SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

Site Plan Review Application

Subsequent Materials & Updated Information

to the

City of Belfast

for

Convenient MD
Belfast, Maine

on behalf of

Parkingway Management, LLC
P.O. Box 963
Portland, Maine 04104

April 2023

75 John Roberts Road – Suite 4A, South Portland, ME 04106-6963 • 207-200-2100 • Fax: 207-856-2206

April 12, 2023
220473

Bub Fournier, Director, Code & Planning
Jon Boynton, City Planner
City of Belfast, Maine
131 Church Street
Belfast, ME 04915

RE: Response to Questions/ Materials for Belfast Convenient MD – Site Plan Application

Dear Mr. Fournier and Mr. Boynton:

On behalf of our client, Coldbrook LLC (owner) and Parkingway Management LLC. (applicant), please see below for responses to the questions regarding the Site Plan application and related materials for the proposed Convenient MD in Belfast issued on March 28, 2023.

Question:

Structure size: My biggest concern is the identified structure size of 4,997 s.f. as I cannot confirm the stated square footage. The performance standards identify structures over 5,000 s.f. must follow the 35 ft setback requirement, while structures 5,000 or less can follow the 30 ft setback requirement. This concerns me as all my measurements show a structure size of over 5,000 s.f. The structure's relocation to meet the 35 ft setback could impact how you meet many other standards like landscaping and wetland fill.

Response: The total building size, including the canopy overhangs considered part of the structure, is 5,635 sf. The square footage excludes the awning overhangs. The building location has been adjusted to conform to the 35-foot front setback requirements.

Question:

Stormwater: My concern with stormwater stems from the fact that the City has two standards for stormwater. Chapter 98 identifies 2 and 25 year storm events, while Sec. 102-1124 requires a stormwater design that meets the requirements for a 50 year storm. The application is silent with the 50 year storm event. Once I have this update, I will forward your proposed stormwater plan to the City Engineer.

Response: The stormwater requirement mentioned within sec. 102-1124 does not apply to our project as we are located within the Route 3 Commercial District. Planning staff has confirmed this understanding.

Question:

Lighting: Your application identifies the types of lights you plan to use. It does not include the number of lights on the building and does not provide a photometric plan that identifies the distribution of light on the site. Without the photometric plan, the Board does not have enough information to make a determination on glare.

Response: Please see the attached photometric plan. The plan has been updated to reflect the adjusted building location. Cut sheets for the fixtures were previously submitted and remain unchanged.

Question:

Parking: The application identifies 34 parking spaces, but your plot plan shows 33. I need clarification on the number of physicians and practitioners. You state having two physicians, P.A., and a nurse practitioner. This equates to 16 parking spaces plus your 12 employees, so you need at least 28 parking spaces. I know you are proposing more parking, but we need an accurate base to determine the minimum amount you need to provide.

Response: An additional parking space has been included to reflect 34 total parking spaces. Please see the revised site plan. As stated in the application, while 28 spaces are required per number of physicians and employees, Convenient MD has found at other locations that 30 parking spaces allows for capacity for patient overlap while waiting for care. There are also four parking spaces on the site to compensate for the four removed on the 22 Belmont parcel per the landowner agreement.

Question:

Wetland: The application identifies needing a Tier 1 NRPA permit as the total amount of wetland fill is 14,911 s.f. Depending on setback requirements based on structure size and the potential new proposed location of the structure will determine if a Tier 1 or Tier 2 NRPA is needed.

Response: Acknowledged. The Site Plan has been updated to indicate a total of 8,400 sf of additional wetland impact on the Convenient MD parcel and 1,455 sf of wetland impact on 22 Belmont Ave parcel. The required NRPA Tier 1 permits will be submitted for both parcels.

Question:

Off Site Improvement: The application identifies making several changes to 22 Belmont Ave. These changes include relocating 4 parking spaces, wetland impacts, and changes to the site's circulation pattern. The application is silent on how you plan to address these changes. I do not know if you are working with the owner on a site plan amendment. However, the identified improvement to 22 Belmont Ave require a site plan amendment and possibly and update to their state permits. I intend to include a condition of approval requiring an update to the site plan permit for 22 Belmont Ave.

Response: The owner of 22 Belmont Ave. has given permission for the applicant to submit an Amended Site Plan Application on their behalf. Please see the attached permission letter from the owner of 22 Belmont Ave. The application will be submitted for consideration at a May 2023 Planning Board meeting.

As noted previously, an access easement already exists between 22 Belmont Ave. and the proposed Convenient MD parcel. A copy of the easement was included in the application. Based on review of the Site Plan Sec. 102-1190, direct connections to adjacent land uses and properties, that allow the shared use of these connections, may be allowed upon review of the staff and Planning Board.

The abutting parcel (22 Belmont Ave.) currently has approximately 42 parking spaces. The connecting road between the parcels will displace four parking spaces on the 22 Belmont parcel which have been relocated to the Convenient MD parcel. A cross access easement will be completed and will assign those four spaces for use by employees and customers of 22 Belmont Ave.

The owner of 22 Belmont Ave. acquired a Site Location of Development Permit on August 9, 1999, specific to Traffic. Sebago's traffic engineer reviewed this permit, available data from Maine DOT, collected additional traffic count data in February 2023, and generated proposed trip generation from the proposed Convenient MD, and determined that a Maine DOT Traffic Movement Permit (TMP) would not be required for Convenient MD, as project trip generation does not exceed the 100-trip threshold per peak hour. Additionally, this level of trip generation would not require potential TMP modification to the neighboring 22 Belmont Ave site. See the Traffic Impact Study submitted with this application and Maine DEP Findings of Fact and Order attached.

Question:

Signage: I have concerns that your proposed signage does not meet the size requirements for the Route 3 Commercial zoning district. You will need to work with the CEO, as the planning board does not review signs.

Response: **The applicant will work with the CEO, as noted.**

Question:

Fees: I do not remember informing anyone about the permit fee. According to the fee schedule, the review constitutes a major permit for the site plan. The fee is $5,000 plus advertising and deliberation costs.

Response: A fee of $5,000 is included with this submission.

We look forward to discussing this project with the Planning Board at the April 26, 2023 meeting. Please feel free to contact us if additional information is needed. Thank you for your time and consideration relative to this project.

Sincerely,

SEBAGO TECHNICS, INC.

Amy Bell Segal, RLA ASLA
Maine Licensed Landscape Architect
Senior Project Manager

c.c. M.d'Hemecourt

Table of Contents

Exhibit 1

Authorization

To Whom It May Concern:

BELFAST RIVER LLC (the "Owner") is the owner of the property located at 22 Belmont Avenue, Belfast, ME (Tax Map 5, Lot 12-A) (the "Property"). The Owner hereby authorizes Parkingway Management, LLC, and its agents and representatives (including, without limitation, any law firm or engineering or architecture firm that the above may designate), to execute, submit and prosecute applications and any applicable materials to the City of Belfast, ME boards, commissions, agencies and the like (including, without limitation, zoning boards, planning boards and the City Council) on behalf of the Owner, for the purpose of obtaining municipal permits and approvals and property rezonings necessary or desired in connection with the creation of a driveway connection from, and traffic access rights of, the adjacent property at 20 Belmont Avenue to connect to and use the driveway on the Property for access to Belmont Avenue as detailed in the proposed site plan in Exhibit A.

BELFAST RIVER LLC

4/11/2023

Date

By: DocuSigned by: Joe Delois 35589656423E4BB...

Name: Joseph Delois, sole manager
Duly authorized

Exhibit A

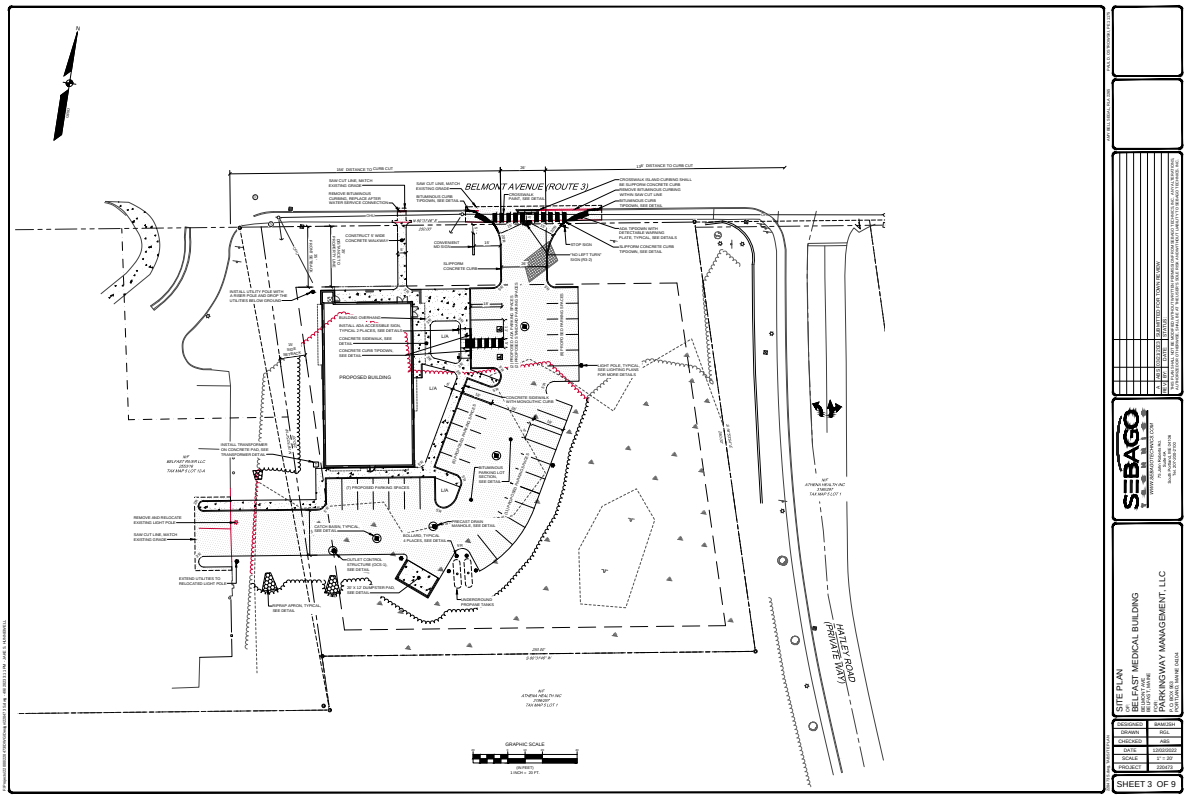
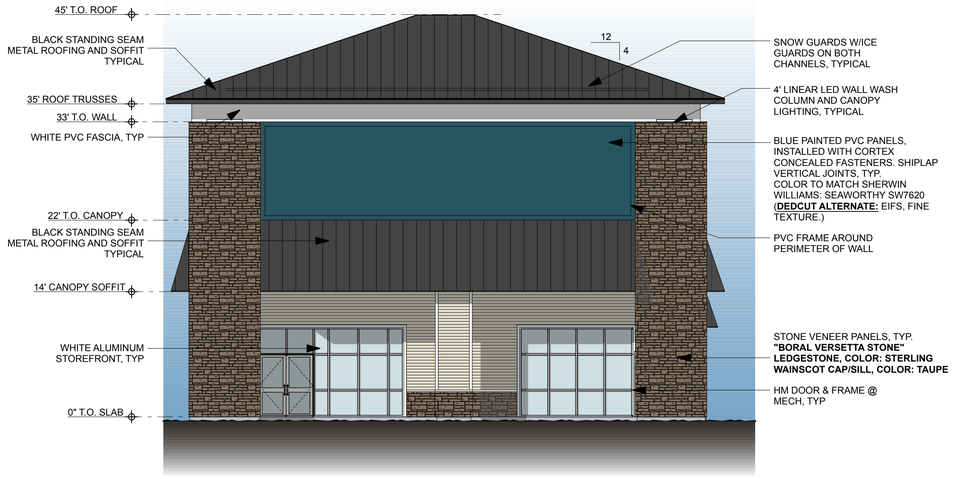
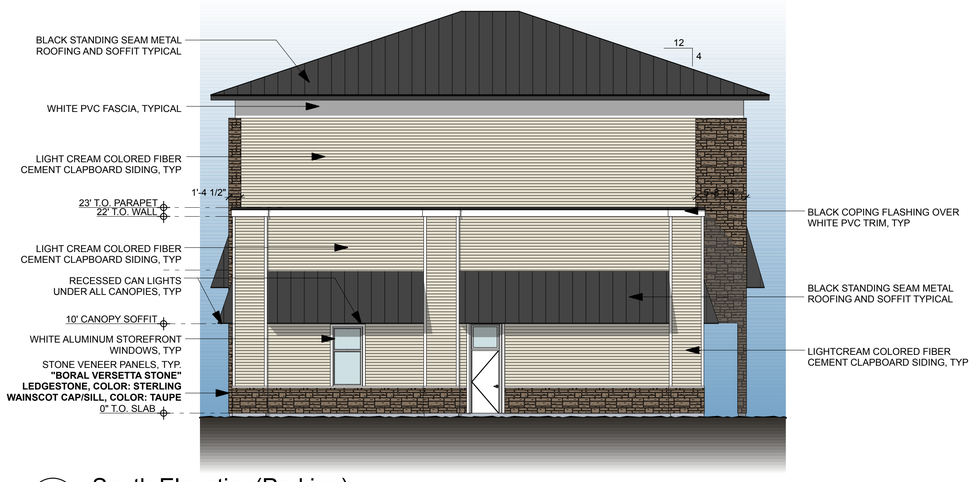


Exhibit 2

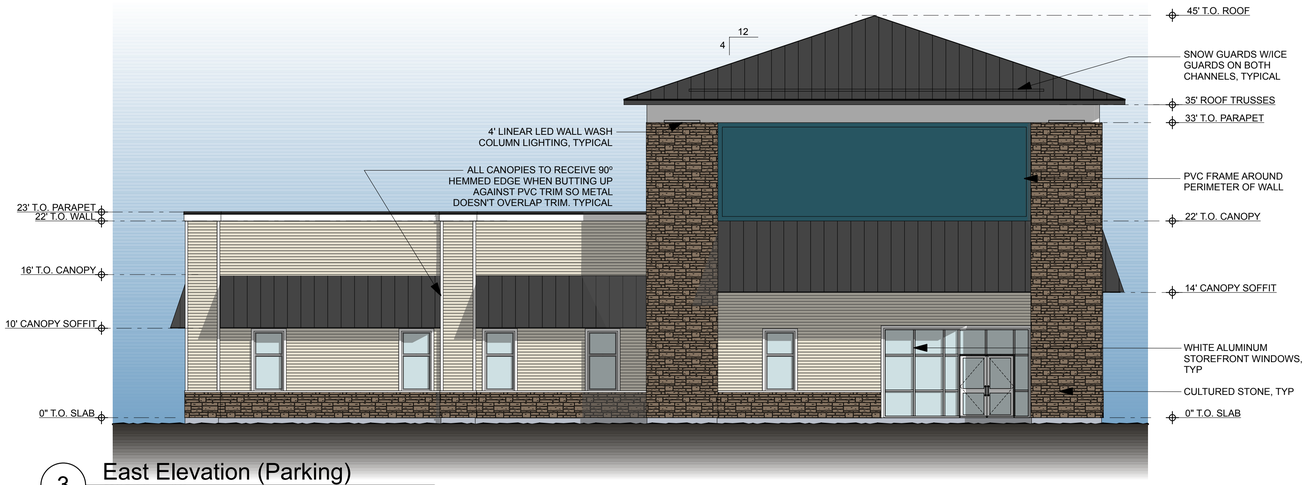
Architecture - Elevations



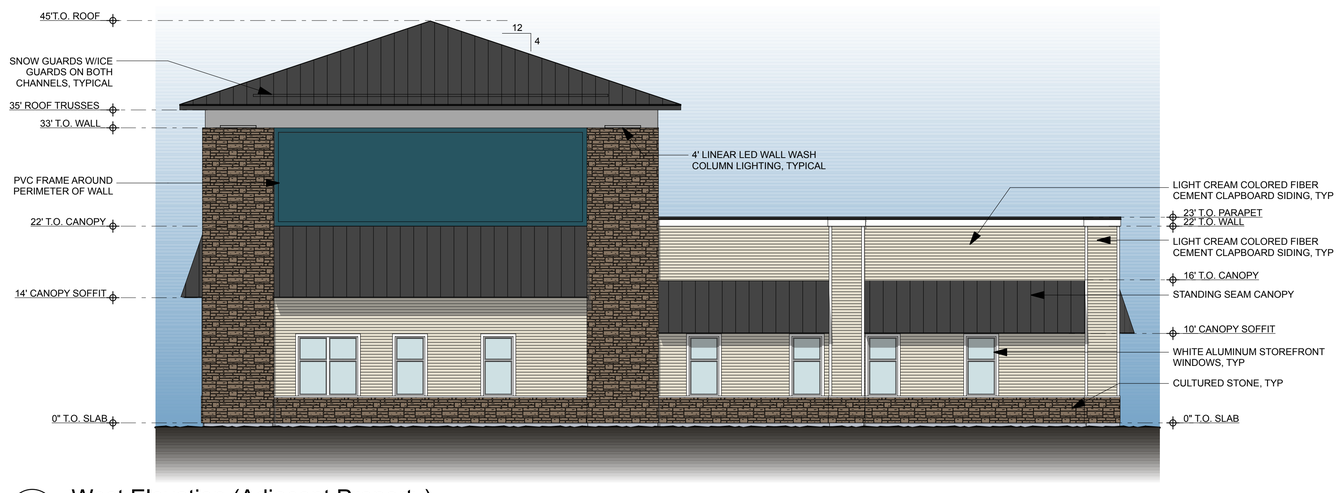
1 North Elevation (Belmont Avenue)
SCALE: 1/8" = 1'-0"



2 South Elevation(Parking)
SCALE: 1/8" = 1'-0"



3 East Elevation (Parking)
SCALE: 1/8" = 1'-0"



4 West Elevation (Adjacent Property)
SCALE: 1/8" = 1'-0"

CONVENIENTMD EXTERIOR FINISH NOTES:

Pitched Roofs & Canopies: Standing Seam Metal Roofing, Pac-Clad "Snap Clad" or approved equal, Color: **Black**

Membrane Roof: Fully Adhered White .060 TPO Membrane on coverboard over R30 min polyiso rigid insulation,

Eave & Canopy Soffits: Pac Clad Aluminum Flush Soffit Panels or approved equal. Upper tower soffit color to match roof color. Lower canopy soffits to be white pvc beadboard, AZEK or approved equal.

Exterior Clapboard Siding: Pre-Finished James Hardie clapboard siding, 4" exposure. Color: Navajo Beige

Exterior Trim: 5/4 PVC, Azek or architect approved equal. Color white

Stone Veneer: Stone Veneer Panels "Boral Versetta Stone" Color/style to be confirmed with architect.

Aluminum Storefront: All Aluminum Storefront doors/windows shall be Kawneer 451T Thermally Broken aluminum storefront system or approved equal.
Two sets of glass exterior double doors with thermally broken aluminum frames with two ADA automatic door openers.
Color to be white

Rear Exit Door: Insulated Hollow Metal rear door with ADA push exit hardware, electric strike & FOB access control system.

Envelope Insulation:
-Low slope roof to be R30 min continuous between exterior insulated walls, ensuring continuity of all envelope insulation.
-Exterior Walls to be R26 (4") min Closed cell spray in place polyurethane insulation in stud cavity
-2" min rigid insulation from top of foundation footing to top of slab elevation on outside face of foundation wall, Reinforced Stucco finish over exposed foundation insulation.

Exterior Lighting:
Provide & Install recessed LED lighting fixtures in all canopies, overhangs at canopies/overhangs
Provide & Install Round recessed LED down lights around perimeter of upper & lower canopy/roof overhangs
Provide additional Linear LED wall wash down lights to graze down corner columns of tower.
Provide LED Wall pack lighting at rear doors
Provide Linear LED lighting above tower canopies per electrical drawings.

ENGINEER:

CLIENT:

convenientMD

Corporate Office
111 New Hampshire Avenue,
Portsmouth, NH 03801
603-319-4490

PROJECT:

ConvenientMD
Urgent Care
20 Belmont Avenue
Belfast, ME 04915

SEAL:

Elevations

ISSUE FOR:	Progress
ISSUE DATE:	4/6/23
REVISIONS:	

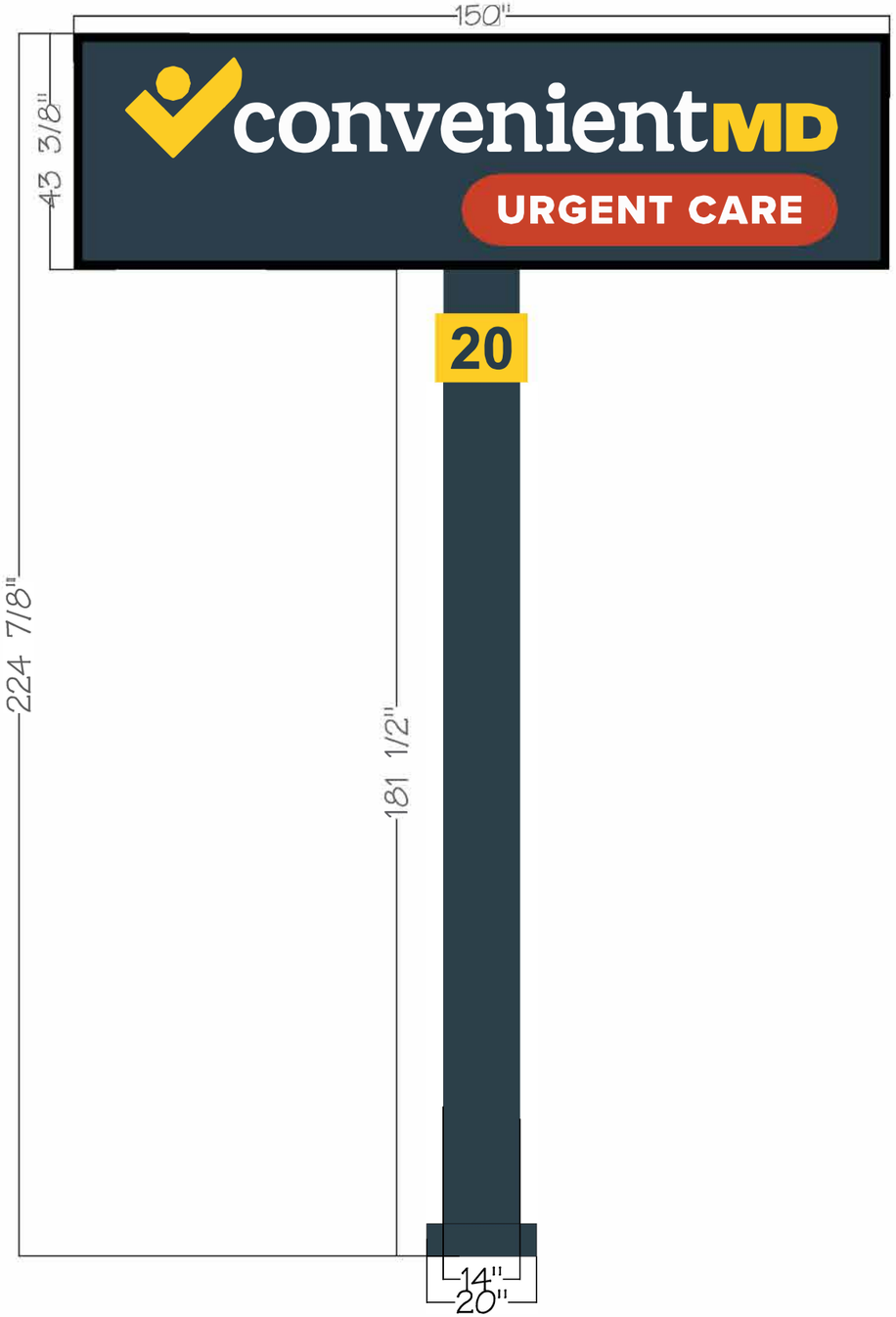
A201

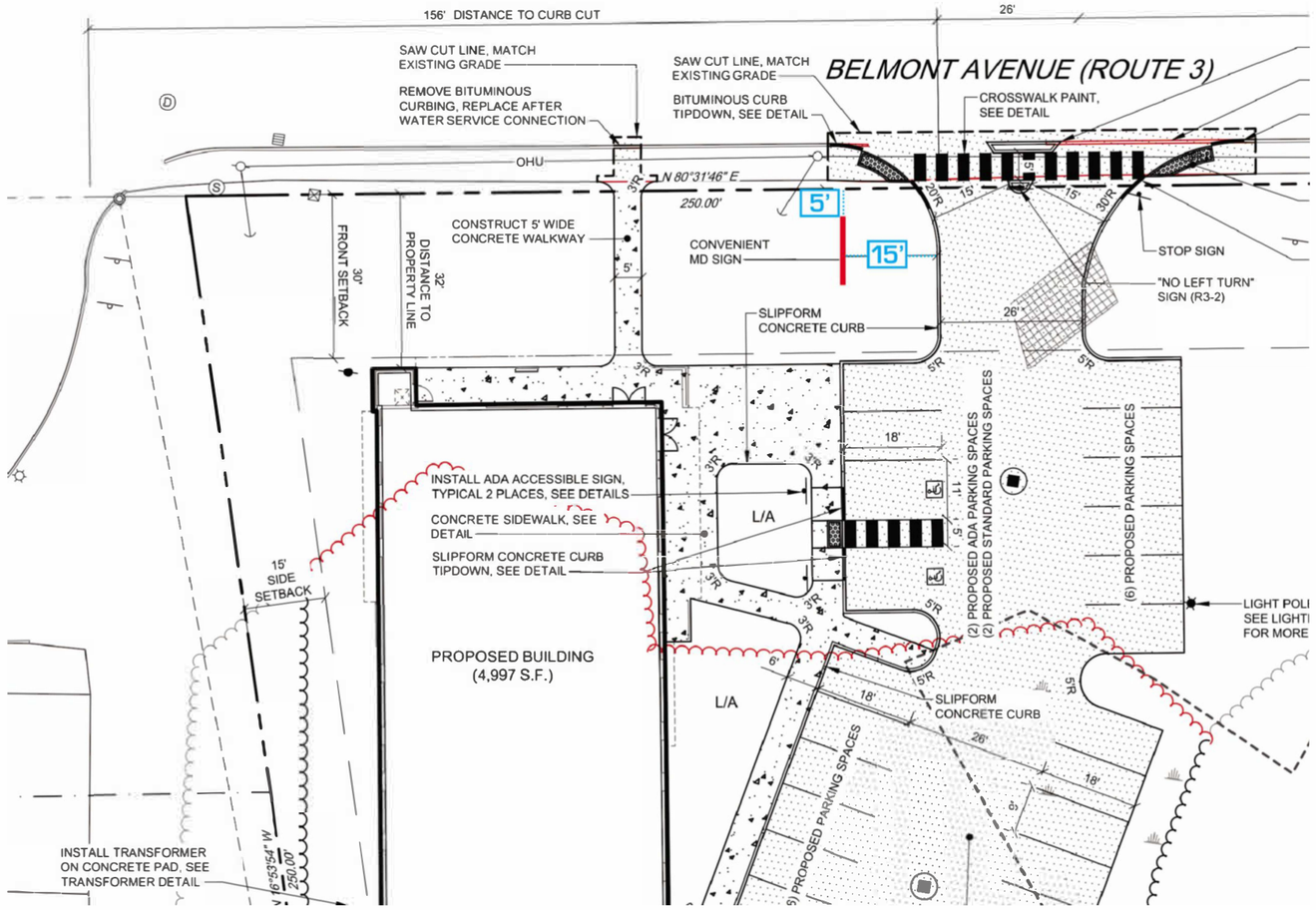
PROJECT #: 2023-004

Exhibit 3

Sign Plan

20 BELMONT AVE - CMD-URGENT CARE - FREESTANDING SIGN





Quantity [1]

Design, furnish and install (1) new, LED illuminated, freestanding sign on the corner of the entrance driveway. Sign is setback 5' from front lot line and 15' from driveway corner entrance.

- Sign colors and design comply with Convenient MD corporate branding standards
- sign is UL listed under Sousa Signs, LLC

Night Rendering

Sign Area Calculation

45.3 Total Sq. Ft.

PART# DF-PS-050

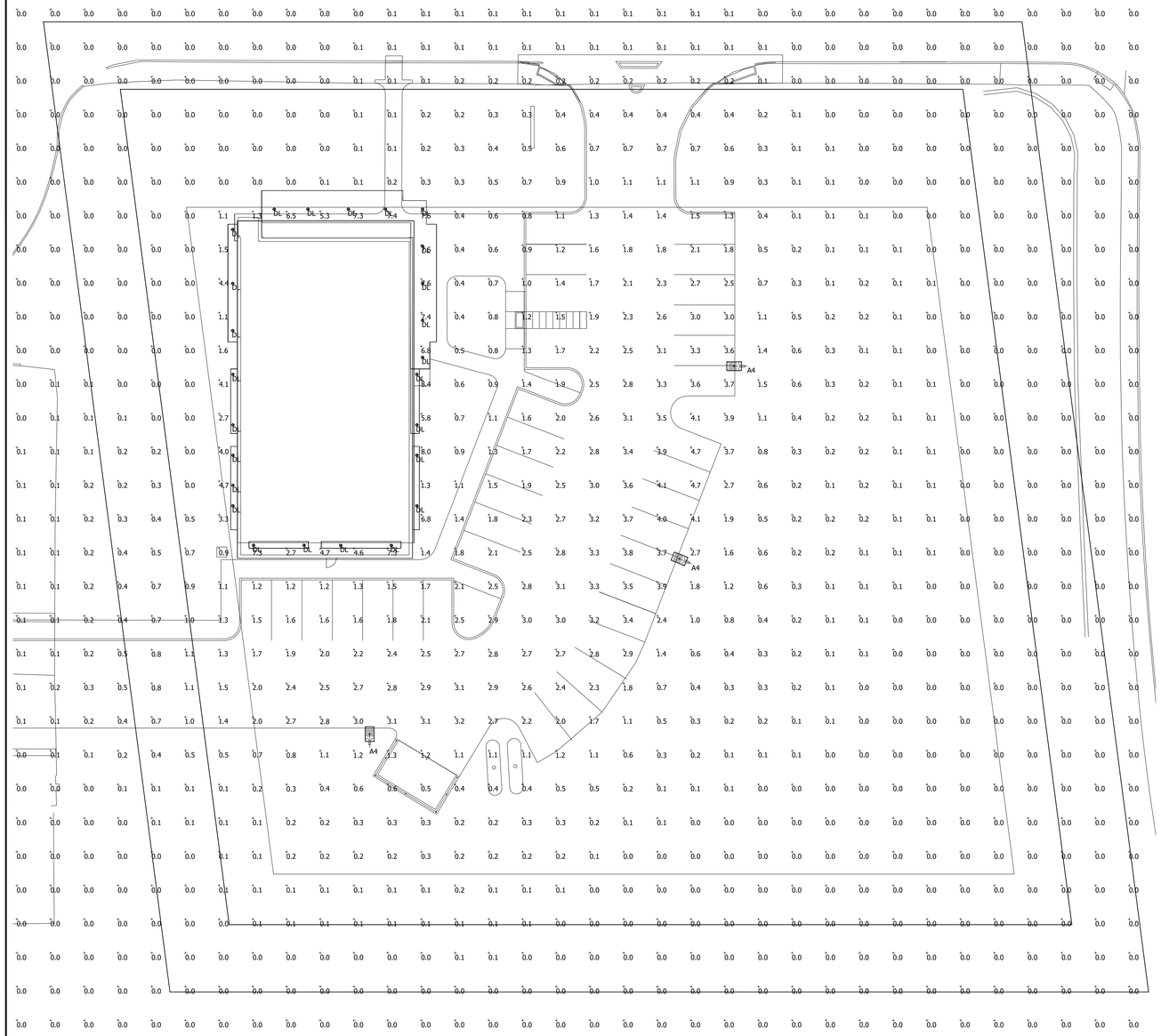
FREESTANDING SPECIFICATIONS
SIGN FACE: Flexface, White
RETAINERS: 2" Aluminum, Matte Black
CABINET: 040 Aluminum, Matte Black
ACCENT BARS: 040 Aluminum, Painted PMS 1235c
POLE COVER: 040 Aluminum, Painted PMS 7477c
LIGHTING: Hanley LED Lighting, White
COLOR: Pantone 7477c
COLOR: Pantone 2028c, Matched to Tomato Red Trans.
COLOR: Pantone 1235c

DATE: 3-21-23	**JOB NAME:** Convenient MD Primary Care - Exterior Sign Package
REP: Jason	**JOB LOCATION:** 20 Belmont Ave., Belfast, ME
CONTACT: Dave S.	**Signature:**
AUTHORIZED SIGNATURE REQUIRED TO BEGIN PRODUCTION	

SOUSA Signs
225 East Industrial Park Dr. Manchester, NH 03109
603-622-5067 FAX 603-624-6188

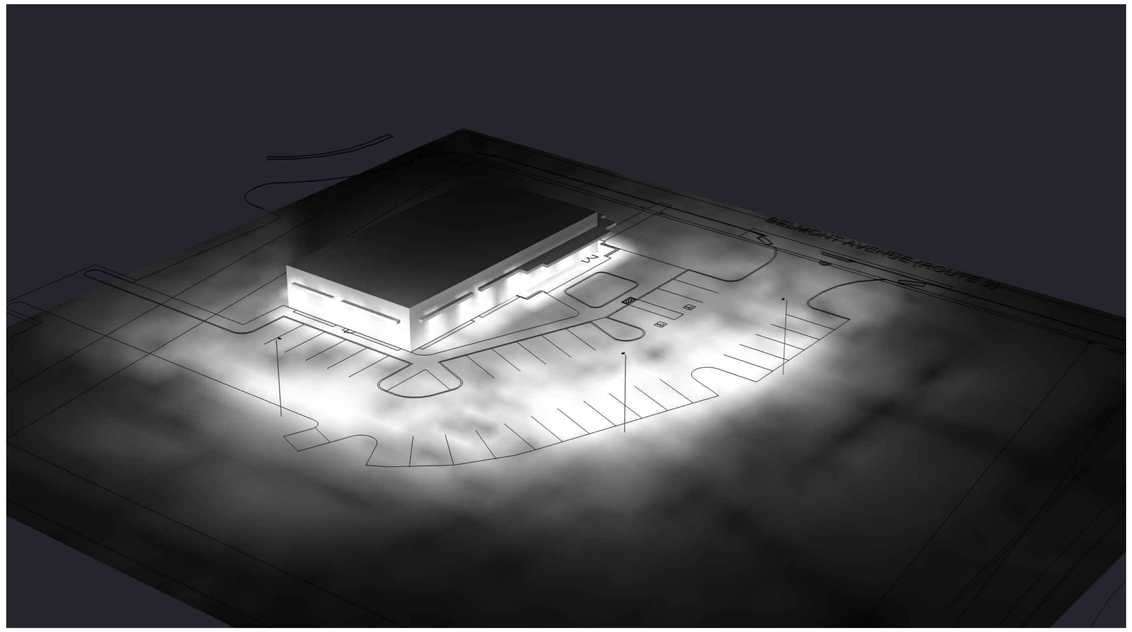
Exhibit 4

Lighting Photometric Plan



Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
	3	A4	25' - 0" AFG	0.900	19139	180	VP-2-72L-180-4K7-4W
	25	DL	9' - 0" AFG	0.900	663	8	LTR-3RD-RH-SL06L-DM1_LTR-3RD-T-SL35K8WDS

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
20' Beyond Property Line	Illuminance	Fc	0.05	0.6	0.0	N.A.	N.A.
Property Line	Illuminance	Fc	0.12	1.3	0.0	N.A.	N.A.
Building Perimeter	Illuminance	Fc	4.77	8.4	0.9	5.30	9.33
Overall Area	Illuminance	Fc	0.60	8.4	0.0	N.A.	N.A.
Parking Area	Illuminance	Fc	2.37	4.7	0.4	5.93	11.75



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 - FT.

1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO CURRENT. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

BELFAST MEDICAL BUILDING
BELFAST, ME
SITE PHOTOMETRIC PLAN

REVISED FROM DRAWING NUMBER(S):	
R1: 04/13/23	

Current

DN BY: DHK	DATE: 03/03/23	CHK BY: N/A
REV. BY: DHK	DATE: 04/13/23	SCALE: AS NOTED
QUOTE: N/A	DRAWING / DESIGN NO.: A230311R1	

Exhibit 5

Maine DEP Findings of Fact and Order for 22 Belmont Ave.

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER

IN THE MATTER OF

DEAD RIVER COMPANY	) SITE LOCATION OF DEVELOPMENT
Belfast, Waldo County	)
CONVENIENCE STORE & GAS STATION	) TRAFFIC
L-19858-T3-A-N (Approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 et seq. and 06-096 CMR 374, the Department of Environmental Protection has considered the application of DEAD RIVER COMPANY with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. The applicant proposes to construct a 2,074 square foot convenience store with eight fueling positions and a 2,954 square foot fast food restaurant with a drive through service window. The site is located on a 1.93 acre parcel of land. This development will generate 279 passenger car equivalents (PCEs) at the peak hour that generally occurs during noontime Saturdays. The development is located on Route 3 in the Town of Belfast all as shown on a set of plans the first of which is entitled "Site Layout Plan, Convenience Store, Belfast, Maine," prepared by Gorrill-Palmer Consulting Engineers, Inc, with a revision date of June 21, 1999.

2. A scoping meeting with the Department, the Maine Department of Transportation (MDOT), the applicant and the Town of Belfast was held on December 7, 1998.

3. Based upon the information provided by the applicant, the scoping meeting, and written comments provided by MDOT, dated April 13, 1999, the Department finds that the applicant has met the standards contained in Department Rules, Chapter 374(3) pertaining to the traffic movement standard of the Site Location of Development Law provided the following traffic improvements are made:

   On-Site Impacts:

   1. Overhead street lights shall be installed at both site driveways where they intersect with Route 3.

   2. A second "Do not Enter" sign (R5-1) shall be installed on the west side of the westerly driveway to the site. This westerly driveway to the site is to be designed to operated as a one-way right-turn entrance-only driveway from Route 3.

   Off-Site Impacts:

   1. Appropriate lane use signs and pavement markings shall be installed on both Route 3 approaches and on the Dead River driveway approach and on the Dairy Queen driveway approach.

2. The Dead River driveway approach shall have the median exit lane designated as an exclusive left-turn lane, and the curb exit lane shall be designated as a shared through/right-turn lane since the curb exit lane is the only lane that will line up to match the Dairy Queen entrance lane.

3. The existing Dairy Queen driveway approach shall have the median exit lane designated as an exclusive left-turn lane, and the curb exit lane should be designated as a shared through/right-turn lane since the curb exist lane is the only lane that will line up to match the Dead River entrance lane.

4. A "Keep Right" sign shall be installed at both ends of the raised median that separates the entering lane from the existing lanes on the Dead River approach.

5. Route 3 striping shall be redone in the vicinity of the development so that the following queue storage requirements are provided on Route 3:

Westbound exclusive left-turn lane (Site): 125 feet (plus adequate taper).
Eastbound exclusive left-turn lane (Dairy Queen): 75 feet (plus adequate taper).

Route 1/Route 3 Interchange:

1. MDOT has previously made a commitment to DEP to monitor the Route 1/Route 3 interchange to assess whether or not traffic signals are warranted at either the northbound or southbound Route 1 ramps for weekday summer traffic conditions that would be impacted by the MBNA development. This commitment was recorded as part of MDOT's review of the MBNA expansion that would increase their employment level from approximately 1000 to 3000 employees.

2. The status of MDOT's summer 1997 monitoring of this interchange is that traffic signals are not warranted or justified at either the northbound or southbound Route 1 ramps at this time. MBNA has since built the additional office space to house 2000 additional employees but has not yet hired the 2000 additional employees'. MDOT has suspended it's monitoring of weekday during summer traffic conditions at this interchange until such time as MBNA decides to move ahead with their plans to hire 2000 additional employees.

3. The northbound Route 1 off-ramp is a High Accident Location. The consultant's collision diagram indicates that there is an angle accident pattern. Mitigation of this type of accident pattern typically requires the installation of a traffic signal at the ramps or at a nearby location to provide additional gaps in traffic. The consultant states that installation of a traffic signal at the Route 3 shopping center located just westerly of the

Route 1/Route 3 interchange may help reduce accidents by creating gaps in the traffic stream.

4. MDOT has programmed $40,000 in it's (FY 2000-2001) Biennial Transportation Improvement Program (BTIP) for preconstruction engineering design work for future highway improvements that will address safety, geometric and access management deficiencies at the intersection of Route 3 and the shopping center entrance westerly of the Route 1/Route 3 interchange. The project identification number associated with this preconstruction engineering project is 8842.00. The preconstruction engineering design work is scheduled to begin July 1, 1999 and be completed by June 30, 2001.

5. MDOT will commit the necessary funds needed in it's FY 2002-2003 BTIP as part of it's future Route 3 highway improvement project so that a fully actuated traffic signal will be installed at the Route 3/Shopping Center driveway intersection. This signal will provide gaps in Route 3 traffic which will assist traffic entering and exiting Route 3 to/from the shopping center as well as help traffic entering Route 3 to/from the Route 1 northbound and southbound ramps.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions, in relation to traffic, pursuant to 38 M.R.S.A. Sections 481 et seq.

A. The applicant has made adequate provision for traffic movement of all types into and out of the development area and any traffic increase attributable to the proposed development will not result in unreasonable congestion or unsafe conditions on a road in the vicinity of the proposed development provided that the traffic and roadway improvements described in finding 3 above are implemented prior to occupancy and provided that the Route 1/Route 3 interchange monitoring and modifications are completed by MDOT.

THEREFORE, the Department APPROVES the above noted application of DEAD RIVER COMPANY, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.

2. Prior to initial occupancy the applicant shall (a) install overhead street lights at both site driveways where they intersect with Route 3, (b) install a second "Do not Enter" sign (R5-1) on the west side of the westerly driveway to the site. This westerly driveway to the site is to be designed to operated as a one-way right-turn entrance-only driveway from Route 3, (c) install appropriate lane use signs and pavement markings on both Route 3 approaches and on the Dead River driveway approach and on the Dairy Queen driveway approach, (d) construct the Dead River driveway approach to have the median exit lane designated as an exclusive left-turn lane, and the curb exit lane shall be designated as a shared through/right-turn lane since the curb exit lane is the only lane that will line up to match the Dairy Queen entrance lane.

3. The existing Dairy Queen driveway approach shall have the median exit lane designated as an exclusive left-turn lane, and the curb exit lane shall be designated as a shared through/right-turn lane since the curb exist lane is the only lane that will line up to match the Dead River entrance lane.

4. Prior to initial occupancy the applicant shall install a "Keep Right" sign at both ends of the raised median that separates the entering lane from the existing lanes on the Dead River approach.

5. Prior to initial occupancy the applicant shall install Route 3 striping in the vicinity of the development so that the following queue storage requirements are provided on Route 3:

Westbound exclusive left-turn lane (Site): 125 feet (plus adequate taper).
Eastbound exclusive left-turn lane (Dairy Queen): 75 feet (plus adequate taper).

6. MDOT has programmed $40,000 in it's (FY 2000-2001) Biennial Transportation Improvement Program (BTIP) for Preconstruction Engineering design work for future highway improvements that will address safety, geometric and access management deficiencies at the intersection of Route 3 and the shopping center entrance westerly of the Route 1/Route 3 interchange. The preconstruction engineering design work is scheduled to begin July 1, 1999 and be completed by June 30, 2001. MDOT has indicated that it will commit the necessary funds needed in it's FY 2002-2003 BTIP as part of it's future Route 3 highway improvement project so that a fully actuated traffic signal will be installed at the Route 3/Shopping Center driveway intersection. This signal will assist provide gaps in Route 3 traffic which will assist traffic entering and exiting Route 3 to/from the shopping center as well as help traffic entering Route 3 to/from the Route 1 northbound and southbound ramps. In the event that the traffic improvements warranted are not constructed by MDOT within three years of the date of this order, the applicant shall make the necessary improvements to this interchange within four years of the initial occupancy of the development.

DONE AND DATED AT AUGUSTA, MAINE, THIS 6th DAY OF August, 1999.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES…

Date of initial receipt of application 1/28/99
Date of application acceptance 2/18/99

Date filed with Board of Environmental Protection

FILED
AUG 9 1999
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. **This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.**

2. **The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.**

3. **The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.**

4. **Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.**

5. **Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.**

6. **If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.**

7. **If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.**

8. **A copy of this approval must be included in or attached to all contract bid specifications for the development.**

9. **Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.**

(2/81)/Revised November 1, 1979

Exhibit 6

Stormwater Management Report

Stormwater Narrative
Belfast Medical Building
Belfast, Maine

The proposed project involves the construction of an urgent care medical building. The parcel is identified as Lot 12B on the City of Belfast Tax Map 5 and has an overall area of approximately 1.43 acres. The project will disturb approximately 0.8 acres with the development proposed to be located in the northwestern corner of the parcel. The northern half of the parcel was cleared and approximately 6,121 S.F. of wetlands were filled in the past, while the southern half of the site is undeveloped scrub-shrub wetlands. Slopes on-site are gentle in the previously cleared area, ranging from 0% to 3%, and steepening up to 10% to 20% in the approach to the wetlands, and then flattening to 0% to 3% again within the wetlands. Soil mapping available through the National Resources Conservation Service (NRCS) indicates that the existing soils on-site are of Hydrologic Soil Group C/D and portions of A in the previously filled area. A landscaped wall runs from north to south along the site's eastern boundary. Between the wall and Hatley Road there is a swale that conveys runoff south to the wetland complex. Stormwater runoff from the site generally drains from north to south, collecting into various natural swales before entering the wetland complex. The site is tributary to the Little River watershed which flows southeast into the Belfast Reservoirs and then discharges into the Atlantic Ocean. Little River is not listed by the Maine Department of Environmental Protection as an Urban Impaired Stream.

The proposed site improvements for the medical building will result in 23,005 square feet of new impervious area and approximately 32,000 square feet of new developed area. The proposed development will require a Natural Resource Protection Act (NRPA) permit through the Maine Department of Environmental Protection (MDEP) as the project results in the additional filling of approximately 8,400 S.F. of wetlands on-site totaling 14,521 S.F. of on-site wetland fill. However, the proposed project will disturb less than one acre of land area; therefore, this project is not subject to MDEP stormwater standards. The proposed grading has been designed to drain stormwater runoff away from the proposed building to then collect in a series of catch basins before entering a Stormtech Chamber system. The chamber system detains stormwater runoff to match the pre-development peak flow rates by gradually discharging it into the wetland complex.

Per the Belfast City ordinances, the peak discharges for the developed site cannot exceed the peak discharge for the undeveloped site for the two- and twenty-five-year storms. One point of analysis (POA-1) was chosen for analyzing the peak runoff rates in the existing and proposed conditions. POA-1 is located in the southwestern corner of the site within the wetland complex. The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions.

Peak Runoff Rate Summary Table			
Analysis Point	**Storm Event**	**Existing Conditions (cfs)**	**Proposed Conditions (cfs)**
POA-1	2-year	1.4	1.4
	25-year	4.3	4.3

The HydroCAD Data output sheets from this analysis are appended to this report in **Appendix 1**, along with the Stormwater Management Plans in **Appendix 2**. The model predicts that the peak runoff rates in the proposed condition are equal to existing condition runoff rates for the 2-, and 25-year storm events with the implementation of the proposed stormwater management practice.

Areas of disturbance have been minimized to the greatest extent practicable. Erosion and sedimentation measures have been outlined in the attached plan set that emphasizes the installation of sedimentation barriers and vegetation to minimize potential erosion from development activities during and after construction. The erosion and sedimentation control measures outlined in the design plans include the locations of the erosion control provisions (i.e., silt fence) along with notes and construction details for reference during construction. With the incorporation of these measures, no significant impacts to off-site drainage related to erosion are anticipated due to the proposed project.

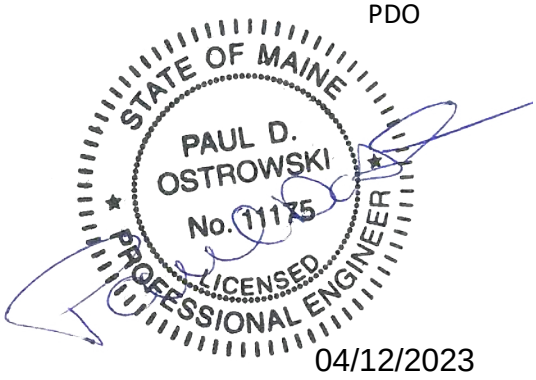
Sincerely,
SEBAGO TECHNICS, INC.

Jake S. Hunnewell, E.I.
Civil Engineer

JSH

Paul D. Ostrowski, P.E.
Senior Project Engineer

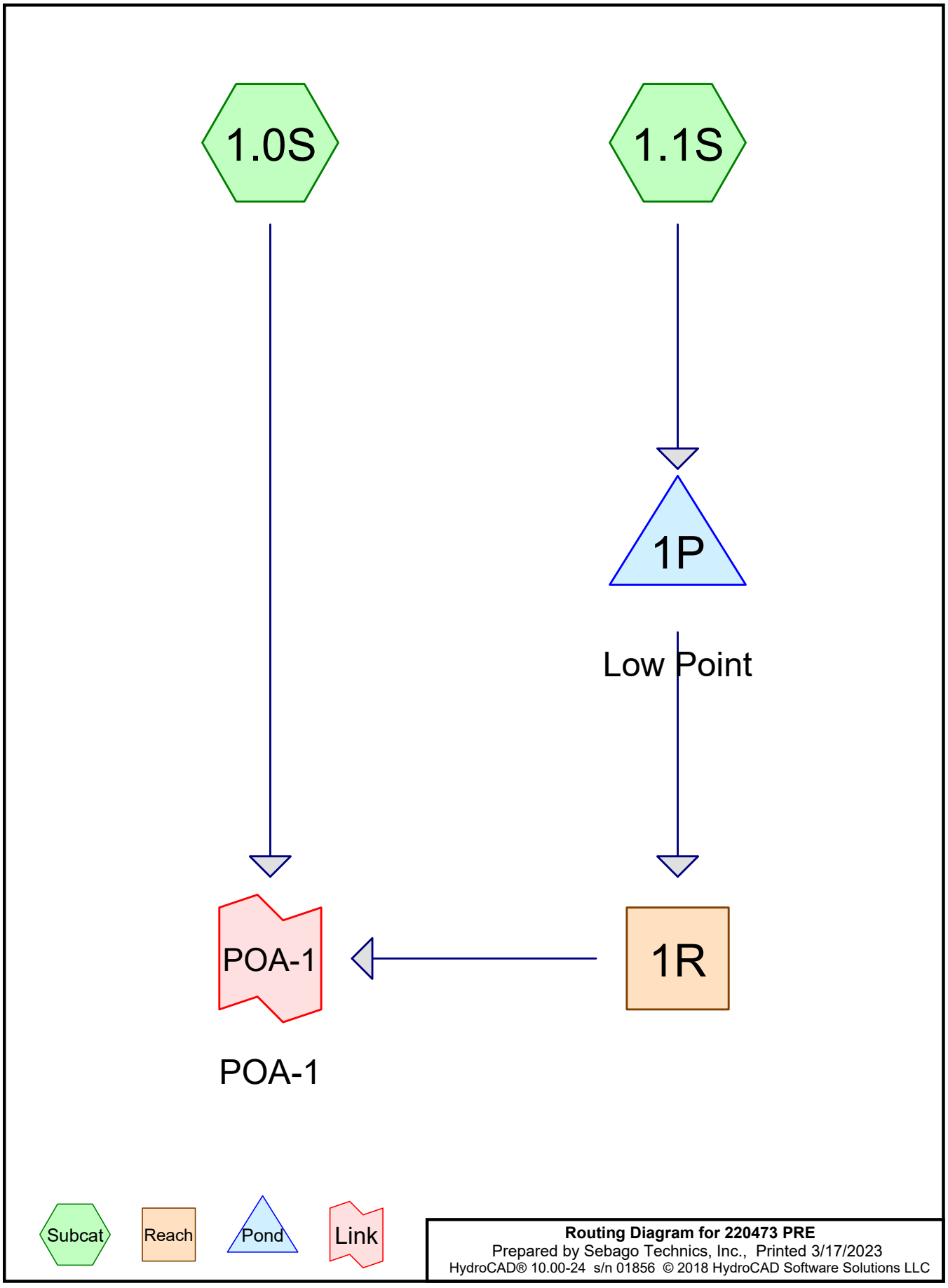
PDO



04/12/2023

Appendix 1A

Existing Conditions
HydroCAD Summary



Routing Diagram for 220473 PRE
Prepared by Sebago Technics, Inc., Printed 3/17/2023

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
8,520	39	>75% Grass cover, Good, HSG A (1.0S)
17,870	80	>75% Grass cover, Good, HSG D (1.0S, 1.1S)
12,110	98	Impervious Area (1.0S)
300	30	Woods, Good, HSG A (1.0S)
43,515	77	Woods, Good, HSG D (1.0S, 1.1S)
82,315	**77**	**TOTAL AREA**

Summary for Subcatchment 1.0S:

Runoff = 3.1 cfs @ 12.24 hrs, Volume= 13,721 cf, Depth= 2.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

	Area (sf)	CN	Description
*	12,110	98	Impervious Area
	300	30	Woods, Good, HSG A
	31,745	77	Woods, Good, HSG D
	8,520	39	>75% Grass cover, Good, HSG A
	8,280	80	>75% Grass cover, Good, HSG D
	60,955	76	Weighted Average
	48,845		80.13% Pervious Area
	12,110		19.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	84	0.0260	0.12		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 2.90"
1.3	92	0.0270	1.15		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
4.8	194	0.0180	0.67		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
17.8	370	Total			

Summary for Subcatchment 1.1S:

Runoff = 1.7 cfs @ 12.09 hrs, Volume= 5,130 cf, Depth= 2.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

Area (sf)	CN	Description
11,770	77	Woods, Good, HSG D
9,590	80	>75% Grass cover, Good, HSG D
21,360	78	Weighted Average
21,360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	30	0.1030	0.17		**Sheet Flow, A to B** Grass: Dense n= 0.240 P2= 2.90"
0.7	70	0.0500	1.57		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
1.6	84	0.0297	0.86		**Shallow Concentrated Flow, C to D** Woodland Kv= 5.0 fps
0.7					**Direct Entry,**
6.0	184	Total			

Summary for Reach 1R:

Inflow Area = 21,360 sf, 0.00% Impervious, Inflow Depth = 2.84" for 25-YR event
Inflow = 1.6 cfs @ 12.11 hrs, Volume= 5,052 cf
Outflow = 1.3 cfs @ 12.17 hrs, Volume= 5,052 cf, Atten= 20%, Lag= 3.9 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.40 fps, Min. Travel Time= 7.5 min
Avg. Velocity = 0.11 fps, Avg. Travel Time= 27.2 min

Peak Storage= 570 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.12'
Bank-Full Depth= 0.50' Flow Area= 22.5 sf, Capacity= 19.9 cfs

20.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 70.00'
Length= 180.0' Slope= 0.0161 '/'
Inlet Invert= 197.19', Outlet Invert= 194.30'

‡

Summary for Pond 1P: Low Point

Inflow Area = 21,360 sf, 0.00% Impervious, Inflow Depth = 2.88" for 25-YR event
Inflow = 1.7 cfs @ 12.09 hrs, Volume= 5,130 cf
Outflow = 1.6 cfs @ 12.11 hrs, Volume= 5,052 cf, Atten= 3%, Lag= 1.1 min
Primary = 1.6 cfs @ 12.11 hrs, Volume= 5,052 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Peak Elev= 197.47' @ 12.11 hrs Surf.Area= 657 sf Storage= 221 cf

Plug-Flow detention time= 16.1 min calculated for 5,052 cf (98% of inflow)
Center-of-Mass det. time= 6.9 min (832.3 - 825.4)

Volume	Invert	Avail.Storage	Storage Description
#1	196.65'	717 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.65	2	0	0
197.00	162	29	29
198.00	1,215	689	717

Device	Routing	Invert	Outlet Devices
#1	Primary	197.19'	**5.0' long x 5.0' 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 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.6 cfs @ 12.11 hrs HW=197.47' TW=197.30' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 1.6 cfs @ 1.14 fps)

Summary for Link POA-1: POA-1

Inflow Area = 82,315 sf, 14.71% Impervious, Inflow Depth = 2.74" for 25-YR event
Inflow = 4.3 cfs @ 12.23 hrs, Volume= 18,773 cf
Primary = 4.3 cfs @ 12.23 hrs, Volume= 18,773 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.0S: Runoff Area=60,955 sf 19.87% Impervious Runoff Depth=0.95"
Flow Length=370' Tc=17.8 min CN=76 Runoff=1.0 cfs 4,817 cf

Subcatchment1.1S: Runoff Area=21,360 sf 0.00% Impervious Runoff Depth=1.06"
Flow Length=184' Tc=6.0 min CN=78 Runoff=0.6 cfs 1,884 cf

Reach 1R: Avg. Flow Depth=0.06' Max Vel=0.27 fps Inflow=0.6 cfs 1,805 cf
n=0.100 L=180.0' S=0.0161 '/' Capacity=19.9 cfs Outflow=0.4 cfs 1,805 cf

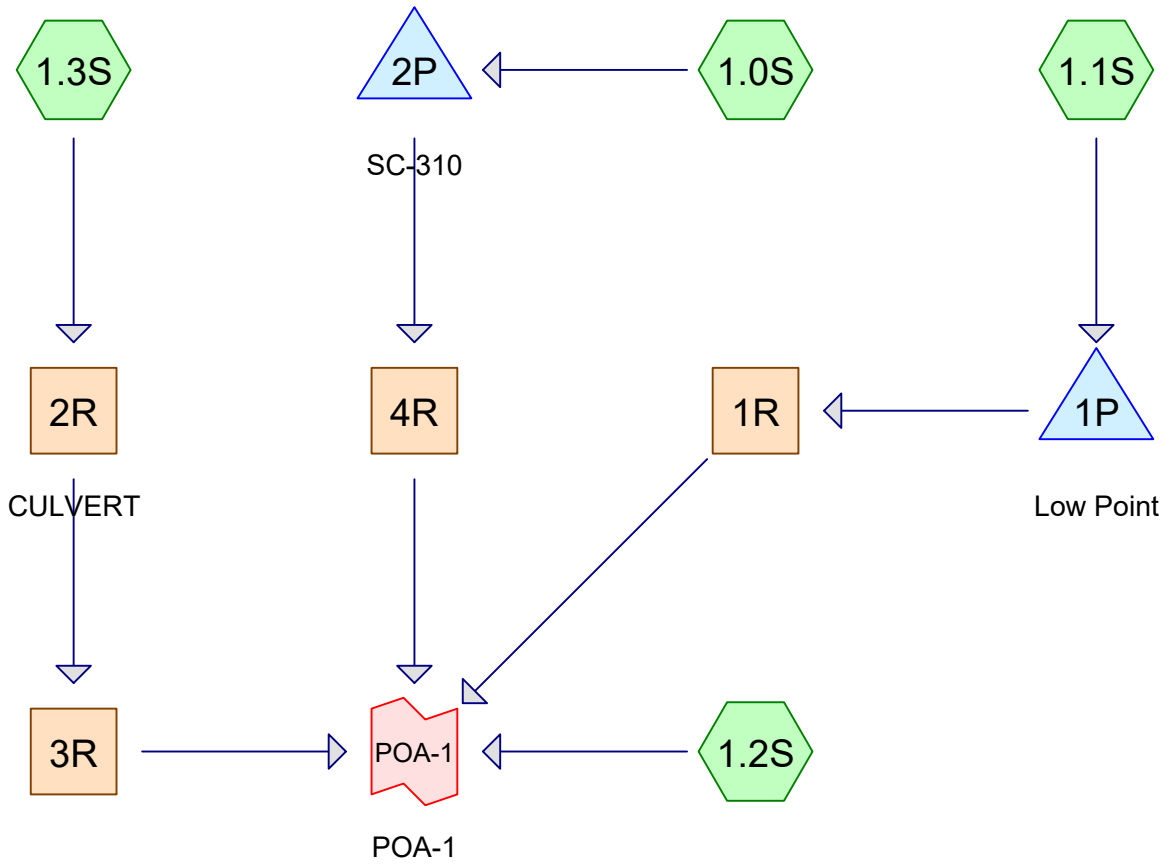
Pond 1P: Low Point Peak Elev=197.33' Storage=139 cf Inflow=0.6 cfs 1,884 cf
Outflow=0.6 cfs 1,805 cf

Link POA-1: POA-1 Inflow=1.4 cfs 6,622 cf
Primary=1.4 cfs 6,622 cf

Total Runoff Area = 82,315 sf Runoff Volume = 6,700 cf Average Runoff Depth = 0.98"
85.29% Pervious = 70,205 sf 14.71% Impervious = 12,110 sf

Appendix 1B

Proposed Conditions
HydroCAD Summary



Subcat Reach Pond Link

Routing Diagram for 220473 POST
Prepared by Sebago Technics, Inc., Printed 4/12/2023

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
7,795	39	>75% Grass cover, Good, HSG A (1.3S)
18,530	80	>75% Grass cover, Good, HSG D (1.0S, 1.1S, 1.2S, 1.3S)
13,900	98	IMPERVIOUS (1.2S, 1.3S)
21,215	98	Impervious Area (1.0S)
50	30	Woods, Good, HSG A (1.3S)
20,825	77	Woods, Good, HSG D (1.1S, 1.2S, 1.3S)
82,315	**83**	**TOTAL AREA**

Summary for Subcatchment 1.0S:

Runoff = 2.7 cfs @ 12.08 hrs, Volume= 9,376 cf, Depth= 4.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

	Area (sf)	CN	Description
*	21,215	98	Impervious Area
	2,565	80	>75% Grass cover, Good, HSG D
	23,780	96	Weighted Average
	2,565		10.79% Pervious Area
	21,215		89.21% Impervious Area

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

Summary for Subcatchment 1.1S:

Runoff = 1.2 cfs @ 12.09 hrs, Volume= 3,862 cf, Depth= 2.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

Area (sf)	CN	Description
8,130	77	Woods, Good, HSG D
7,950	80	>75% Grass cover, Good, HSG D
16,080	78	Weighted Average
16,080		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	30	0.1030	0.17		**Sheet Flow, A to B** Grass: Dense n= 0.240 P2= 2.90"
0.7	70	0.0500	1.57		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
1.6	84	0.0297	0.86		**Shallow Concentrated Flow, C to D** Woodland Kv= 5.0 fps
0.7					**Direct Entry,**
6.0	184	Total			

Summary for Subcatchment 1.2S:

Runoff = 1.1 cfs @ 12.36 hrs, Volume= 5,765 cf, Depth= 3.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

	Area (sf)	CN	Description
	11,495	77	Woods, Good, HSG D
*	4,975	98	IMPERVIOUS
	4,145	80	>75% Grass cover, Good, HSG D
	20,615	83	Weighted Average
	15,640		75.87% Pervious Area
	4,975		24.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.6	70	0.0350	0.05		**Sheet Flow, A-B** Woods: Dense underbrush n= 0.800 P2= 2.90"
4.0	145	0.0145	0.60		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
27.6	215	Total			

Summary for Subcatchment 1.3S:

Runoff = 1.1 cfs @ 12.18 hrs, Volume= 4,282 cf, Depth= 2.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

	Area (sf)	CN	Description
	3,870	80	>75% Grass cover, Good, HSG D
	1,200	77	Woods, Good, HSG D
*	8,925	98	IMPERVIOUS
	50	30	Woods, Good, HSG A
	7,795	39	>75% Grass cover, Good, HSG A
	21,840	72	Weighted Average
	12,915		59.13% Pervious Area
	8,925		40.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0	40	0.0115	0.07		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 2.90"
0.0	5	0.0160	2.57		**Shallow Concentrated Flow, B-C** Paved Kv= 20.3 fps
1.8	129	0.0307	1.23		**Shallow Concentrated Flow, C-D** Short Grass Pasture Kv= 7.0 fps
1.5	60	0.0182	0.67		**Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps
12.3	234	Total			

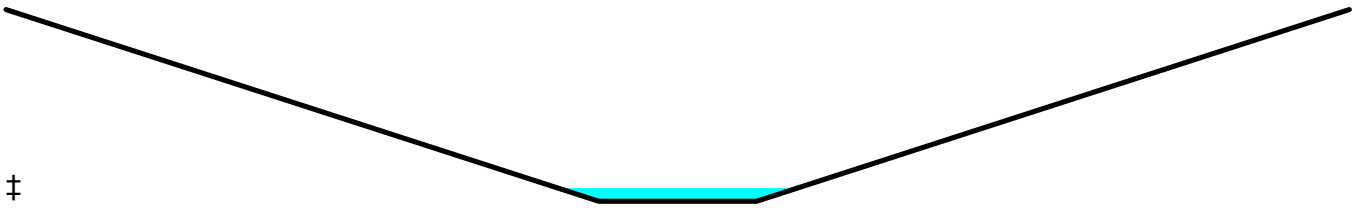
Summary for Reach 1R:

Inflow Area = 16,080 sf, 0.00% Impervious, Inflow Depth = 2.84" for 25-YR event
Inflow = 1.2 cfs @ 12.10 hrs, Volume= 3,801 cf
Outflow = 0.9 cfs @ 12.17 hrs, Volume= 3,801 cf, Atten= 22%, Lag= 4.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.37 fps, Min. Travel Time= 8.0 min
Avg. Velocity = 0.13 fps, Avg. Travel Time= 22.1 min

Peak Storage= 455 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.10'
Bank-Full Depth= 1.50' Flow Area= 142.5 sf, Capacity= 240.9 cfs

20.00' x 1.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 170.00'
Length= 177.0' Slope= 0.0164 '/'
Inlet Invert= 197.20', Outlet Invert= 194.30'



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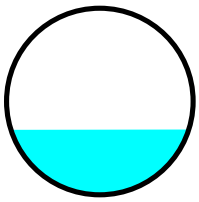
Summary for Reach 2R: CULVERT

Inflow Area = 21,840 sf, 40.87% Impervious, Inflow Depth = 2.35" for 25-YR event
Inflow = 1.1 cfs @ 12.18 hrs, Volume= 4,282 cf
Outflow = 1.1 cfs @ 12.18 hrs, Volume= 4,282 cf, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.57 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.77 fps, Avg. Travel Time= 0.5 min

Peak Storage= 14 cf @ 12.18 hrs
Average Depth at Peak Storage= 0.35'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.3 cfs

12.0" Round Pipe
n= 0.012 Corrugated PP, smooth interior
Length= 57.3' Slope= 0.0122 '/'
Inlet Invert= 196.50', Outlet Invert= 195.80'



Summary for Reach 3R:

Inflow Area = 21,840 sf, 40.87% Impervious, Inflow Depth = 2.35" for 25-YR event
Inflow = 1.1 cfs @ 12.18 hrs, Volume= 4,282 cf
Outflow = 1.1 cfs @ 12.21 hrs, Volume= 4,282 cf, Atten= 4%, Lag= 2.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.45 fps, Min. Travel Time= 2.9 min
Avg. Velocity = 0.15 fps, Avg. Travel Time= 8.5 min

Peak Storage= 185 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.14'
Bank-Full Depth= 0.50' Flow Area= 17.5 sf, Capacity= 16.0 cfs

10.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 60.00'
Length= 77.0' Slope= 0.0195 '/'
Inlet Invert= 195.80', Outlet Invert= 194.30'

‡

Summary for Reach 4R:

Inflow Area = 23,780 sf, 89.21% Impervious, Inflow Depth = 4.65" for 25-YR event
Inflow = 1.7 cfs @ 12.18 hrs, Volume= 9,212 cf
Outflow = 1.5 cfs @ 12.23 hrs, Volume= 9,212 cf, Atten= 10%, Lag= 2.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.49 fps, Min. Travel Time= 2.7 min
Avg. Velocity = 0.12 fps, Avg. Travel Time= 10.5 min

Peak Storage= 241 cf @ 12.23 hrs
Average Depth at Peak Storage= 0.17'
Bank-Full Depth= 0.50' Flow Area= 17.5 sf, Capacity= 15.9 cfs

10.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 60.00'
Length= 78.0' Slope= 0.0192 '/'
Inlet Invert= 195.80', Outlet Invert= 194.30'

‡

Summary for Pond 1P: Low Point

Inflow Area = 16,080 sf, 0.00% Impervious, Inflow Depth = 2.88" for 25-YR event
Inflow = 1.2 cfs @ 12.09 hrs, Volume= 3,862 cf
Outflow = 1.2 cfs @ 12.10 hrs, Volume= 3,801 cf, Atten= 3%, Lag= 0.9 min
Primary = 1.2 cfs @ 12.10 hrs, Volume= 3,801 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 197.43' @ 12.11 hrs Surf.Area= 492 sf Storage= 151 cf

Plug-Flow detention time= 15.9 min calculated for 3,801 cf (98% of inflow)
Center-of-Mass det. time= 6.3 min (831.7 - 825.4)

Volume	Invert	Avail.Storage	Storage Description
#1	196.65'	576 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.65	2	0	0
197.00	116	21	21
198.00	995	556	576

Device	Routing	Invert	Outlet Devices
#1	Primary	197.19'	**5.0' long x 5.0' 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 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.2 cfs @ 12.10 hrs HW=197.43' TW=197.29' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 1.2 cfs @ 1.02 fps)

Summary for Pond 2P: SC-310

Inflow Area = 23,780 sf, 89.21% Impervious, Inflow Depth = 4.73" for 25-YR event
Inflow = 2.7 cfs @ 12.08 hrs, Volume= 9,376 cf
Outflow = 1.7 cfs @ 12.18 hrs, Volume= 9,212 cf, Atten= 39%, Lag= 6.0 min
Primary = 1.7 cfs @ 12.18 hrs, Volume= 9,212 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 197.90' @ 12.18 hrs Surf.Area= 2,024 sf Storage= 2,223 cf

Plug-Flow detention time= 52.4 min calculated for 9,210 cf (98% of inflow)
Center-of-Mass det. time= 41.4 min (802.8 - 761.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	196.00'	1,435 cf	**38.17'W x 53.04'L x 2.33'H Field A** 4,724 cf Overall - 1,135 cf Embedded = 3,588 cf x 40.0% Voids
#2A	196.50'	1,135 cf	**ADS_StormTech SC-310 +Cap** x 77 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

77 Chambers in 11 Rows

2,570 cf Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	196.20'	**15.0" Round Culvert** L= 14.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 196.20' / 195.80' S= 0.0286 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	197.70'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	196.15'	**5.0" W x 3.0" H Vert. Rectangular Orifice** C= 0.600

Primary OutFlow Max=1.7 cfs @ 12.18 hrs HW=197.90' TW=195.95' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.7 cfs of 4.8 cfs potential flow)
  ├─**2=Broad-Crested Rectangular Weir** (Weir Controls 1.0 cfs @ 1.26 fps)
  └─**3=Rectangular Orifice** (Orifice Controls 0.6 cfs @ 6.13 fps)

Summary for Link POA-1: POA-1

Inflow Area = 82,315 sf, 42.66% Impervious, Inflow Depth = 3.36" for 25-YR event
Inflow = 4.3 cfs @ 12.23 hrs, Volume= 23,060 cf
Primary = 4.3 cfs @ 12.23 hrs, Volume= 23,060 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.0S: Runoff Area=23,780 sf 89.21% Impervious Runoff Depth=2.45"
Tc=6.0 min CN=96 Runoff=1.5 cfs 4,862 cf

Subcatchment1.1S: Runoff Area=16,080 sf 0.00% Impervious Runoff Depth=1.06"
Flow Length=184' Tc=6.0 min CN=78 Runoff=0.4 cfs 1,418 cf

Subcatchment1.2S: Runoff Area=20,615 sf 24.13% Impervious Runoff Depth=1.37"
Flow Length=215' Tc=27.6 min CN=83 Runoff=0.4 cfs 2,348 cf

Subcatchment1.3S: Runoff Area=21,840 sf 40.87% Impervious Runoff Depth=0.75"
Flow Length=234' Tc=12.3 min CN=72 Runoff=0.3 cfs 1,364 cf

Reach 1R: Avg. Flow Depth=0.05' Max Vel=0.24 fps Inflow=0.4 cfs 1,357 cf
n=0.100 L=177.0' S=0.0164 '/' Capacity=240.9 cfs Outflow=0.3 cfs 1,357 cf

Reach 2R: CULVERT Avg. Flow Depth=0.18' Max Vel=3.18 fps Inflow=0.3 cfs 1,364 cf
12.0" Round Pipe n=0.012 L=57.3' S=0.0122 '/' Capacity=4.3 cfs Outflow=0.3 cfs 1,364 cf

Reach 3R: Avg. Flow Depth=0.07' Max Vel=0.31 fps Inflow=0.3 cfs 1,364 cf
n=0.100 L=77.0' S=0.0195 '/' Capacity=16.0 cfs Outflow=0.3 cfs 1,364 cf

Reach 4R: Avg. Flow Depth=0.09' Max Vel=0.35 fps Inflow=0.5 cfs 4,699 cf
n=0.100 L=78.0' S=0.0192 '/' Capacity=15.9 cfs Outflow=0.5 cfs 4,699 cf

Pond 1P: Low Point Peak Elev=197.31' Storage=98 cf Inflow=0.4 cfs 1,418 cf
Outflow=0.4 cfs 1,357 cf

Pond 2P: SC-310 Peak Elev=197.12' Storage=1,347 cf Inflow=1.5 cfs 4,862 cf
Outflow=0.5 cfs 4,699 cf

Link POA-1: POA-1 Inflow=1.4 cfs 9,766 cf
Primary=1.4 cfs 9,766 cf

Total Runoff Area = 82,315 sf Runoff Volume = 9,992 cf Average Runoff Depth = 1.46"
57.34% Pervious = 47,200 sf 42.66% Impervious = 35,115 sf

Appendix 2

Stormwater Plans

N

GRID

EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH (A — B)
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

SOIL TABLE

SYMBOL	NAME	SLOPE	HYDROLOGIC SOIL GROUP
Ud	UDORTHENTS-URBANLAND COMPLEX	0-3%	A
Sw	SWANVILLE	0-3%	C/D
PbB	PERU	0-8%	C/D

HSG A
HSG C/D

1.1S

1.0S

1P

1R

POA-1

BM-1

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

PAUL D. OSTROWSKI, PE 11175

AMY BELL SEGAL, RLA 2265

STATE OF MAINE
PAUL D. OSTROWSKI
No. 11175
LICENSED PROFESSIONAL ENGINEER
04/12/2023

REV	BY	DATE	STATUS
B	ABS	04/12/2023	REVISED FROM TOWN COMMENTS
A	ABS	03/21/2023	SUBMITTED FOR TOWN REVIEW

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

EXISTING CONDITIONS STORMWATER PLAN
OF:
BELFAST CONVENIENT MD
BELMONT AVE.
BELFAST, MAINE
FOR:
PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, MAINE 04104

DESIGNED	EOR
DRAWN	RGL
CHECKED	ABS
DATE	12/02/2022
SCALE	1" = 20'
PROJECT	220473

SHEET 1 OF 2

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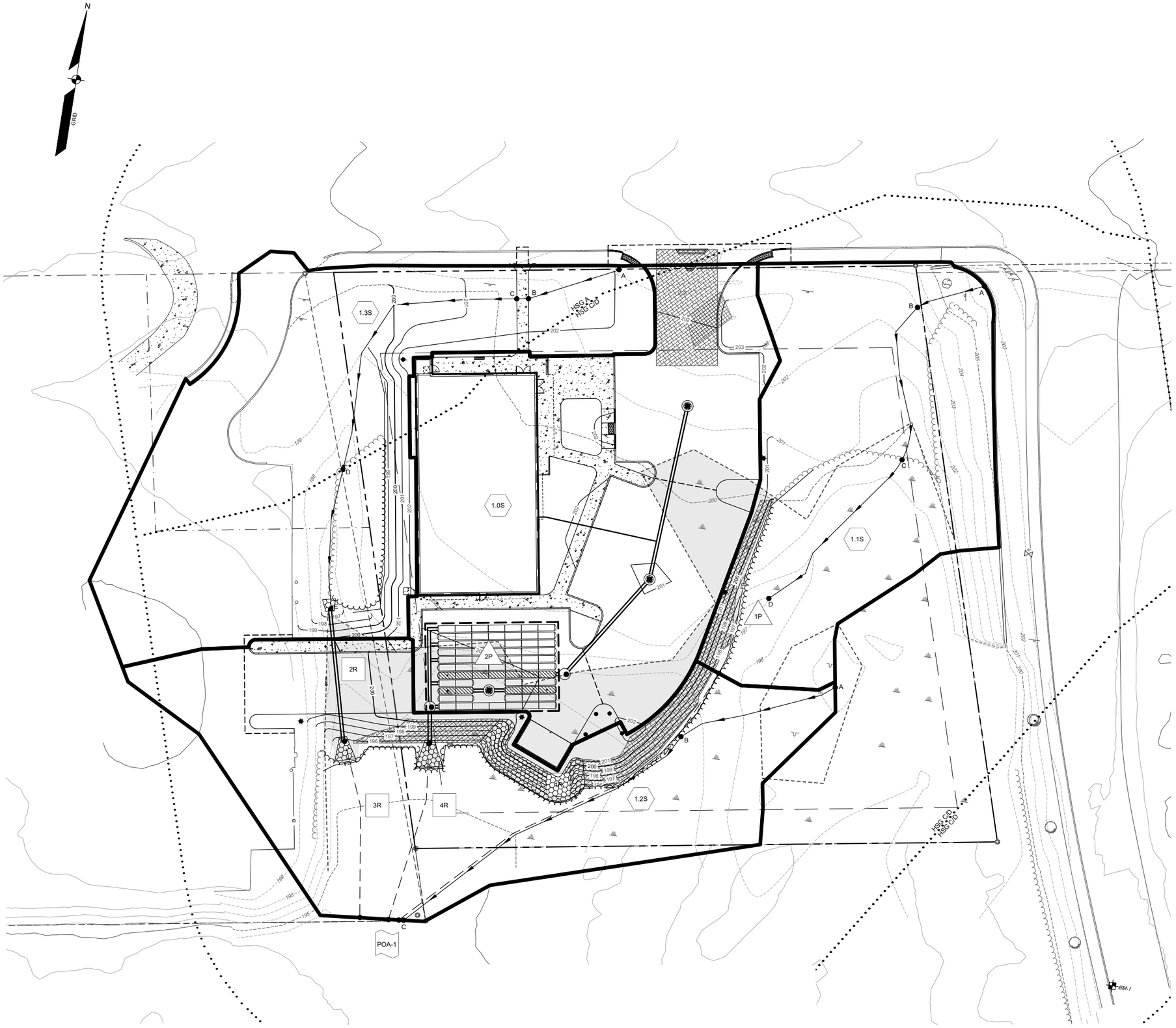
220473 SWP.dwg, TAB EXISTING CONDITIONS STORMWATER PLAN



PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

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PbB	PERU	0-8%	C/D

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SHEET 2 OF 2

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220473 SWP.dwg TAB PROPOSED CONDITIONS