrock				11.5'	
22											
23											
24											
25											
26										15.6' (PROBABLE) BEDROCK	
27											
Granular Soils		Cohesive Soils		% Composition		NOTES: PP = Pocket Penetrometer, MC = Moisture Content LL = Liquid Limit, PI = Plastic Index <u>Bedrock Joints</u> Shallow = 0 to 35 degrees Dipping = 35 to 55 degrees Steep = 55 to 90 degrees Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches Gravel = < 3 inch and > No 4, Sand = < No 4 and > No 200, Silt/Clay = < No 200				Soil Moisture Condition	
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487						Dry: S = 0% Humid: S = 1 to 25% Damp: S = 26 to 50% Moist: S = 51 to 75% Wet: S = 76 to 99% Saturated: S = 100%	
0-4	V. Loose	<2	V. soft	< 5% Trace							
5-10	Loose	2-4	Soft	5-15% Little							
11-30	Compact	5-8	Firm	15-30% Some							
31-50	Dense	9-15	Stiff	> 30% With							
>50	V. Dense	16-30	V. Stiff								
		>30	Hard								

						SOIL BORING LOG		Boring #: B-3	
Drilling Co: Summit Geoengineering						Project: Biddeford Primary School Addition		Project #: 23175	
Driller: S. Floyd						Location: 320 Hill Street		Sheet: 1 of 1	
Summit Staff: J. Barnes, E.I., R. Osbourne						City, State: Biddeford, ME		Chkd by: WMP	
Boring Elevation:						Reference:			
Date started: 7/12/2023						Date Completed: 7/12/2023			
DRILLING METHOD		SAMPLER		ESTIMATED GROUND WATER DEPTH					
Vehicle: ATV	Length: 24" SS	Date	Depth	Elevation	Reference				
Model: 9500 AMS	Diameter: 2"OD/1.5"ID	7/12/2023	2.3'		Measured after completion				
Method: 2-1/4" HSA	Hammer: 140 lb								
Hammer Style: Auto	Method: ASTM D1586								
Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION		Geological/ Test Data	Geological Stratum
1	S-1	24/12	0-2	1		Dark brown Sandy SILT, trace Gravel, loose, damp, ML			TOPSOIL
				5		Tan coarse to medium SAND, loose, humid, SP			0.5'
2				9					STREAM ALLUVIUM
3									
4									
5									
6	S-2	24/20	5-7	13		Olive brown Silty CLAY, firm, moist to wet, CL			
				6					
7				3					
				8					
10	S-3	24/20	10-12	2		Olive gray Clayey SILT, soft to firm, saturated, ML		water in spoon @10'	10'
11				2					
12				6					
				8					
13									
14									
15									
16	S-4	24/18	15-17	1		Olive gray Clayey SILT, weathered rock fragments at 16.8', hard, saturated, ML			
				18					
17				26					
				12					
18						End of Boring @ 17', Refusal on Probable Bedrock			17'
19									(PROBABLE) BEDROCK
20									
21									
22									
23									
24									
25									
26									
27									

Granular Soils		Cohesive Soils		% Composition ASTM D2487	NOTES: PP = Pocket Penetrometer, MC = Moisture Content LL = Liquid Limit, PI = Plastic Index	Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency			
0-4	V. Loose	<2	V. soft	< 5% Trace 5-15% Little 15-30% Some > 30% With	Bedrock Joints Shallow = 0 to 35 degrees Dipping = 35 to 55 degrees Steep = 55 to 90 degrees Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200	Dry: S = 0% Humid: S = 1 to 25% Damp: S = 26 to 50% Moist: S = 51 to 75% Wet: S = 76 to 99% Saturated: S = 100%
5-10	Loose	2-4	Soft			
11-30	Compact	5-8	Firm			
31-50	Dense	9-15	Stiff			
>50	V. Dense	16-30	V. Stiff			
		>30	Hard			

						SOIL BORING LOG				Boring #: B-4	
						Project: Biddeford Primary School Addition				Project #: 23175	
						Location: 320 Hill Street				Sheet: 1 of 1	
						City, State: Biddeford, ME				Chkd by: WMP	
Drilling Co: Summit Geoengineering						Boring Elevation:					
Driller: S. Floyd						Reference:					
Summit Staff: J. Barnes, E.I., R. Osbourne						Date started: 7/12/2023 Date Completed: 7/12/2023					
DRILLING METHOD			SAMPLER			ESTIMATED GROUND WATER DEPTH					
Vehicle: ATV			Length: 24" SS			Date	Depth	Elevation	Reference		
Model: 9500 AMS			Diameter: 2"OD/1.5"ID			7/12/2023	12 ft		Measured in 15 feet of casing		
Method: 3" Casing			Hammer: 140 lb								
Hammer Style: Auto			Method: ASTM D1586								
Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	Elev	SAMPLE DESCRIPTION			Geological/ Test Data	Geological Stratum	
1	S-1	24/12	0-2	1		Dark brown Sandy SILT, trace Gravel, compact, damp, ML			0.8'	TOPSOIL	
				5		Brown medium to coarse SAND, compact, humid, SW					
2				9							
3											
4											
5	S-2	0/0	5-5.1	50/1"		No recovery, offset boring 2' east					
	S-2a	24/24	5-7	18		Dark brown Sandy SILT, trace Clay, very stiff, humid ML			6'		
6				9		Gray Clayey SILT, mottled, stiff, humid to damp, ML					
7				7							
8											
9											
10											
	S-3	24/18	10-12	3		Olive gray Clayey SILT, firm, saturated, ML					
11				3							
				4							
12				6							
13											
14											
15											
	S-4	24/24	15-17	4		Gray Silty CLAY, slight mottling, stiff, wet, CL			15'		
16				9							
17				4							
18				3							
19											
20											
	S-5	24/24	20-22	3		Olive gray SAND, some to little Silt, dense, saturated SP-SM			20'		
21				14							
22				17							
23				16							
24						End of Boring at 22', No Refusal			22'		
25											
26											
27											
Granular Soils		Cohesive Soils		% Composition		NOTES:					Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487		PP = Pocket Penetrometer, MC = Moisture Content LL = Liquid Limit, PI = Plastic Index					Dry: S = 0%
0-4	V. Loose	<2	V. soft	< 5% Trace		Bedrock Joints					Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	5-15% Little		Shallow = 0 to 35 degrees					Damp: S = 26 to 50%
11-30	Compact	5-8	Firm	15-30% Some		Dipping = 35 to 55 degrees					Moist: S = 51 to 75%
31-50	Dense	9-15	Stiff	> 30% With		Steep = 55 to 90 degrees					Wet: S = 76 to 99%
>50	V. Dense	16-30	V. Stiff			Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches					Saturated: S = 100%
		>30	Hard			Gravel = < 3 inch and > No 4, Sand = < No 4 and > No 200, Silt/Clay = < No 200					



ATTACHMENT G

NATURAL RESOURCE REPORT



TECHNICAL REPORT OF WETLAND DELINEATION, CLASSIFICATION & IDENTIFICATION

Haley Ward Project No.: 14125.003 **Date(s) of Delineation:** 6/6/23 **Date of Report:** 6/26/23

Field Delineator: Steven D. Riker, CWS (NH)

Compiled by: Steven D. Riker, CWS (NH)

Project Location/Tax Map & Lot: 320 Hill Street, Biddeford, ME Tax Map 82, Lot 32

Prepared for: Leah Schaffer, Mobile Studio Design, 128 Main Street, Unit 201, Biddeford, ME 04005.

Site Area Observed: Portion of lot to establish wetland buffers and wetland buffer extents toward proposed development area.

Site Conditions: Lot with previously developed uplands and freshwater wetlands.

Weather/Seasonal Conditions: 65 sunny, summer conditions.

Site Disturbance: Historic disturbance around previously developed area.

Wetlands Present: Yes. Property contains freshwater wetlands.

Wetland conditions/atypical situation/problem area: None.

Hydric Soil Criterion: A11. Field Indicators of Hydric Soils in the United States, Version 8.2, USDA-NRCS, 2018.

Delineation Standards Utilized:

1. *US Army Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1 (Jan 1987). **AND** Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0, January 2012.
2. Field Indicators of Hydric Soils in the United States, Version 8.2, USDA-NRCS, 2018 **AND (for disturbed sites)** *Field Indicators for Identifying Hydric Soils in New England*, Version 4. NEIWPCC Wetlands Work Group (April 2019).
3. *National List of Plant Species That Occur in Wetlands: Northeast (Region 1)*. USFWS (May 1988).

Notes: Haley Ward delineated wetland boundaries on the subject parcel within the scope area using fluorescent pink flagging tape labeled alpha numerically to aid in survey location. Wetland flags A1-A37 delineate a palustrine forested broad leaved deciduous wetland system that is seasonally flooded and/or saturated (PFO1E) There were no potential vernal pools identified within the scope area.

Protected species and habitats were assessed through the MDIFW data layers and through MDIFW's Beginning with Habitat data server. This database did indicate any rare plant and a natural communities on the site or in very close proximity to the site. The nearest rare plant/exemplary community is a "Hemlock-





Hardwood Pocket Swamp” located approximately 950 feet to the southwest of the western access road into the property. Haley Ward reviewed information available on Federal protected species and habitats through the U.S. Fish and Wildlife Service’s Information for Planning and Consultation System (IPaC). Review through the IPaC system determined that the project area is within the range of two federally protected species, Northern long-eared bat (Threatened) and within range of one candidate species, Monarch butterfly. The Monarch butterfly is a candidate species.

The State of Maine classifies wetlands as “Wetlands of Special Significance” (WOSS), based on MDEP Rule Chapter 310, Section 4A of *Wetlands and Waterbodies*; or wetlands that do not meet the criteria (not WOSS). Based on my observations of the site, the wetland delineated by flagged lines A1-A37 would be considered WOSS based on association with the exemplary community described above and the wetland is also associated with a stream which flows in a northeasterly direction through the subject parcel.

I would recommend official consultation with State and Federal resource regulatory agencies regarding prior to permit application submission.

Steven D. Riker, CWS (NH)
Wetland Scientist
Ambit Engineering, Inc. Haley Ward



ATTACHMENT H

STORMWATER REPORT

Pre-Development Hydrology
Post-Development Hydrology



STORMWATER MANAGEMENT

NARRATIVE

The intent of this Stormwater Management Plan is to comply with the requirements of the City of Biddeford Land Development Regulations and the Maine Department of Environmental Protection (MDEP) Chapter 500 regulations.

The site is subject to an existing Site Law Permit (#L-015965-22-A-N) but meets the criteria for an exemption from an amendment as a “modification to an educational institution that does not exceed an additional 40,000 square feet (sf) of disturbed area not to be revegetated in a calendar year.” This project is utilizing this exemption but has still been designed to meet stormwater standards of the held Site Law permit.

This project involves the 11,806sf building expansion of the existing school. This permit application will account for stormwater runoff quantity and quality from the new building, emergency access driveway, and eight parking spaces. This project includes the creation of approximately 0.56 acres (24,536 square feet) of impervious surface and 1.13 acres (49,223 square feet) of disturbed area. Per the current Site Law permit for the property, the project is required to adhere with the Basic Standards, General Standards, and Flooding Standards of Chapter 500. As a result, it will be required to treat 95% of the impervious area. We are proposing to utilize grass under-drained soil filters and porous pavement to provide stormwater management for this project.

Basic Standard Submission: Information is provided as required for the Basic Standard Submission in Section 8 of this application.

General Standards Submission: The following information is provided as required in the General Standard Submission.

1. Drainage Plans: A set of Hydrology Plans are provided within this report. These plans include watershed boundaries and locations of the stormwater management features.
2. Calculations: This project will include best management practices which have been designed in accordance with Chapters 7 and 8 of the MDEP Stormwater BMP Technical Design Manual, Volume III. Sizing calculations are provided in this report.
3. Details, Designs, and Specifications: Please refer to the plans for stormwater management details, designs, and specifications.



Flooding Standard Submission: The following information is provided as required in the Flooding Standard Submission.

1. Control of Peak Flows: The project is required to meet Flooding Standards in accordance with Chapter 500 requirements. The Pre- and Post-Development Hydrology models and narrative are located in within this report.
2. Details, Design, and Specifications: The model runoff calculations are performed using a HydroCAD 10.0 model. Sizing of the required stormwater treatment methods are included in this report.



STORMWATER QUALITY CONTROL NARRATIVE

Based on Maine Department of Environmental Protection stormwater standards, the required treatment is 95% of the impervious surface created by the development.

To meet stormwater quality standards, the project is proposing a grassed underdrain soil filter to treat run-off from the roof of the expansion, and porous pavement to treat the emergency access road and parking spaces. The locations of these treatment devices are shown on the Proposed Site Plan.

The following tables summarize the impervious and developed area created by the project, as well as the treatment structure, area treated, and relationship with the total developed and impervious areas for the project.

SITE AREA

PROJECT AREA	IMPERVIOUS AREA
Total Proposed Site Area	24,536 SF (0.56 acres)
Impervious Removed	2,175 SF (0.05 acres)
New Impervious Created	22,361 sf (0.51 acres)

STORMWATER TREATMENT SYSTEMS (SITE AREA)

TREATMENT METHOD	AREA TREATED
	IMPERVIOUS AREA
Grassed Underdrained Soil Filter	11,870 SF
Emergency Access Drive Porous Pavement	8,176 SF
New Parking Spaces Porous Pavement	1,655 SF
TOTAL TREATED AREA	21,701 SF
TOTAL IMPERVIOUS AREA	22,361 SF
PERCENT OF TOTAL AREA TREATED	97.05

As can be seen in the table above, we are proposing to treat **97.05%** of the Impervious and Developed Area from the site portion of the project. This exceeds the standards required by Chapter 500.

BMP DESCRIPTIONS AND SIZING CALCULATIONS

The proposed stormwater quality control devices have been designed in accordance with the standards outlined in Stormwater Management for Maine, Volume II BMP Manual, January 2006, and revised May 2016. Construction and maintenance will be done according to the standards outlined in this manual. Descriptions of the treatment types follow.



1. Grassed Underdrain Soil Filter

Description:

The proposed soil filter will treat the roof area of the expanded school in Subcatchment 1. This filter is located on Type A, upland soils and will outlet into natural drainage pathways.

Calculations:

This filter was sized using Chapter 7.1 of the MDEP Stormwater BMP Technical Design Manual, Volume III.

Required Filter Area:

$$\begin{aligned} & 5\% \text{ (imperious area)} + 2\% \text{ (landscaped area)} \\ & = 0.05(11,806 \text{ SF}) + 0.02 (12,315 \text{ SF}) \\ & = 837 \text{ SF (Proposed filter is 890 SF)} \end{aligned}$$

Required Treatment Volume:

$$\begin{aligned} & 1\text{-inch}*(\text{impervious area}) + 0.4\text{-inches}*(\text{Landscaped Area}) \\ & = (1/12*11,806 \text{ SF}) + (0.4/12*12,315 \text{ SF}) \\ & = 1,394 \text{ CF (Proposed filter is 2,405 CF @ 18-inches of impoundment depth)} \end{aligned}$$

2. Porous Pavement

Description:

The proposed porous pavement will treat the emergency access driveway in Subcatchment 2. Run-off from portions of the sidewalk and landscaped areas around the building will also be captured by this system. The pavement will attenuate and treat runoff within the layers of the driveway, collect the treated water in underdrains, and outlet into natural drainage pathways.

Calculations:

This porous pavement was sized using Chapter 7.7 of the MDEP Stormwater BMP Technical Design Manual, Volume III. This system is not designed as an infiltration system, an impermeable liner will be installed at the base and run-off will be collected and conveyed to an outlet.



STORMWATER PEAK RUNOFF CONTROL NARRATIVE

As previously stated, the project is required to meet the flooding standard under Chapter 500 Section 4.E(2)(a). To meet the flooding standard, HydroCAD calculations were performed to compare pre-development and post-development conditions.

The pre-development site of the area within the proposed addition to the school is a landscaped area and baseball diamond. The areas of the new parking spaces are cleared areas around the existing parking lots. Soils on the site, per the USDA web soil survey, are classified as Naumburg Sand (Hydrologic Soil Group A-D) and Lyman-Rock outcrop complex (Hydrologic Soil Group D).

The entire Site drains to the south and the east to a wetlands complex, which drains to the north. The post-development site was broken into seven subareas encompassing the same footprint as pre-development. Roof runoff from the building addition is collected and conveyed to a grassed under-drain soil filter. The access drive and portions of the sidewalk and landscaped areas are collected by porous pavement. Both of these systems will release runoff as controlled flow to natural drainage pathways.

The Summation Point of the culvert draining the wetland was chosen in both pre- and post-development to compare peak flow runoff for the 25-year storm event. Based on results of the HydroCAD, it is expected that stormwater runoff from the site will be lessened in post-development conditions as in pre-development conditions. A comparison of each of the watershed areas in both Pre- and Post-Development is organized in the table below.

		25 Year (cfs)	25 Year Net Change (cfs)	25 Year % Change
Summation Point 1	Pre	1.36	-0.07	-5.15%
	Post	1.29		

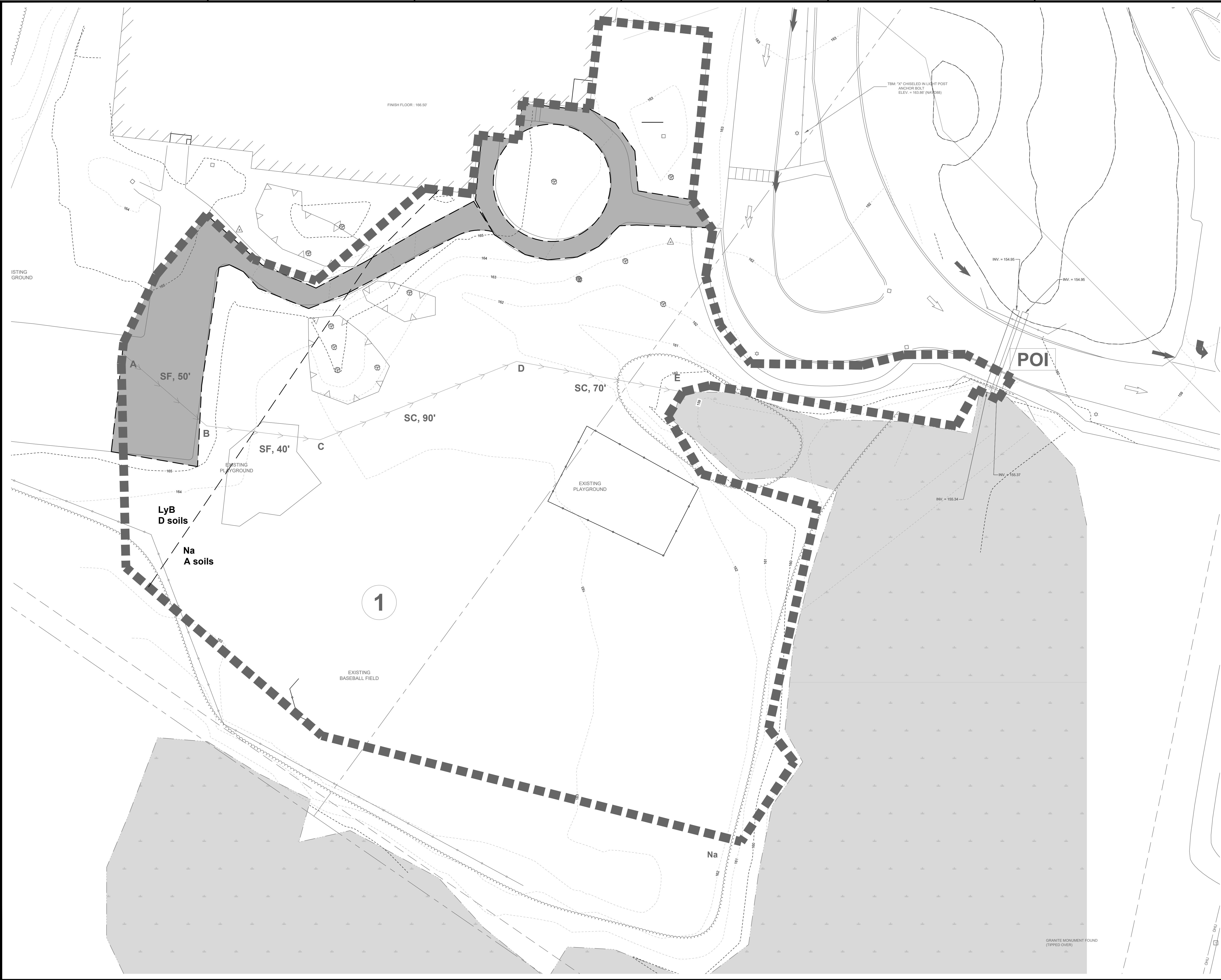
As seen in the table above, the summation point will see decreased post-development flow rates due to detention in the porous pavement and under-drained filter. For the Summation Point, there will be a decrease of 0.07 CFS for the 25-year storm event. Based on the results of our stormwater management design and calculations we conclude that this project will not have negative impacts on adjacent and downstream areas.

Prepared by:
Haley Ward, Inc.


Drew Olehowski, PE
Project Manager



FILE LOCATION: P:\ME11102-MOBILE STUDIO DESIGNS\BIDDEFORD PRIMARY SCHOOL SURVEY & WETLAND DELINEATION\AT02.CAD /FILESCAL/114125.003-C:\HYDRO\2024.02.14_1024.AM



LEGEND:

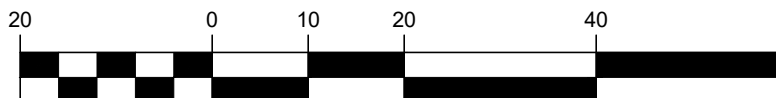
DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	---	---
UTILITY POLE	⊙	⊙
SIGN	⬆	⬆
CATCH BASIN	□	□
HYDRANT	⊗	⊗
EDGE OF GRAVEL	---	---
EDGE OF PAVEMENT	---	---
MAJOR FOOT CONTOUR	---	---
MINOR FOOT CONTOUR	---	---
STORM DRAIN	SD	SD
SILT FENCE	---	---
TREE LINE	---	---
PAVED SURFACE	---	---
CULVERT	---	---
SOIL TYPE BOUNDARY	---	---
SUBCATCHMENT BOUNDARY	---	---
TIME OF CONCENTRATION	---	---

SUBCATCHMENT IDENTIFICATION

1

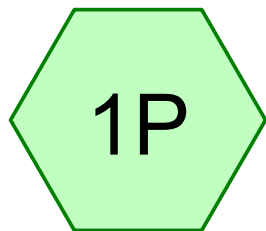


GRAPHIC SCALE

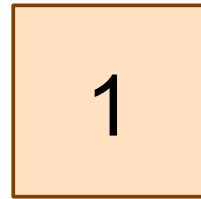


(IN FEET)
1 inch = 20 ft.

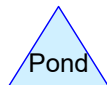
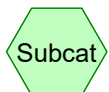
REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				
NOT FOR CONSTRUCTION				
 HALEY WARD ENGINEERING ENVIRONMENTAL SURVEYING WWW.HALEYWARD.COM One Merchants Plaza, Suite 701 Bangor, Maine 04401 207.989.4824				
PROJECT				
BIDDEFORD PRIMARY SCHOOL EXPANSION 320 HILL STREET, BIDDEFORD, MAINE				
TITLE				
PRE DEVELOPMENT HYDROLOGY MAP				
DATE		SCALE		
2024.02.14		1" = 20'		
DRAWN BY		DESIGNED BY		CHECKED BY
AWG		DJO		PAM
PROJECT No.				
14125.003				
DRAWING No.				REV.
C701				



PRE



Adjacent Wetlands



Routing Diagram for PRE

Prepared by {enter your company name here}, Printed 2/8/2024
HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

PRE

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.563	39	>75% Grass cover, Good, HSG A (1P)
0.131	80	>75% Grass cover, Good, HSG D (1P)
0.174	98	Sidewalks (1P)
1.868	47	TOTAL AREA

PRE

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.563	HSG A	1P
0.000	HSG B	
0.000	HSG C	
0.131	HSG D	1P
0.174	Other	1P
1.868		TOTAL AREA

PRE

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.563	0.000	0.000	0.131	0.000	1.694	>75% Grass cover, Good	1P
0.000	0.000	0.000	0.000	0.174	0.174	Sidewalks	1P
1.563	0.000	0.000	0.131	0.174	1.868	TOTAL AREA	

PRE*Type III 24-hr 25 year Rainfall=6.20"*

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1P: PRERunoff Area=81,355 sf 9.30% Impervious Runoff Depth>0.90"
Flow Length=250' Tc=10.1 min CN=47 Runoff=1.36 cfs 0.140 af**Reach 1: Adjacent Wetlands**Inflow=1.36 cfs 0.140 af
Outflow=1.36 cfs 0.140 af**Total Runoff Area = 1.868 ac Runoff Volume = 0.140 af Average Runoff Depth = 0.90"**
90.70% Pervious = 1.694 ac 9.30% Impervious = 0.174 ac

PRE

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 6

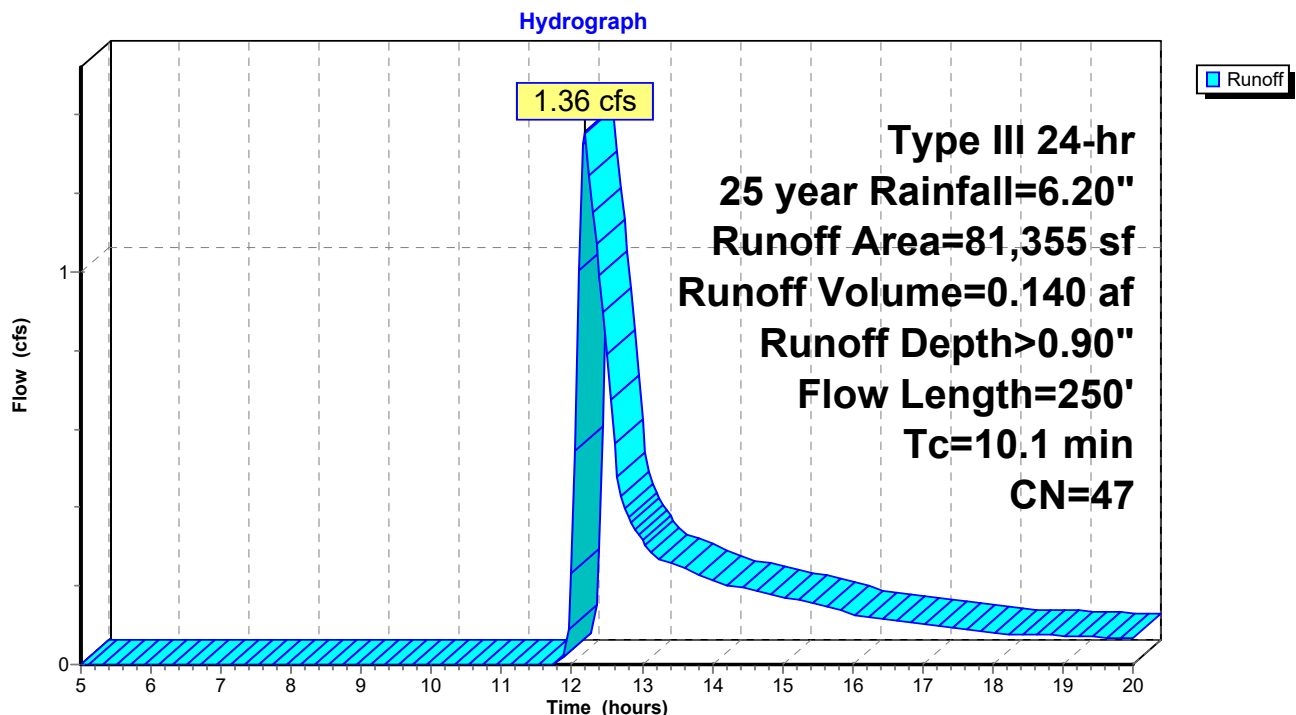
Summary for Subcatchment 1P: PRE

Runoff = 1.36 cfs @ 12.18 hrs, Volume= 0.140 af, Depth> 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	7,570	98	Sidewalks
	68,089	39	>75% Grass cover, Good, HSG A
	5,696	80	>75% Grass cover, Good, HSG D
	81,355	47	Weighted Average
	73,785		90.70% Pervious Area
	7,570		9.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.92		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
6.1	40	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
2.1	90	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.0	70	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.1	250	Total			

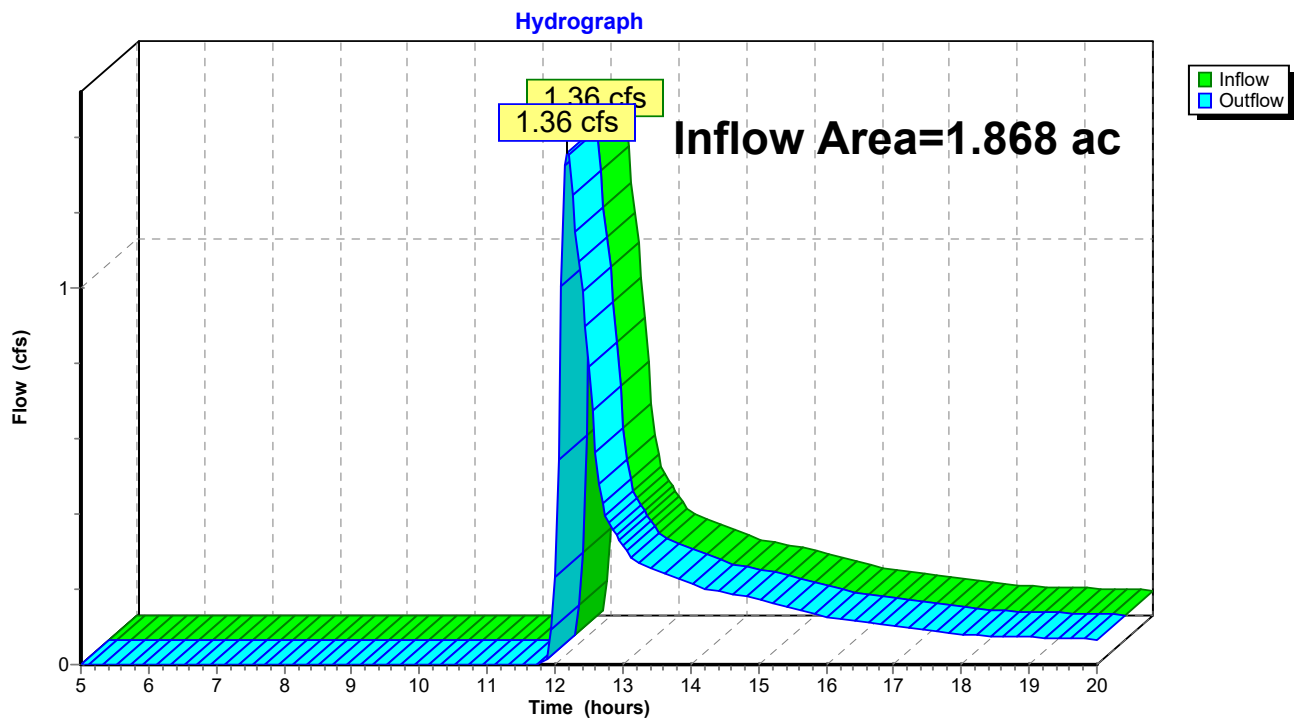
Subcatchment 1P: PRE

Summary for Reach 1: Adjacent Wetlands

Inflow Area = 1.868 ac, 9.30% Impervious, Inflow Depth > 0.90" for 25 year event
Inflow = 1.36 cfs @ 12.18 hrs, Volume= 0.140 af
Outflow = 1.36 cfs @ 12.18 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1: Adjacent Wetlands





STORMWATER PEAK RUNOFF CONTROL NARRATIVE

As previously stated, the project is required to meet the flooding standard under Chapter 500 Section 4.E(2)(a). To meet the flooding standard, HydroCAD calculations were performed to compare pre-development and post-development conditions.

The pre-development site of the area within the proposed addition to the school is a landscaped area and baseball diamond. The areas of the new parking spaces are cleared areas around the existing parking lots. Soils on the site, per the USDA web soil survey, are classified as Naumburg Sand (Hydrologic Soil Group A-D) and Lyman-Rock outcrop complex (Hydrologic Soil Group D).

The entire Site drains to the south and the east to a wetlands complex, which drains to the north. The post-development site was broken into seven subareas encompassing the same footprint as pre-development. Roof runoff from the building addition is collected and conveyed to a grassed under-drain soil filter. The access drive and portions of the sidewalk and landscaped areas are collected by porous pavement. Both of these systems will release runoff as controlled flow to natural drainage pathways.

The Summation Point of the culvert draining the wetland was chosen in both pre- and post-development to compare peak flow runoff for the 25-year storm event. Based on results of the HydroCAD, it is expected that stormwater runoff from the site will be lessened in post-development conditions as in pre-development conditions. A comparison of each of the watershed areas in both Pre- and Post-Development is organized in the table below.

		25 Year (cfs)	25 Year Net Change (cfs)	25 Year % Change
Summation Point 1	Pre	1.36	-0.07	-5.15%
	Post	1.29		

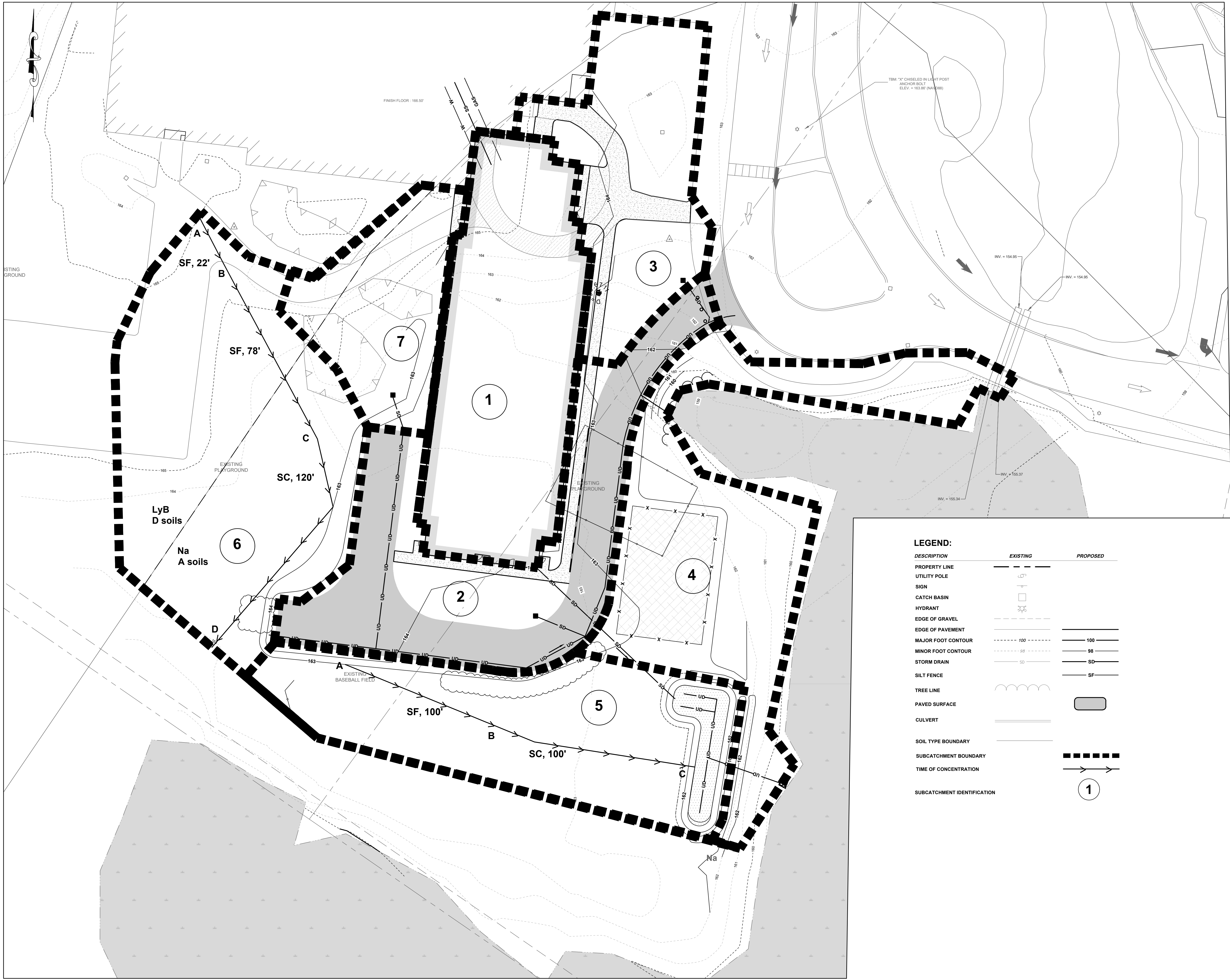
As seen in the table above, the summation point will see decreased post-development flow rates due to detention in the porous pavement and under-drained filter. For the Summation Point, there will be a decrease of 0.07 CFS for the 25-year storm event. Based on the results of our stormwater management design and calculations we conclude that this project will not have negative impacts on adjacent and downstream areas.

Prepared by:
Haley Ward, Inc.

Drew Olehowski, PE
Project Manager

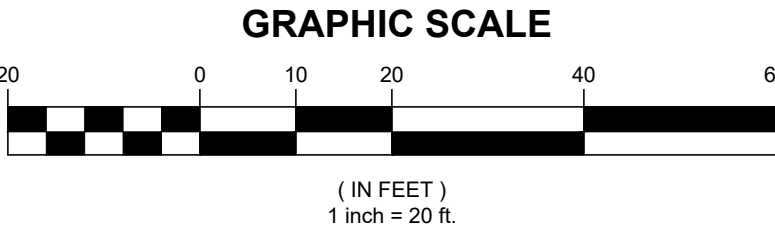


FILE LOCATION: P:\ME11\02-MOBILE STUDIO DESIGNS\03-BIDDEFORD PRIMARY SCHOOL SURVEY & WETLAND DELINEATION\AT02.CAD / FILESCAL\114125.003-C-HV.DWG, 2024.02.14, 10:32 AM

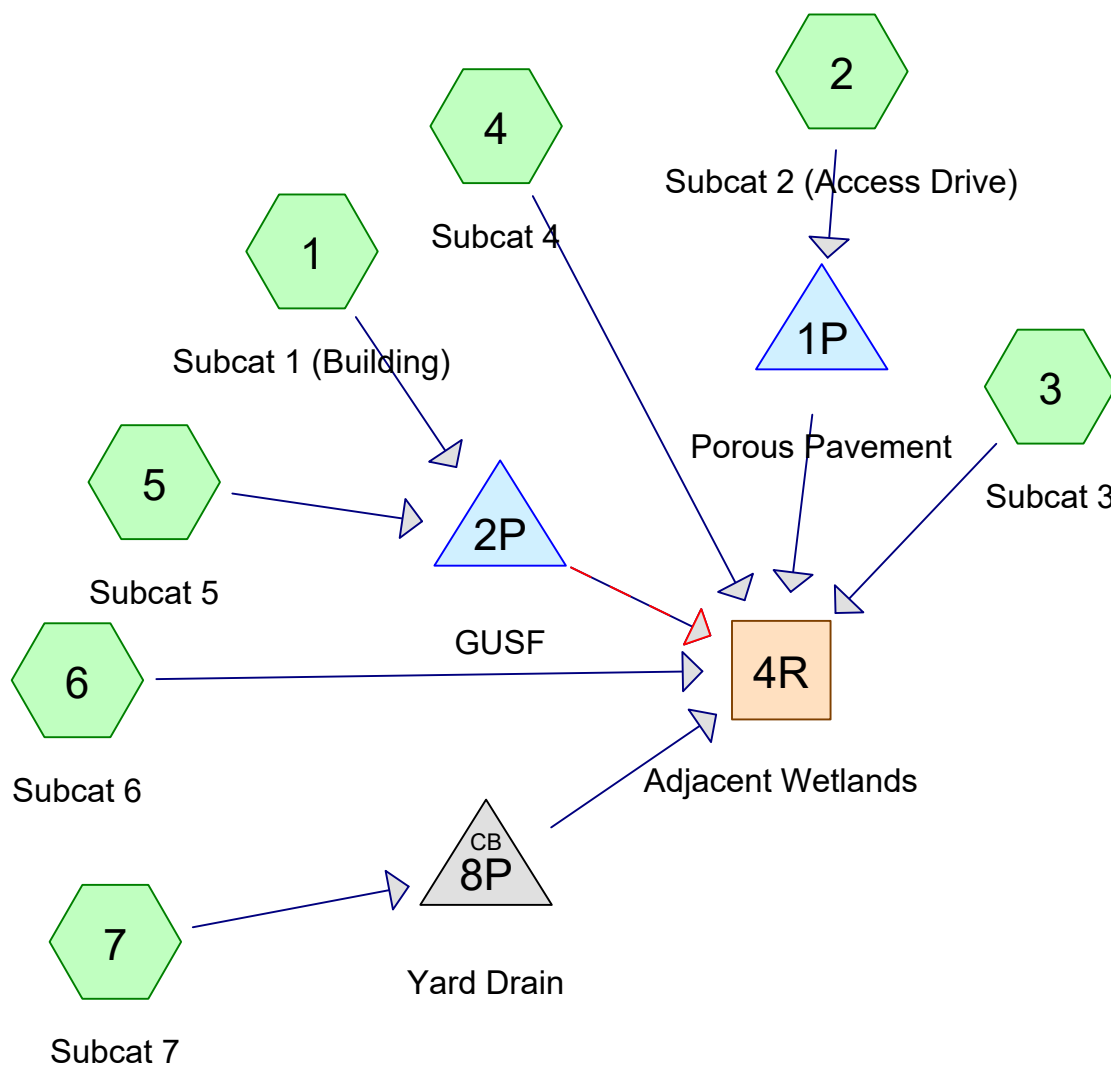


LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	---	---
UTILITY POLE	○	○
SIGN	+	+
CATCH BASIN	□	□
HYDRANT	⊗	⊗
EDGE OF GRAVEL	---	---
EDGE OF PAVEMENT	---	---
MAJOR FOOT CONTOUR	--- 100 ---	100
MINOR FOOT CONTOUR	--- 98 ---	98
STORM DRAIN	SD	SD
SILT FENCE	---	SF
TREE LINE	~	~
PAVED SURFACE		
CULVERT	---	---
SOIL TYPE BOUNDARY	---	---
SUBCATCHMENT BOUNDARY	---	---
TIME OF CONCENTRATION	---	---
SUBCATCHMENT IDENTIFICATION		1



REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				
NOT FOR CONSTRUCTION				
 HALEY WARD ENGINEERING ENVIRONMENTAL SURVEYING One Merchants Plaza, Suite 701 Bangor, Maine 04401 207.989.4824 WWW.HALEYWARD.COM				
PROJECT				
BIDDEFORD PRIMARY SCHOOL EXPANSION 320 HILL STREET, BIDDEFORD, MAINE				
TITLE				
POST DEVELOPMENT MAP				
DATE		SCALE		
2024.02.14		1" = 20'		
DRAWN BY		DESIGNED BY	CHECKED BY	
AWG		DJO	JHW	
PROJECT No.				
14125.003				
DRAWING No.				REV.
C702				



POST

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.108	39	>75% Grass cover, Good, HSG A (2, 3, 4, 5, 6, 7)
0.117	80	>75% Grass cover, Good, HSG D (6, 7)
0.197	98	Access Driveway (2)
0.272	98	Building (1)
0.065	98	Sidewalk (2, 3)
0.108	98	Sidewalks (6, 7)
1.868	62	TOTAL AREA

POST

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.108	HSG A	2, 3, 4, 5, 6, 7
0.000	HSG B	
0.000	HSG C	
0.117	HSG D	6, 7
0.643	Other	1, 2, 3, 6, 7
1.868		TOTAL AREA

POST

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.108	0.000	0.000	0.117	0.000	1.225	>75% Grass cover, Good	2, 3, 4, 5, 6, 7
0.000	0.000	0.000	0.000	0.197	0.197	Access Driveway	2
0.000	0.000	0.000	0.000	0.272	0.272	Building	1
0.000	0.000	0.000	0.000	0.065	0.065	Sidewalk	2, 3
0.000	0.000	0.000	0.000	0.108	0.108	Sidewalks	6, 7
1.108	0.000	0.000	0.117	0.643	1.868	TOTAL AREA	

POST

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 5

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	7	0.00	0.00	335.0	0.0060	0.010	6.0	0.0	0.0
2	1P	160.83	159.20	300.0	0.0054	0.013	6.0	0.0	0.0
3	2P	158.80	158.60	35.0	0.0057	0.010	6.0	0.0	0.0
4	8P	161.50	159.50	335.0	0.0060	0.010	6.0	0.0	0.0

POST*Type III 24-hr 25 year Rainfall=6.20"*

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 6

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: Subcat 1 (Building) Runoff Area=11,870 sf 100.00% Impervious Runoff Depth>5.51"
Tc=5.0 min CN=98 Runoff=1.67 cfs 0.125 af

Subcatchment 2: Subcat 2 (Access Drive) Runoff Area=12,122 sf 78.86% Impervious Runoff Depth>4.34"
Tc=5.0 min CN=86 Runoff=1.47 cfs 0.101 af

Subcatchment 3: Subcat 3 Runoff Area=8,514 sf 22.07% Impervious Runoff Depth>1.25"
Tc=5.0 min CN=52 Runoff=0.28 cfs 0.020 af

Subcatchment 4: Subcat 4 Runoff Area=13,691 sf 0.00% Impervious Runoff Depth>0.42"
Flow Length=95' Slope=0.0150 '/' Tc=10.4 min CN=39 Runoff=0.06 cfs 0.011 af

Subcatchment 5: Subcat 5 Runoff Area=12,315 sf 0.00% Impervious Runoff Depth>0.42"
Flow Length=200' Slope=0.0100 '/' Tc=15.1 min CN=39 Runoff=0.05 cfs 0.010 af

Subcatchment 6: Subcat 6 Runoff Area=17,176 sf 22.44% Impervious Runoff Depth>2.12"
Flow Length=220' Tc=13.7 min CN=63 Runoff=0.81 cfs 0.070 af

Subcatchment 7: Subcat 7 Runoff Area=5,673 sf 15.07% Impervious Runoff Depth>1.32"
Flow Length=410' Tc=8.6 min CN=53 Runoff=0.18 cfs 0.014 af

Reach 4R: Adjacent Wetlands Inflow=1.29 cfs 0.254 af
Outflow=1.29 cfs 0.254 af

Pond 1P: Porous Pavement Peak Elev=161.00' Storage=3,443 cf Inflow=1.47 cfs 0.101 af
6.0" Round Culvert n=0.013 L=300.0' S=0.0054 '/' Outflow=0.06 cfs 0.026 af

Pond 2P: GUSF Peak Elev=162.79' Storage=2,126 cf Inflow=1.67 cfs 0.135 af
Primary=0.10 cfs 0.099 af Secondary=0.29 cfs 0.014 af Outflow=0.39 cfs 0.113 af

Pond 8P: Yard Drain Peak Elev=161.79' Inflow=0.18 cfs 0.014 af
6.0" Round Culvert n=0.010 L=335.0' S=0.0060 '/' Outflow=0.18 cfs 0.014 af

Total Runoff Area = 1.868 ac Runoff Volume = 0.351 af Average Runoff Depth = 2.26"
65.56% Pervious = 1.225 ac 34.44% Impervious = 0.643 ac

POST

Prepared by {enter your company name here}
HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"
Printed 2/8/2024
Page 7

Summary for Subcatchment 1: Subcat 1 (Building)

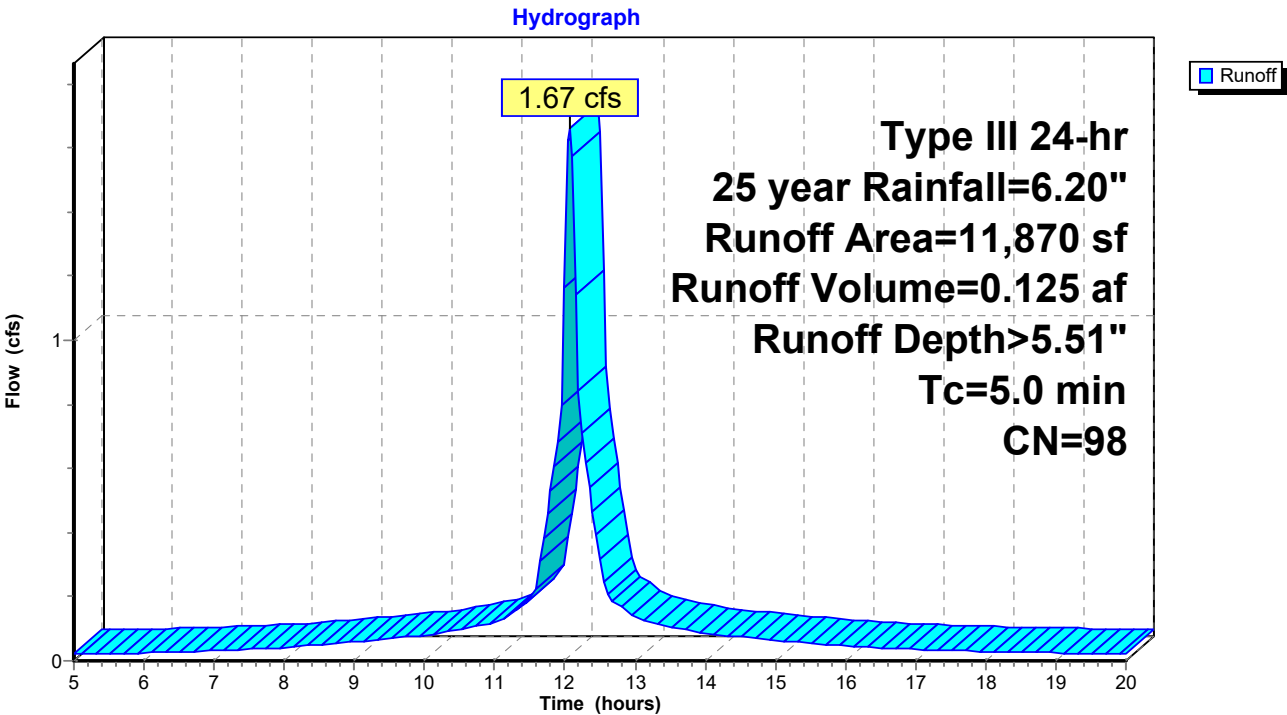
Runoff = 1.67 cfs @ 12.07 hrs, Volume= 0.125 af, Depth> 5.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	11,870	98	Building
	11,870		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1: Subcat 1 (Building)



POST

Summary for Subcatchment 2: Subcat 2 (Access Drive)

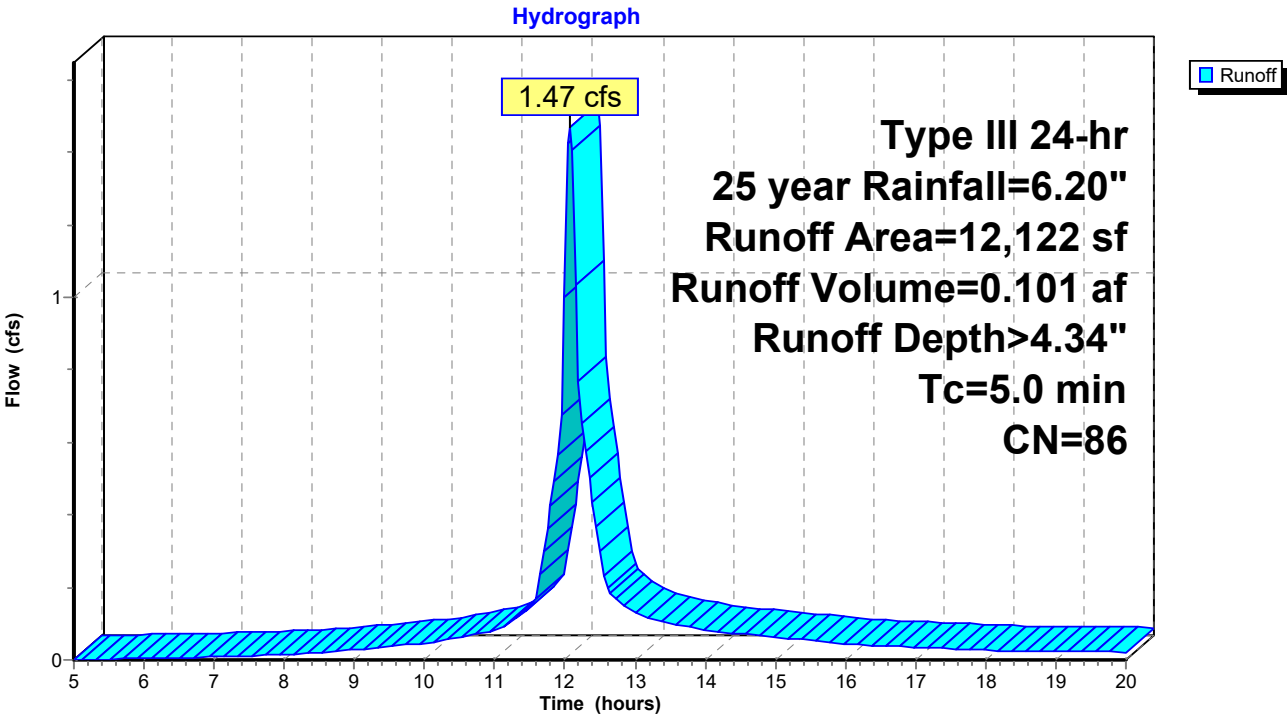
Runoff = 1.47 cfs @ 12.07 hrs, Volume= 0.101 af, Depth> 4.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	8,599	98	Access Driveway
	2,563	39	>75% Grass cover, Good, HSG A
*	960	98	Sidewalk
	12,122	86	Weighted Average
	2,563		21.14% Pervious Area
	9,559		78.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2: Subcat 2 (Access Drive)



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 9

Summary for Subcatchment 3: Subcat 3

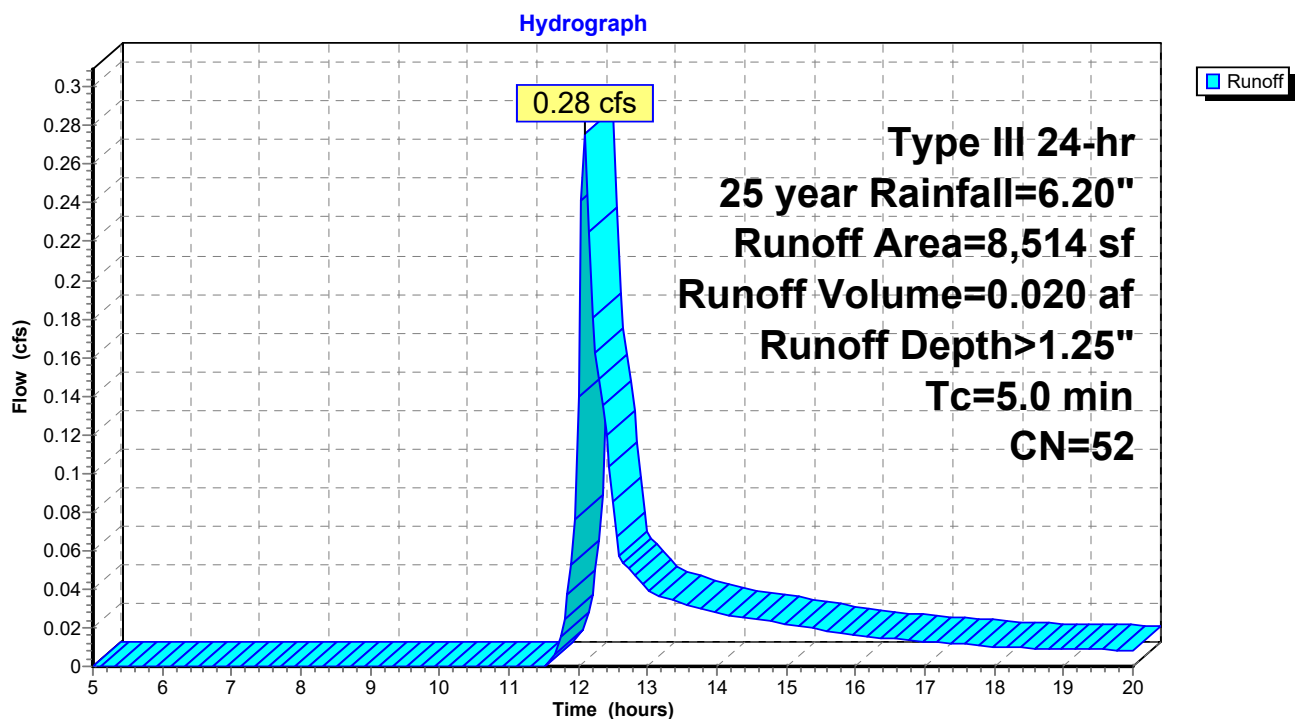
Runoff = 0.28 cfs @ 12.10 hrs, Volume= 0.020 af, Depth> 1.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

Area (sf)	CN	Description
6,635	39	>75% Grass cover, Good, HSG A
* 1,879	98	Sidewalk
8,514	52	Weighted Average
6,635		77.93% Pervious Area
1,879		22.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 3: Subcat 3



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 10

Summary for Subcatchment 4: Subcat 4

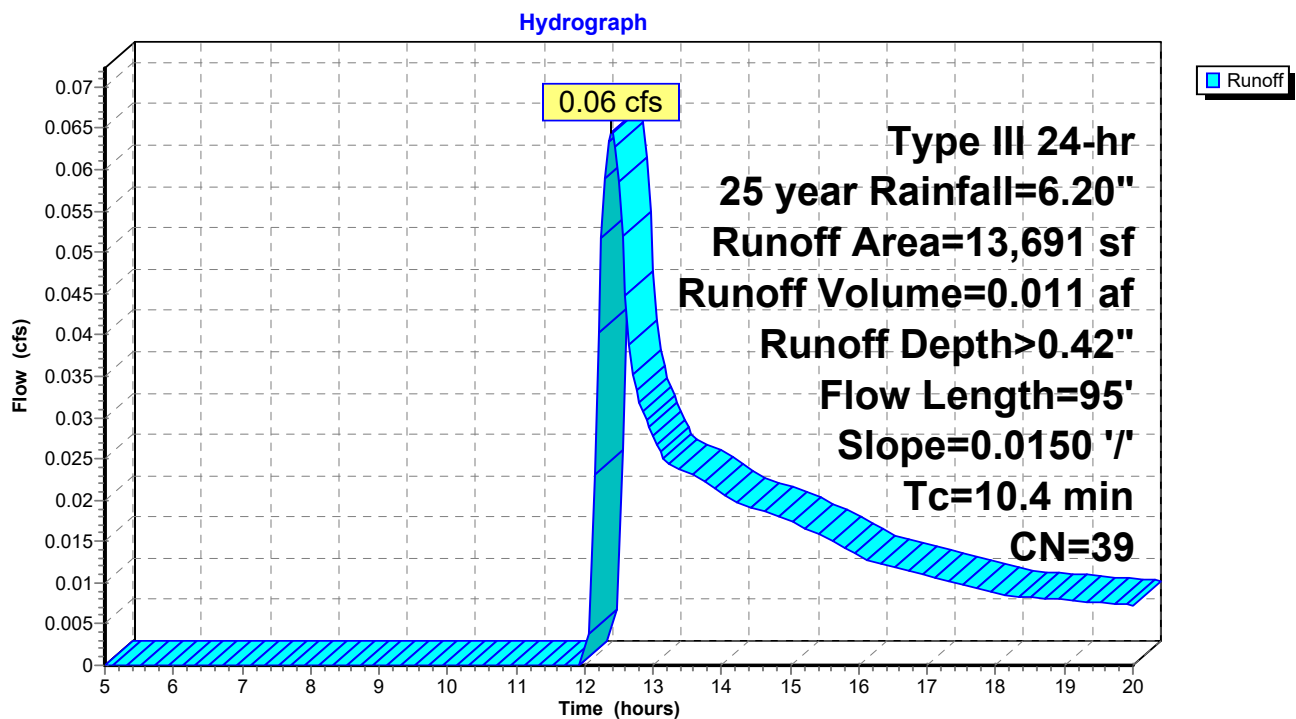
Runoff = 0.06 cfs @ 12.40 hrs, Volume= 0.011 af, Depth> 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

Area (sf)	CN	Description
13,691	39	>75% Grass cover, Good, HSG A
13,691		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	95	0.0150	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"

Subcatchment 4: Subcat 4



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 11

Summary for Subcatchment 5: Subcat 5

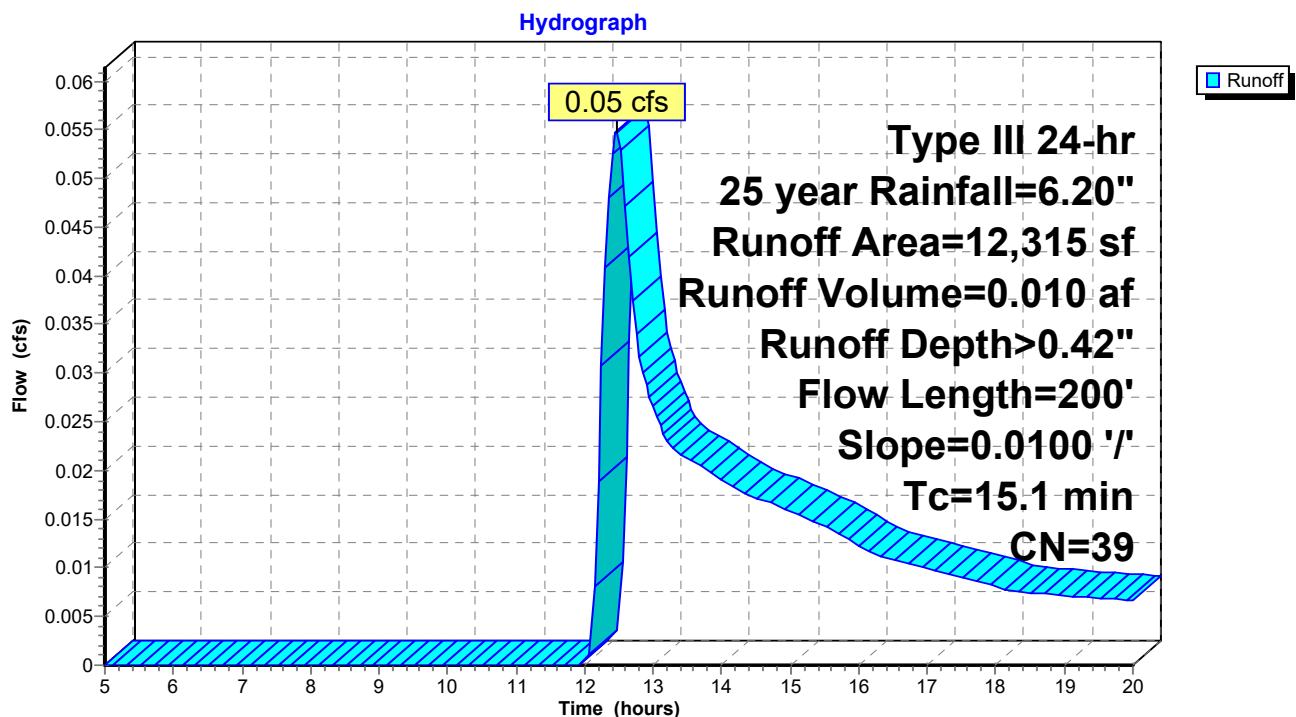
Runoff = 0.05 cfs @ 12.47 hrs, Volume= 0.010 af, Depth> 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

Area (sf)	CN	Description
12,315	39	>75% Grass cover, Good, HSG A
12,315		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	100	0.0100	0.13		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
2.4	100	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.1	200	Total			

Subcatchment 5: Subcat 5



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 12

Summary for Subcatchment 6: Subcat 6

Runoff = 0.81 cfs @ 12.20 hrs, Volume= 0.070 af, Depth> 2.12"

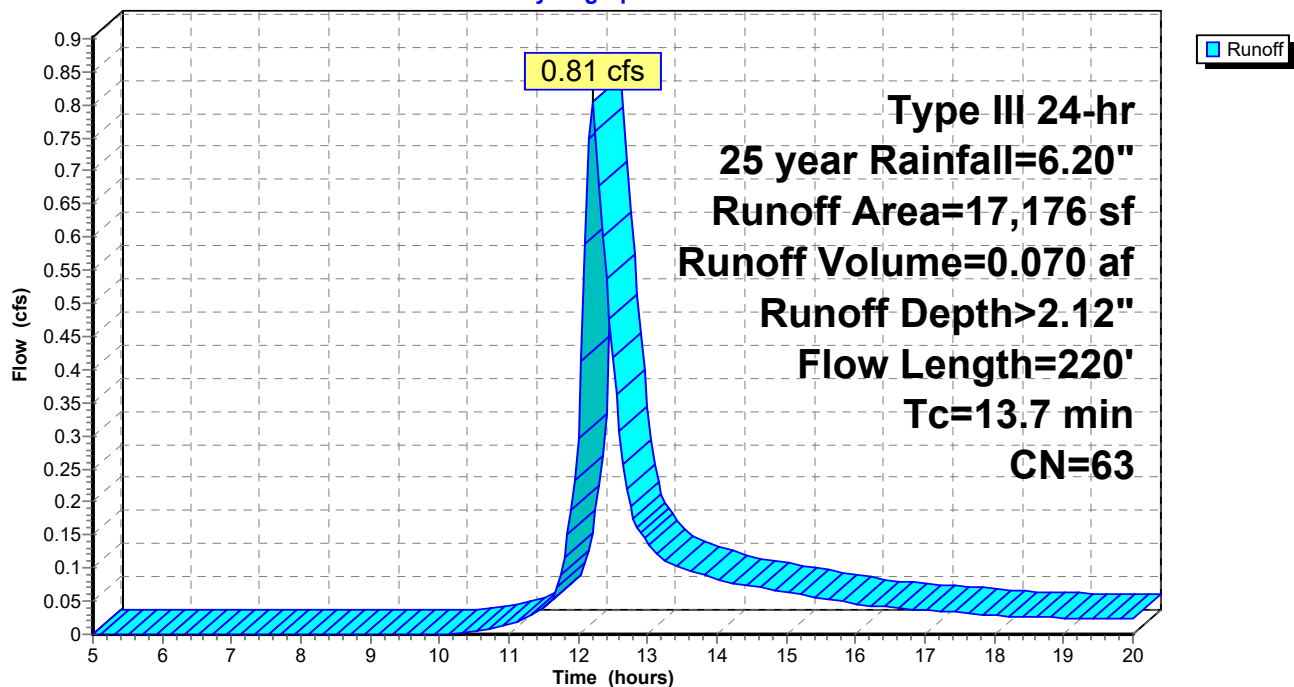
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

	Area (sf)	CN	Description
*	3,855	98	Sidewalks
	8,940	39	>75% Grass cover, Good, HSG A
	4,381	80	>75% Grass cover, Good, HSG D
	17,176	63	Weighted Average
	13,321		77.56% Pervious Area
	3,855		22.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	22	0.0150	0.92		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
10.4	78	0.0100	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
2.9	120	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
13.7	220	Total			

Subcatchment 6: Subcat 6

Hydrograph



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 13

Summary for Subcatchment 7: Subcat 7

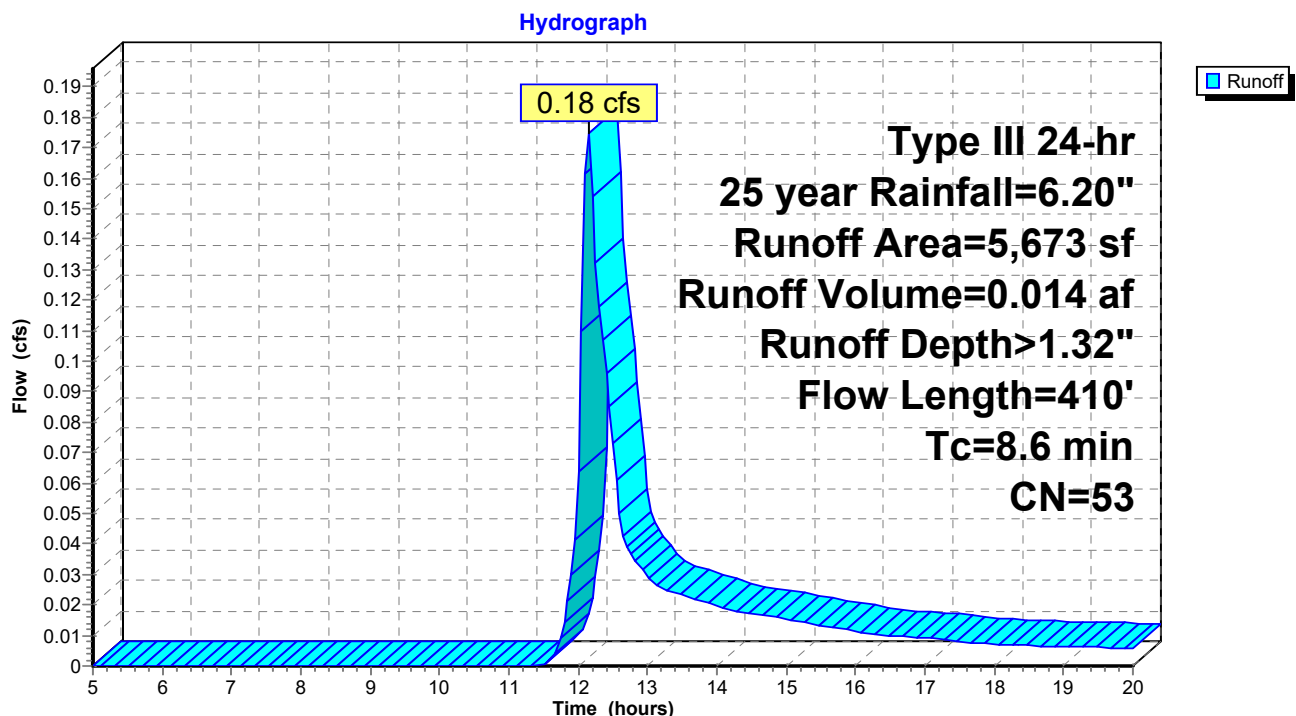
Runoff = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af, Depth> 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=6.20"

Area (sf)	CN	Description
* 855	98	Sidewalks
4,103	39	>75% Grass cover, Good, HSG A
715	80	>75% Grass cover, Good, HSG D
5,673	53	Weighted Average
4,818		84.93% Pervious Area
855		15.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	15	0.0200	0.96		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
6.4	60	0.0200	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.9	335	0.0060	2.88	0.57	Pipe Channel, 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
8.6	410	Total			

Subcatchment 7: Subcat 7



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

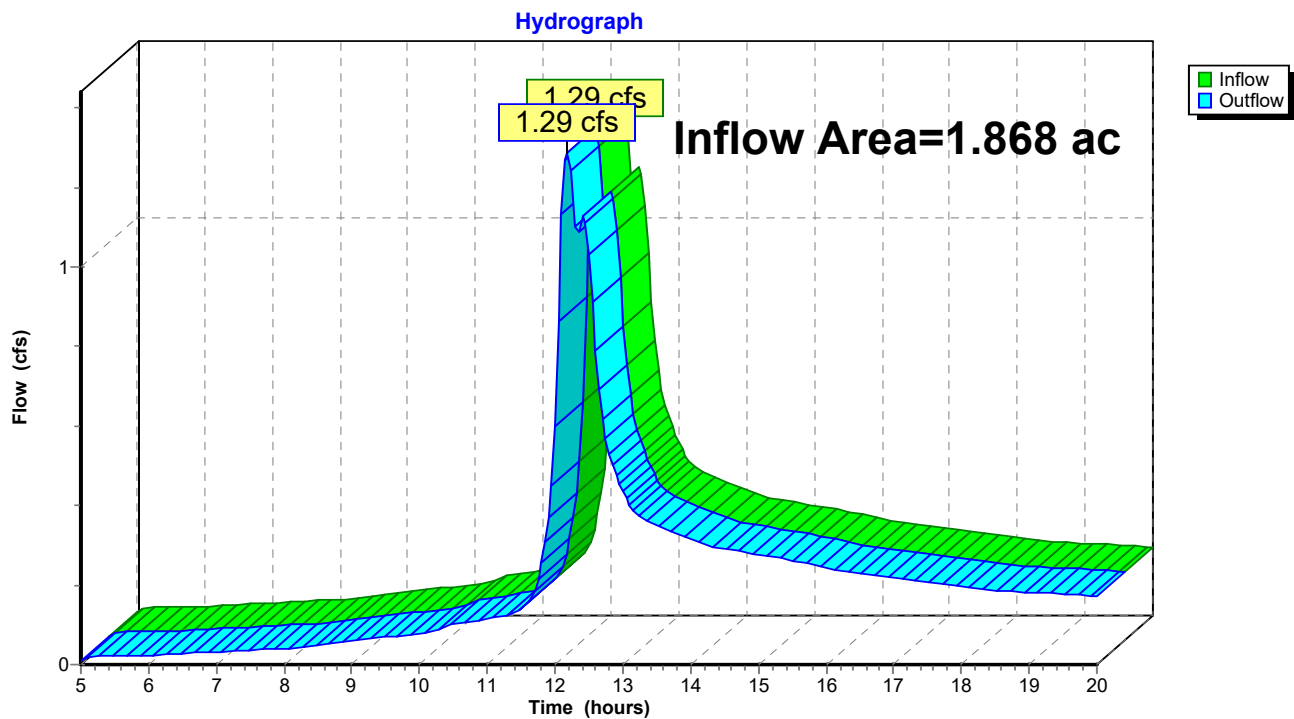
Page 14

Summary for Reach 4R: Adjacent Wetlands

Inflow Area = 1.868 ac, 34.44% Impervious, Inflow Depth > 1.63" for 25 year event
Inflow = 1.29 cfs @ 12.18 hrs, Volume= 0.254 af
Outflow = 1.29 cfs @ 12.18 hrs, Volume= 0.254 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 4R: Adjacent Wetlands



POST

Type III 24-hr 25 year Rainfall=6.20"

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 15

Summary for Pond 1P: Porous Pavement

Inflow Area = 0.278 ac, 78.86% Impervious, Inflow Depth > 4.34" for 25 year event
 Inflow = 1.47 cfs @ 12.07 hrs, Volume= 0.101 af
 Outflow = 0.06 cfs @ 15.18 hrs, Volume= 0.026 af, Atten= 96%, Lag= 186.6 min
 Primary = 0.06 cfs @ 15.18 hrs, Volume= 0.026 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 161.00' @ 15.18 hrs Surf.Area= 8,599 sf Storage= 3,443 cf

Plug-Flow detention time= 339.3 min calculated for 0.026 af (26% of inflow)
 Center-of-Mass det. time= 213.4 min (978.2 - 764.8)

Volume	Invert	Avail.Storage	Storage Description
#1	160.00'	16,338 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 40,845 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
160.00	8,599	0	0
162.00	8,599	17,198	17,198
163.25	8,599	10,749	27,947
163.75	8,599	4,300	32,246
164.75	8,599	8,599	40,845

Device	Routing	Invert	Outlet Devices
#1	Primary	160.83'	6.0" Round Culvert L= 300.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.83' / 159.20' S= 0.0054 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.06 cfs @ 15.18 hrs HW=161.00' (Free Discharge)

↑**1=Culvert** (Barrel Controls 0.06 cfs @ 1.49 fps)

POST

Prepared by {enter your company name here}

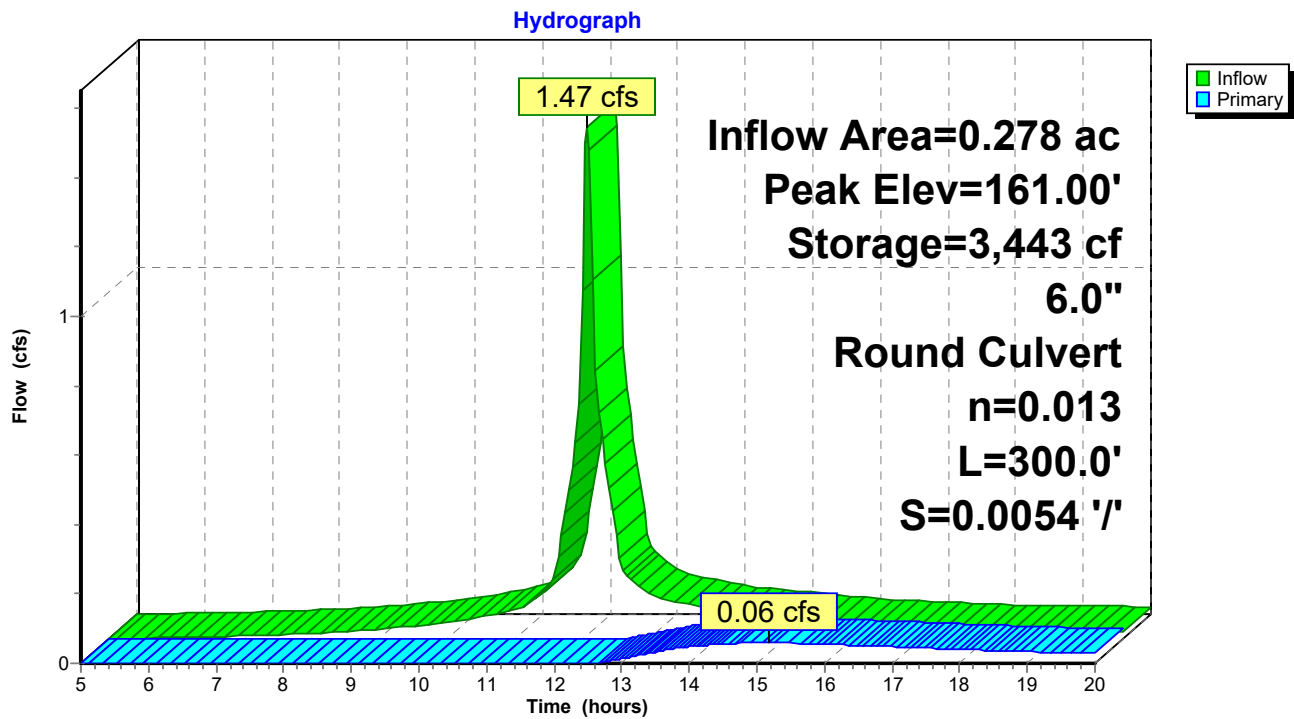
HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 16

Pond 1P: Porous Pavement



POST

Type III 24-hr 25 year Rainfall=6.20"

Prepared by {enter your company name here}

Printed 2/8/2024

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Page 17

Summary for Pond 2P: GUSF

Inflow Area = 0.555 ac, 49.08% Impervious, Inflow Depth > 2.92" for 25 year event
 Inflow = 1.67 cfs @ 12.07 hrs, Volume= 0.135 af
 Outflow = 0.39 cfs @ 12.49 hrs, Volume= 0.113 af, Atten= 76%, Lag= 25.2 min
 Primary = 0.10 cfs @ 10.60 hrs, Volume= 0.099 af
 Secondary = 0.29 cfs @ 12.49 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 162.79' @ 12.49 hrs Surf.Area= 1,600 sf Storage= 2,126 cf

Plug-Flow detention time= 129.7 min calculated for 0.112 af (83% of inflow)
 Center-of-Mass det. time= 79.5 min (824.4 - 744.9)

Volume	Invert	Avail.Storage	Storage Description
#1	161.20'	2,461 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
161.20	890	0	0
162.00	1,420	924	924
162.70	1,600	1,057	1,981
163.00	1,600	480	2,461

Device	Routing	Invert	Outlet Devices
#1	Primary	158.80'	6.0" Round Culvert L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 158.80' / 158.60' S= 0.0057 ' S Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Secondary	162.70'	4.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#3	Device 1	161.20'	0.10 cfs Exfiltration at all elevations

Primary OutFlow Max=0.10 cfs @ 10.60 hrs HW=161.22' (Free Discharge)

↑ **1=Culvert** (Passes 0.10 cfs of 1.10 cfs potential flow)

↑ **3=Exfiltration** (Exfiltration Controls 0.10 cfs)

Secondary OutFlow Max=0.29 cfs @ 12.49 hrs HW=162.79' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 0.29 cfs @ 0.81 fps)

POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

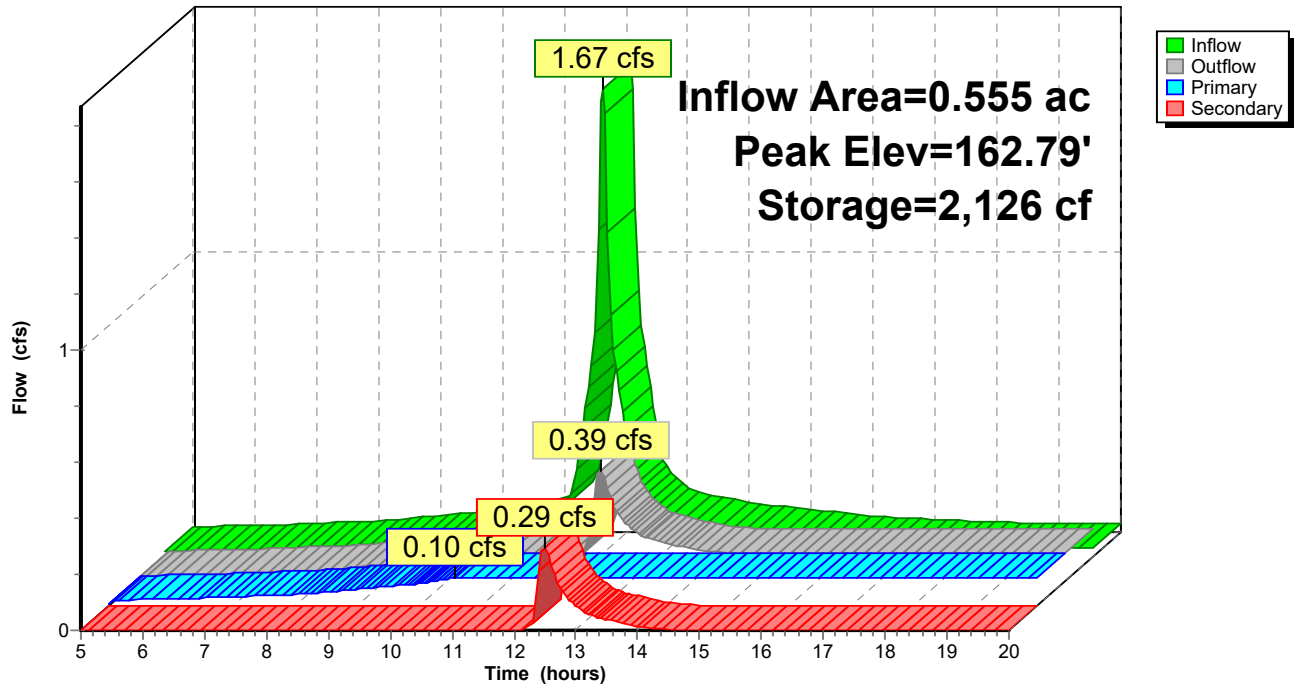
Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 18

Pond 2P: GUSF

Hydrograph



POST

Prepared by {enter your company name here}

HydroCAD® 10.00-26 s/n 00641 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25 year Rainfall=6.20"

Printed 2/8/2024

Page 19

Summary for Pond 8P: Yard Drain

Inflow Area = 0.130 ac, 15.07% Impervious, Inflow Depth > 1.32" for 25 year event
Inflow = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af
Outflow = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min
Primary = 0.18 cfs @ 12.14 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 161.79' @ 12.14 hrs

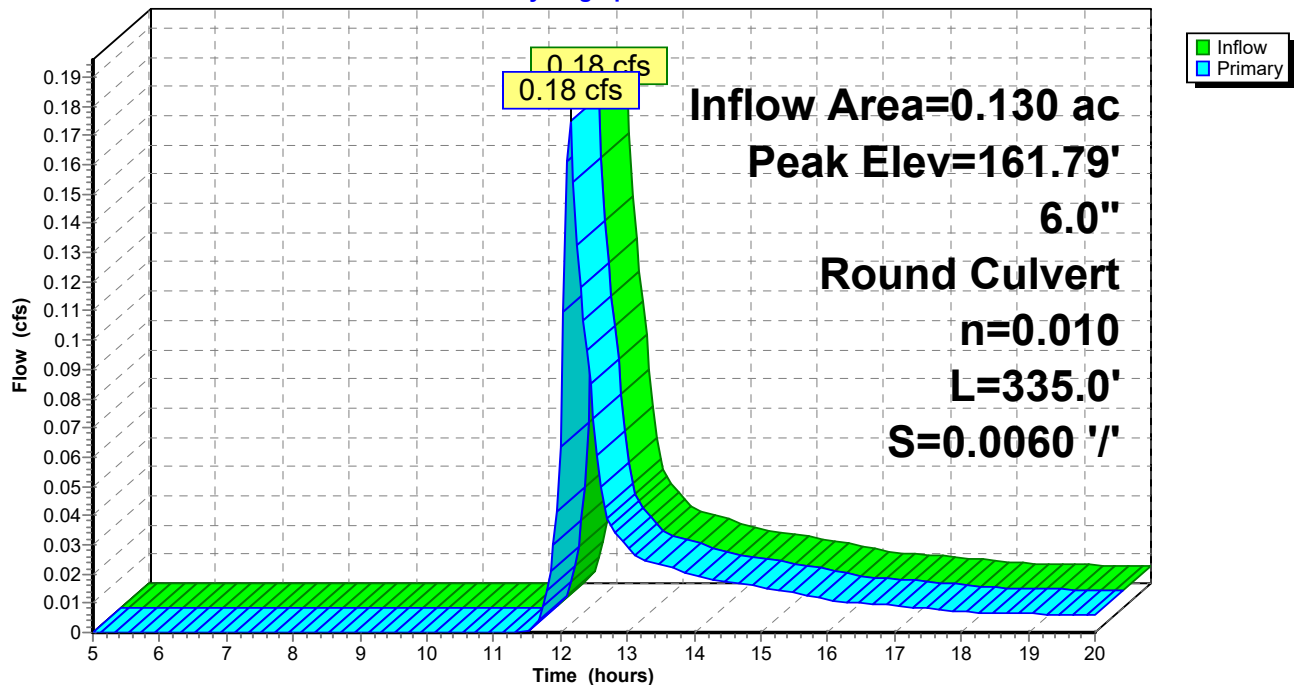
Device	Routing	Invert	Outlet Devices
#1	Primary	161.50'	6.0" Round Culvert L= 335.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 161.50' / 159.50' S= 0.0060 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.17 cfs @ 12.14 hrs HW=161.79' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.17 cfs @ 1.45 fps)

Pond 8P: Yard Drain

Hydrograph





ATTACHMENT I

EROSION CONTROL AND MAINTENANCE PLAN



EROSION AND SEDIMENTATION CONTROL

These erosion control notes address permanent stabilization measures, seeding, and mulching rates, as well as the timing of installation. Construction and installation details are also provided for the project. Additional descriptions and specifications are provided in the Erosion and Sedimentation Control Plan.

An Inspection and Maintenance Plan has been included in this section. This plan includes a list of measures to be inspected and maintained. It also includes the frequency and responsible parties to implement the plan. A Housekeeping Plan has also been submitted; this plan provides controls to address spill prevention and possible contamination of the site.



EROSION AND SEDIMENTATION CONTROL PLAN

A. Narrative: The proposed construction will require the implementation of temporary and permanent erosion control measures. These measures will be implemented in accordance with the Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual, prior to removal of any on-site vegetation or disturbance of any on-site soil. The general erosion and sediment control specifications and details, as provided within this section, are intended to describe measures to be used by contractors working on the site to maintain compliance with the standards established in the BMPs. These standards include information on temporary and permanent erosion control measures, rates of seeding and applied mulch, slope and soil stabilization, effect of construction schedule, and other details. The proposed location and use of erosion control measures on-site are shown on the Site Demolition and Erosion Control Plan C100 located in this application. There are no known existing erosion control concerns with the site. Implementation of proper erosion control measures will be required by site conditions to confine sediment and debris within the limit of soil disturbance. Proper use and maintenance of erosion control measures will provide protection against off-site transport of sediment and discharge of sediment to undisturbed areas of the development.

B. Construction Schedule:

DESCRIPTION	TIME FRAME
Project Begins	Summer 2024
Project Completion	Fall 2024

C. Site Features: For site features please refer to the enclosed plan.

D. Temporary and Permanent Erosion Control Measures: For temporary and permanent erosion control measures please refer to the enclosed plan.

E. Limits of Disturbed Areas: Areas of disturbance will be limited to the proposed work shown on the enclosed plan. The main aspect of the plan is to widen the existing access drive to 20-feet wide and add ditching. Areas outside of the road and grading area will maintain its existing land cover.

F. Design Drawings and Specifications: For design drawings please refer to the enclosed plan. The following specifications will be utilized by the site contractor during construction of the project.



EROSION CONTROL PLAN SPECIFICATIONS

A. General

1. All work and measures will be as per the Maine Erosion and Sediment Control BMPs manual.
2. The following specifications will be employed.

B. Prior to Construction

1. Prior to the beginning of construction, erosion and sedimentation controls shall be in place.

C. During Construction

1. Exposed soil surfaces will be treated immediately if they are to remain ungraded more than 30 days, or if they are at final grades.
2. Drainage ways, either designed or incidental, will have filter barriers installed.
3. All work and materials necessary to minimize sediment loss from the site will be provided.
4. All erosion control measures will be inspected and repaired after every rainfall greater than ½-inch and at least daily during rain events lasting longer than 24 hours.

D. Post Construction

1. Erosion control measures will be maintained until permanent soil stabilization has been achieved with a growth of vegetation greater than 90%.



SOIL PROTECTION AND EROSION CONTROL

PART 1 - GENERAL

1.01 Description of Work

- A. Provide and maintain devices to control erosion, siltation, sedimentation, and dust that occur during construction operations. Undertake every reasonable precaution and do whatever is necessary to avoid erosion of soil and to prevent silting of wetland areas and drainage ditches.
- B. Provide measures to control dust caused whether on or off the project site.
- C. Deficiencies in erosion control measures indicated by failures or erosion will be corrected as soon as reasonably possible by providing additional measures or different techniques to correct the situation and prevent subsequent erosion.
- D. Exposure of soils on embankments, excavations, and graded areas will be kept as short as possible. Initiate seeding and other erosion control practices as soon as reasonably possible.

1.02 Quality Assurance

- A. Conform to all requirements of applicable Federal, State, and local permits and conform to the recommendations of the Maine Erosion and Sediment Control BMPs whether the measures are specifically noted herein, or not.
- B. Standards: Maine Erosion and Sediment Control BMPs Manual, hereinafter called Erosion Control Handbook.

PART 2 - PRODUCTS

2.01 Materials: Use the following materials to implement and construct erosion control measures.

- A. Hay Bale: Rectangular shaped bales of hay or straw weighing at least 40 pounds per bale; free from noxious weed seeds and rough or woody materials.
- B. Mulch: Type and use as specified by the Erosion Control Handbook
 - 1. Long fibered hay or straw in dry condition and which are relatively free of weeds and foreign matter detrimental to plant life.
 - 2. Mulch netting: Plastic or nylon mesh netting with approximate openings of 1/4-inch to 1-inch.



C. Permanent Seeding: Cut and fill slopes and disturbed areas will be stabilized as follows:

1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface.
2. In lieu of tests, agricultural limestone will be spread at the rate of three tons per acre. 10-20-20 fertilizer will follow at the rate of 800 lbs. per acre. These two soil additives will be incorporated into the soil prior to seeding.
3. Following seed bed preparation, back slopes will be seeded to a mixture of 83% creeping red fescue, and 17% rye grass. Seeding rate is 3 lbs. per 1,000 square feet. Lawn quality sod may be substituted for seed.
4. Hay mulch at the rate of 90 lbs. per 1,000 square feet of a hydro-application of asphalt, wood, or paper fiber will be applied following seeding. A suitable binder such as curason or terrtack will be used on hay mulch for wind control.
5. If final seeding of the disturbed areas is not completed by September 15th of the year of the construction, then on that date these areas will be graded and a cover crop of rye at the rate of 112 lbs/acre or 3 lbs/1,000 sq. ft. will be applied. The rye seeding will be preceded by an application of 3 tons of lime and 800 lbs. of 10-20-20 fertilizer or its equivalent and covered by a layer of jute mat to aid in stabilization.

PART 3 - EXECUTION

3.01 Construction

A. Hay Bales:

1. Install as directed by Erosion Control Handbook, and stake with required stakes.

B. Mulch:

1. Undertake after each area has been properly prepared.
2. When seed for erosion control is sown prior to placing the mulch, place mulch on the seeded areas within 48 hours after seeding.
3. Blowing chopped mulch will be permitted.



4. Hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see the ground through the mulch.
5. Remove matted mulch or bunches.

C. Temporary Erosion Control Matting (where necessary):

1. Surface Preparation:
 - a. Conform to grades for slopes and ditches shown of the drawings.
 - b. Finish to a smooth and even condition with all debris, roots, stones, and lumps raked out and removed.
 - c. Loosen soil surface to permit bedding of the matting.
 - d. Unless otherwise directed, apply seed prior to placement.
2. Installation:
 - a. Place strips lengthwise in the direction of the flow of water.
 - b. Where strips are laid parallel or meet as in a tee, overlap at least four inches.
 - c. Overlap ends at least six inches in a shingle fashion.
 - d. The up-slope end of each strip of the matting will be turned down and buried to a depth of not less than six inches with the soil firmly tamped against it.
 - e. Build check slots at right angles to the direction of the flow of water. Space so that one check slot or one end occurs within each 50 feet of slope length. Construct by placing a tight fold of the matting at least six inches vertically into the ground and tamp the same as up-slope ends.
 - f. Bury edges of matting around the edges of the catch basins and other structures.
 - g. Where determined by the Engineers, additional seed will be spread over matting, particularly at those locations disturbed by building the slots. Matting will then be pressed onto the ground with a light lawn roller or by other satisfactory means.
 - h. Drive staples vertically into the ground flush with the surface.
 - i. On slopes flatter than 4:1, space staples not more than three feet and one row, alternately spaced, down the center.
 - j. On grades 4:1 or steeper, place in the same three rows, but spaced two feet apart.
 - k. On all overlapping or butting edges, double the number of staples, with the spacing halved; all ends of the matting and all required check slots will likewise have staples spaced every foot.



D. Permanent Seeding:

1. Seed with appropriate seeds and application rates as noted in Section 2.01C.
2. Mulch areas where seeding has been applied. Do not mulch seeded areas where matting will be immediately installed.

E. Topsoil Storage:

1. Topsoil which is stockpiled on the site for use in loam applications will be placed out of natural drainages, in piles that have side slopes of 2:1 to 1.5:1.
2. A trench (depth as required) will be constructed around the base of the pile to prevent eroding soil from washing into drainages.

F. Dust Control: Utilize the application of sprinkled water to reduce the emission of airborne soil particulates from the Project site.

G. Temporary Berms: Construct temporary barriers along the toe of embankments using side drains as necessary.

H. Temporary Basins: Construct temporary sedimentation basins adequate to avoid siltation of surface water bodies.

I. Other Temporary Measures:

1. Type and use will be as specified in the Erosion Control Handbook.

J. Winter Stabilization Notes

1. At this time, it is not expected that significant soil disturbance will occur during winter months or periods of heavy icing. If construction is performed during these times, the following construction practices will be followed.
 - a. All disturbed areas not stabilized with stone or other measures will have approved erosion control matting installed and be dormant seeded.
 - b. No frozen soil material or material containing significant snow or ice will be used for fill material.
 - c. All material stockpiles will have silt fence and/or hay bales installed downgradient of piles.
 - d. Follow general erosion control notes described previously wherever possible and as conditions permit.



3.02 Maintenance

- A. Inspect erosion control practices immediately after each rainfall greater than ½-inch and at least daily during rainfall lasting longer than 24 hours or snowmelt for damage. Provide maintenance and make appropriate repairs or replacements.
- B. Remove silt from around hay bales when it has reached one foot above grade or prior to expected heavy runoff or siltation.
- C. Repair matting if any staples become loosened or raised, or if any matting becomes loose, torn, or undermined, make satisfactory repairs immediately.

3.03 Removal of Temporary Erosion Control

- A. Remove temporary materials and devices when permanent soil stabilization has been substantially achieved. For vegetated areas, substantially complete means 95% vegetated cover has been established.
- B. Level and grade to the extent required to present a sightly appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.
- C. Remove unsuitable materials from site and dispose of them in a lawful manner.



INSPECTION AND MAINTENANCE

The following Maintenance Plan will be employed for this facility. The City of Biddeford will be responsible for all maintenance according to their maintenance agreement. Erosion control measures for this site were designed by:

Drew Olehowski, P.E.
Haley Ward, Inc.
120 Main Street
Saco, Maine 04072
(207) 283-9151
dolehowski@haleyward.com

A Pre- and Post-Construction Maintenance Plan for the stormwater management system and erosion control measures are included in this section.



MAINTENANCE PLAN

The MDEP's Stormwater Management for Maine: Best Management Practices (2006), and the MDEP's Chapter 500: Stormwater Management were used as guidelines in the development of this Maintenance Plan. General maintenance requirements are listed below.

A. DURING CONSTRUCTION

The general contractor will be responsible for the inspection and maintenance of all stormwater management system components during construction.

Inspection: Inspection of disturbed and impervious areas, erosion control measures, materials' storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site will be performed at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. Inspections shall be conducted by a person with knowledge of erosion and stormwater control, including the standards and conditions in the permit.

Maintenance: All erosion control measures will be kept in effective operating condition until areas are permanently stabilized. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation will be completed within 7 calendar days and prior to any rainfall event.

Documentation: A log shall be kept summarizing the inspections and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, Construction Inspection Log.

B. POST-CONSTRUCTION

The Owner or their assigns will be responsible for the inspection and maintenance of all stormwater management system components.

Inspection and Corrective Action

1. Vegetated Areas: Inspections and maintenance of vegetated areas will be performed early in the growing season or after significant rainfall to identify any erosion problems. Areas where erosion is evident will be covered with an appropriate lining, or erosive flows will be diverted to an area able to handle the flows. Any bare areas or areas with sparse growth will be replanted.



2. Ditches, Swales, and Culverts: Inspections and maintenance of ditches, culverts, and swales will be performed in the Spring, late Fall, and after rain events greater than 1-inch in depth to remove any obstructions to flow, to remove any accumulated sediments within the structures, and to repair any erosion of channel linings, check dams, inlet protection, or outlet protection. Vegetated ditches and swales must be mowed no more than twice per year and cut no less than 6-inch in height.
3. Porous Pavement:
 - Frequent inspections are performed during the first few months following construction. Then, the system is inspected routinely on an annual basis. Inspections should be made after significant storm events to check for surface ponding that could indicate failure due to clogging. Non-routine maintenance may require reconstruction of the surface treatment, and possibly the filter and reservoir layers, to relieve major clogging. Note, a "storm event" is defined by a storm event producing one inch of rain or more.
 - Prevent sedimentation due to the erosion of areas upgradient to the pervious pavement structures.
 - Prevent vehicles with muddy wheels from accessing onto areas intended for pervious pavement.
 - Maintenance of the pervious asphalt pavement shall use pure vacuum, vacuum-assist, or regenerative air technology. (Mechanical sweeping is not adequate to remove fines from pores in the pavement).
 - Sweep and or vacuum pavement twice annually at a minimum.
 - Limit salt use for deicing, and do not use sand.
 - Remove leaves and organic debris in the fall.
 - Measures should be taken to ensure that an area designed to be porous does not receive a future overlay of conventional non-porous paving.
4. Soil Filters:
 - The basin should be inspected semi-annually and following major storm events. Debris and sediment buildup should be removed from the forebay, and basin as needed. Any bare area or erosion rills should be repaired with new filter media, seeded, and mulched.
 - Maintenance Agreement: A legal entity should be established with responsibility for inspecting and maintaining any underdrained filter. The legal agreement establishing the entity should list specific maintenance responsibilities (including timetables) and provide for the funding to cover long-term inspection and maintenance.
 - Drainage: The filter should within 24 to 48 hours following a one-inch storm or greater. If the system drains too fast, an orifice may need to be added on the underdrain outlet or may need to be modified if already present.



- Sediment Removal: Sediment and plant debris should be removed from the pretreatment structure at least annually.
 - Mowing: If mowing is desired, only hand-held string trimmers or push-mowers are allowed on the filter (no tractor) and the grass bed should be mowed no more than 2 times per growing season to maintain grass heights of no less than 6 inches.
 - Fertilization: Fertilization of the underdrained filter area should be avoided unless absolutely necessary to establish vegetation.
 - Harvesting and Weeding: Harvesting and pruning of excessive growth should be done occasionally. Weeding to control unwanted or invasive plants may also be necessary.
 - Grass cover: Maintaining a healthy cover of grass will minimize clogging with fine sediments. If ponding exceeds 48 hours, the top of the filter bed should be rototilled to reestablish the soil's filtration capacity.
 - Soil Filter Replacement: The top several inches of the filter can be replaced with fresh material if water is ponding for more than 72 hours, or the basin can be rototilled, seeded, and mulched. Once the filter is mature, adding new material (a 1-inch to 2-inch cover of mature compost) can compensate for subsidence.
5. Inspection shall be performed by an individual with experience and/or training on the maintenance and functions of these devices.
6. Documentation: A log will be kept summarizing the inspections, maintenance, and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, BMP Inspection Log.
7. Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
- A. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - B. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.
 - C. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.



HOUSEKEEPING

1. Spill Prevention - During construction, controls will be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
2. Groundwater Protection - During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater will not be stored or handled in areas of the site draining to an infiltration area. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
3. Fugitive Sediment and Dust - Actions will be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil will not be used for dust control. Water will be used for dust control during construction.

Operations during wet months that cause mud to be tracked off the site onto public roads will provide sweeping of the road areas at least once per week and prior to significant storm events.

4. Debris and Other Materials - Litter, construction debris, and chemicals exposed to stormwater will be prevented from becoming a pollutant source. The nature of this development will not cause problems related to debris and other materials.
5. Trench or Foundation De-Watering - If de-watering is necessary, the collected water will be removed from the ponded area and spread through natural wooded buffers or discharged into a construction sedimentation basin. The water will not be allowed to flow over disturbed areas to the site.



BIDDEFORD PRIMARY SCHOOL CONSTRUCTION INSPECTION LOG

Inspection Date	Inspector (Name and Qualifications)	Major Observations	Work Performed

Notes

- 1) Major Observations include the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major Observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.
- 2) Work Performed will include a description of the corrective action taken, the date the corrective action was taken, and the name and qualifications of the person taking the corrective actions
- 3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
- 4) The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.



BIDDEFORD PRIMARY SCHOOL BMP INSPECTION LOG

Date	Inspector (Name and Qualifications)	ID Number	BMP Structure	Work Performed	Comments

Notes

- 1) If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal.
- 2) BMP structures shall be numbered sequentially and located on attached site map.
- 3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
- 4) The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.



INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
	INSPECTION SCHEDULE	CORRECTIVE ACTIONS
VEGETATED AREAS	Annually early spring and after heavy rains	Inspect all slopes and embankments and replant areas of bare soil or with sparse growth
		Armor rill erosion areas with riprap or divert the runoff to a stable area
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Mow vegetation as specified for the area
DITCHES, SWALES AND OPEN STORMWATER CHANNELS	Annually spring and late fall and after heavy rains	Remove obstructions, sediments or debris from ditches, swales and other open channels
		Repair any erosion of the ditch lining
		Mow vegetated ditches
		Remove woody vegetation growing through riprap
		Repair any slumping side slopes
CULVERTS	Spring and late fall and after heavy rains	Repair riprap where underlying filter fabric or gravel is showing or if stones have dislodged
		Remove accumulated sediments and debris at the inlet, outlet, or within the conduit
		Remove any obstruction to flow
ROADWAYS	Annually in the spring or as needed	Repair any erosion damage at the culvert's inlet and outlet
		Clear and remove accumulated winter sand in parking lots and along roadways
		Sweep pavement to remove sediment
		Grade road shoulders and remove accumulated winter sand
		Grade gravel roads and gravel shoulders
		Clean-out the sediment within water bars or open-top culverts
RESOURCE AND TREATMENT BUFFERS	Annually in the spring	Ensure that stormwater runoff is not impeded by false ditches or sediment in the shoulder
		Inspect buffers for evidence of erosion, concentrated flow, or encroachment by development
		Manage the buffer's vegetation with the requirements in any deed restrictions
		Repair any sign of erosion within a buffer
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Install more level spreaders, or ditch turn-outs if needed for a better distribution of flow
FILTRATION AND INFILTRATION BASINS	Annually in the spring and late fall	Clean-out any accumulation of sediment within the spreader bays or turnout pools
		Mow non-wooded buffers no shorter than six inches and less than three times per year
		Clean the basin of debris, sediment and hydrocarbons
		Provide for the removal and disposal of accumulated sediments within the basin
		Renew the basin media if it fails to drain within 72 hours after a one inch rainfall event
PROPRIETARY DEVICES	As specified by manufacturer	Till, seed and mulch the basin if vegetation is sparse
		Repair riprap where underlying filter fabric or gravel is showing or where stones have dislodged
OTHER PRACTICES	As specified for devices	Contract with a third-party for inspection and maintenance
		Follow the manufacturer's plan for cleaning of devices
		Contact the department for appropriate inspection and maintenance requirements for other drainage control and runoff treatment measures.