Town of Windham

Town Offices
8 School Road
Windham, Maine

Meeting Agenda

Planning Board

Monday, July 20, 2026 **5:30 PM** **Hannaford Parking Lot Off of Franklin Drive**

PB 26-020

#26-05 North Windham Public Safety Building - Major Site Plan - Site Walk - Franklin Drive - Town of Windham

The application is for a new 14,330 sq ft footprint, 27,950 sq ft gross floor area, 2-story public safety building. Subject properties are identified as Tax Map: 7; Lot: 14 (portion); Zone: Commercial I (C-1) in the Little Sebago Lake watershed. Use: Public Safety Building.

Attachments:

26-05_MJR_SP_FP_APPL_NWPS_20260610

26-05_MJR_SP_FP_PLANS_NWPS_20260610

Please be aware that public comments are not permitted during the site walk review unless requested by the Planning Board. Written comments can be sent to the Board at any time at PlanningBoard@windhammaine.us

Town of Windham

Town Offices
8 School Road
Windham, Maine

Cover Sheet

File Number: PB 26-020

Agenda Date: 7/20/2026 **Version:** 1 **Status:** Agenda Ready

In Control: Planning Board **File Type:** Planning Board Document

Agenda Number:

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Town of Windham
Major Site Plan Application

North Windham Public Safety
Franklin Drive
Windham, Maine 04062

Applicant:

Town of Windham
8 School Road
Windham, Maine 04062

Prepared by:

Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106

June 2026

240431-01

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Appended: Site Plan Set

June 11, 2026
240431-01

Steve Puleo, Planning Director
Marge Govoni, Planning Board Chair
Town of Windham
8 School Road
Windham, Maine 04062

Re: North Windham Public Safety Building, Franklin Drive
Application: Major Site Plan Review
Applicant: Town of Windham
Assessor reference: Map 70/Lot 14

Dear Steve, Chair Govoni, and Planning Board members:

As discussed during the April 23, 2026. Sketch Plan review, and on behalf of the Town of Windham, in collaboration with construction and project management provided by Great Falls Construction, Inc., we provide this Site Plan Review permit application and plans for site improvements associated with the development of a new public safety building on Franklin Drive in the Town of Windham. The site can be further identified on the Town Tax Map 70 as Lot 14.

Existing Conditions: The project location subject to this application is a vacant, mostly-cleared area approximately 3.21 acres in size, and is an allowed use located in the Commercial District 1 (C-1). Currently, the project location is part of a larger parcel owned by Johnlee Windham, LLC. The Town of Windham has a purchase and sale agreement (PSA) with the record owner, and will be subdividing the project location through a subdivision amendment to the Windham Mall. The site is bounded by commercial developments to the northwest and southwest, Veterans Memorial Drive to the southeast, and an unimproved wooded area to the northeast. Slopes on the site range from 1% to 33%, with slopes generally increasing towards the existing infiltration basin on the eastern portion of the site. Two-thirds of the site drainage flows to the basin, while the remaining flow drains to the existing subsurface stormwater system.

Project Description: This proposed project is for a two-story new public safety building that includes offices, bunks, apparatus bays, and storage facilities for the local fire and police department that intends to relocate to the new building. The building is proposed to have a ±14,330 SF footprint, with ±27,950SF of Gross Floor Area (GFA). The building floor plans, and elevations prepared by Invivid Architecture are included in Section 13 for Board reference. The proposed development also includes an access drive, parking, utilities, sidewalks, landscaping, stormwater management features, and other associated site improvements.

Traffic associated with the new development does not require a Maine Department of Transportation Traffic Movement Permit. Access to the site occurs on a local road, Franklin Drive, that is connected to Route 302 (Roosevelt Trail). Reference is made to *Section 10*-Traffic for additional details.

We note that the Portland Water District confirms that an easement modification will be required to accommodate portions of the proposed Phase 2 building expansion occur within an existing easement on the property, as shown on the plans. PWD directs the applicant to execute a *major modification* to the existing easement after the land is conveyed from the record owner and intends to work directly with the Town to legally address this item.

We note that a future building construction phase will include an addition (±2,050 SF) to provide space for the Cumberland County Sheriff's Department's use. Due to the site location and existing conditions, construction constraints due to natural resources, zoning, the proposed use, or flooding are not anticipated. Reference is made to the enclosed plan set for site design drawings, notes, and details. The application binder also includes reduced-size architectural plans by Invivid Architecture.

Financial Capacity: Windham voters approved the proposal to construct a new North Windham Public Safety Building, agreeing to its cost through a combination of Tax Increment Financing, a portion of funds from the Town's General Fund, using impact fees, and obtaining a general obligation bond at the annual Town Meeting held on June 14, 2025. Funding of the future phase of development will be addressed before commencement.

Project Team: A diverse team has been assembled, providing for the design, survey, engineering, permitting, project management, and site and building construction of this project. The project team consists of: Great Falls Construction, Inc., Sebago Technics, Inc., Invivid Architecture, and a geotechnical investigation provided by S.W. Cole, Inc. An overview of each firm is enclosed in Section 5-Technical Ability & Financial Capacity. Contact information for the project consultants was included in the Sketch Plan submittal documents.

Waivers: There are no anticipated or requested waivers at this time.

We appreciate your attention to this project, and we look forward to discussing the project design in detail with the Planning Board at the next scheduled meeting. Upon your review of the submittal documents and plans, please contact me if you have any questions or require additional information.

Sincerely,

SEBAGO TECHNICS, INC.

Tanner F. Goodine
Project Manager

TFG/skn

Town of Windham
Planning Department:
8 School Road
Windham, Maine 04062
Tel: (207) 894-5960 ext. 2
Fax: (207) 892-1916 -
www.windhammaine.us

MAJOR SITE PLAN REVIEW APPLICATION

FEES FOR MAJOR SITE PLAN REVIEW		**APPLICATION FEE:** (No Bldg.) (W/Bldg.: $25/1,000 SF up to 5,000 SF) **REVIEW ESCROW: (GFA)** 2,000 SF - 5,000 SF = $2,000 5,000 SF - 15,000 SF = $3,000 15,000 SF - 35,000 SF = $4,000 Over 35,000 SF = $5,000 No Building = $2,000	☐ $1,3000.00 ☐ $_____ ☐ $_____ ☐ $_____ ☐ $_____ ☐ $_____ ☐ $_____	**TOTAL AMOUNT PAID:** $_____ DATE: _____ *Office Use:*			
☐ **Amended Site Plan – (Each Revision)**		**AMENDED APPLICATION FEE:** **AMENDED REVIEW ESCROW:**	☐ $350.00 ☐ $250.00				*Office Stamp:*

PROPERTY DESCRIPTION	**Parcel Information:**	**Map(s):**	70	**Lot(s):**	14	**Zoning District(s):**	C-1, RCCFO Overlay	**Size of the Parcel in SF:**	3.2 Acres
	Total Disturbance. >1Ac	☑ **Y**	☐ **N**	**Estimated. Building SF:**	12,175±	**IF NO BUILDING; Estimated SF of Total Development:**			
	Physical Address:	Franklin Drive, Unassigned				**Watershed:**	Little Sebago Lake Pleasant River		
PROPERTY OWNER'S INFORMATION	**Name:**	Jonlee Windham, LLC				**Name of the Business:**			
	Phone:					**Mailing Address:**	5050 Belmont Avenue Youngstown, OH 44505		
	Fax or Cell:								
	Email:								
APPLICANT'S INFORMATION (*IF DIFFERENT FROM OWNER*)	**Name:**	Town of Windham				**Name of Business:**			
	Phone					**Mailing Address:**			
	Fax or Cell								
	Email:								
APPLICANT'S AGENT INFORMATION	**Name:**	Tanner Goodine				**Name of Business:**	Sebago Technics, Inc.		
	Phone:	(207) 200-2121				**Mailing Address:**	75 John Roberts Road, Suite 4A South Portland, ME 04106		
	Fax or Cell:	(207) 856-2206, Fax							
	Email:	tgoodine@sebagotechnics.com							

PROJECT INFORMATION

Existing Land Use ***(Use extra paper, if necessary)*****:**

The project site consists of an unimproved parcel and new utility easement area. There is an existing infiltration basin that collects two-thirds of the drainage while the additional area within a proposed easement area on the adjoining lot drains to catch basins in the parking lot or the retail site to the southwest.

Provide a narrative description of the Proposed Project ***(Use extra paper, if necessary)*****:**

The proposed development consists of new two-story public safety building of ±6,000 sf and an attached ±6,175 sf apparatus bay. The facility will provide office and bunking area for the fire and police departments. The apparatus bay will contain five bays for department vehicle storage and maintenance, with additional space provided for equipment storage. The facility with include 40 parking spaces and results in the creation of 0.83 acres of new impervious area, 1.62 acres of developed area. Other site development include an access drive, walks, utilities, landscape, lighting and other associated improvements.

Provide a narrative description of construction constraints (wetlands, shoreland zone, flood plain, non-conformance, etc.):

There are no environmental, zoning or conformance constraints associated with the site development proposal.

MAJOR SITE PLAN REVIEW APPLICATION REQUIREMENTS

Section 120-811 of the Land Use Ordinance

The submission shall contain five (5) copies of the following information, including full plan sets. Along with one (1) electronic version of the entire submission, unless waiver of a submission requirement is granted, and one (1) complete plan set.

The Major Plan document/map:

A) Plan size: 24" X 36"
B) Plan Scale: No greater 1":100'
C) Title block: Applicant's name, project name, and address

- Name of the preparer of plans with professional information
- Parcel's tax map identification (map and lot) and street address, if available

- Complete application submission deadline: three (3) weeks (21-days) before the desired Planning Board meeting.
  - Five copies of the application and plans
  - Application Payment and Review Escrow
- A pre-submission meeting with the Town staff is required.
- Contact information:

Windham Planning Department (207) 894-5960, ext. 2
Steve Puleo, Town Planner sjpuleo@windhammaine.us
Amanda Lessard, Planning Director allessard@windhammaine.us

APPLICANT/PLANNER'S CHECKLIST FOR MAJOR SITE PLAN REVIEW

SUBMITTALS THAT THE TOWN PLANNER DEEMS SUFFICIENTLY LACKING IN CONTENT WILL NOT BE SCHEDULED FOR PLANNING BOARD REVIEW.

The following checklist includes items generally required for development by the Town of Windham's LAND USE ORDINANCE, Sections 120-811, 120-812, 120-813 & 120-814. Due to projects specifics, the applicant is required to provide a complete and accurate set of plans, reports, and supporting documentation (as listed in the checklist below).

IT IS THE RESPONSIBILITY OF THE APPLICANT TO PRESENT A CLEAR UNDERSTANDING OF THE PROJECT.

Column #1.			Column #2.		
1. Final Plan -Major Site Plan: Submission Requirements	**Applicant**	**Staff**	**Plan Requirements – Existing Conditions (Continued):**	**Applicant**	**Staff**
A. Completed Major Site Plan Application form	☑	☐	vii. Zoning classification(s), including overlay and/or subdistricts, of the property and the location of zoning district boundaries if the property is located in 2 or more districts or abuts a different district	☑	☐
n/a, Municipal Project B. Evidence of Payment of application & escrow fees	☐	☐	viii. Bearings and lengths of all property lines of the property to be developed, and the stamp of the surveyor that performed the survey	☑	☐
C. Written information – submitted in a **bounded and tabbed** report			ix. Existing topography of the site at 2-foot contour intervals.	☑	☐
1. A narrative describing the proposed use or activity.	☑	☐	x. Location and size of any existing sewer and water mains, culverts and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property and on abutting streets or land that may serve the development.	☑	☐
2. Name, address, & phone number of record owner, and applicant if different (see Agent Autorotation form).	☑	☐	xi. Location, names, and present widths of existing public and/or private streets and rights-of-way within or adjacent to the proposed development.	☑	☐
3. Names and addresses of all abutting property owners	☑	☐	xii. Location, dimensions, and ground floor elevation of all existing buildings.	☐	☐
4. Documentation demonstrating right, title, or interest in the property	☑	☐	xiii. Location and dimensions of existing driveways, parking and loading areas, walkways, and sidewalks on or adjacent to the site.	☐	☐
5. Copies of existing proposed covenants or deed restrictions.	☐	☐	xiv. Location of intersecting roads or driveways within 200 feet of the site.	☑	☐
6. Copies of existing or proposed easements on the property.	☑	☐	xv. Location of the following		
7. Name, registration number, and seal of the licensed professional who prepared the plan, if applicable.	☑	☐	a. Open drainage courses	☐	☐
8. Evidence of applicant's technical capability to carry out the project.	☑	☐	b. Wetlands	☐	☐
			c. Stone walls	☐	☐
9. Assessment of the adequacy of any existing sewer and water mains, culverts and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property.	☑	☐	d. Graveyards	☐	☐

Continued from Column #1. (Page 2)			Continued from Column #2. (Page 2)		
10. Estimated demands for water and sewage disposal.	☑	☐	e. Fences	☐	☐
			f. Stands of trees or treeline, and	☑	☐
			g. Other important or unique natural areas and site features, including but not limited to, floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archaeological resources.	☐	☐
11. Provisions for handling all solid wastes, including hazardous and special wastes.	☑	☐	xvi. Direction of existing surface water drainage across the site	☑	☐
12. Detail sheets of proposed light fixtures.	☑	☐	xvii. Location, front view, dimensions, & lighting of exsiting signs.	☐	☐
13. Listing of proposed trees or shrubs to be used for landscaping	☑	☐			
14. Estimate weekday AM and PM and Saturday peak hours and daily traffic to be generated by the project.	☑	☐	xviii. Location & dimensions of existing easements that encumber or benefit the site.	☐	☐
15. Description of important or unique natural areas and site features, including floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and	☑	☐	xix. Location of the nearest fire hydrant, dry hydrant, or other water supply.	☑	☐
16. If the project requires a stormwater permit from MaineDEP or if the Planning Board or if the Staff Review Committee determines that such information is required, submit the following. SLODA Amendment pending			**E. Plan Requirements - Proposed Development Activity**		
			i. Location and dimensions of all provisions for water supply and wastewater disposal, and evidence of their adequacy for the proposed use, including soils test pit data if on-site sewage disposal is proposed	☑	☐
a. stormwater calculations.	☑	☐	ii. Grading plan showing the proposed topography of the site at 2-foot contour intervals	☑	☐
b. erosion and sedimentation control measures.	☑	☐	iii. The direction of proposed surface water drainage across the site and from the site, with an assessment of impacts on downstream properties.	☑	☐
c. water quality and/or phosphorous export management provisions.	☑	☐	iv. Location and proposed screening of any on-site collection or storage facilities	☑	☐
17. If public water or sewerage will be utilized, provide a statement from the utility district regarding the adequacy of water supply in terms of quantity and pressure for both domestic and fire flows, and the capacity of the sewer system to accommodate additional wastewater.	☑	☐	v. Location, dimensions, and materials to be used in the construction of proposed driveways, parking, and loading areas, and walkways, and any changes in traffic flow onto or off-site	☑	☐
18. Financial Capacity See Section 5			vi. Proposed landscaping and buffering	☑	☐
i. Estimated costs of development and itemize estimated major expenses.	☑	☐	vii. Location, dimensions, and ground floor elevation of all buildings or expansions	☑	☐
ii. Financing (submit one of the following)			viii. Location, front view, materials, and dimensions of proposed signs together with a method for securing sign	☑	☐
a. Letter of commitment to fund	☐	☐	ix. Location and type of exterior lighting. Photometric plan to demonstrate the coverage area of all lighting may be required by the Planning Board.	☑	☐
b. Self-financing	☐	☐	x. Location of all utilities, including fire protection systems	☑	☐
1. Annual corporate report	☐	☐	xi. Approval block: Provide space on the plan drawing for the following words, "Approved: Town of Windham Planning Board" along with space for signatures and date	☑	☐
2. Bank Statement	☐	☐	**2. Major Final Site Plan Requirements as Exhibits to the Application**		
c. Other Municipal Project funding approved at 2025 Town Meeting			a. Narrative and/or plan describing how the proposed development plan relates to the sketch plan.	☑	☐
1. Cash equity commitment of 20% of the total cost of development	☐	☐	b. Stormwater drainage and erosion control program shows:		
2. Financial plan for remaining financing.	☐	☐	1. The existing and proposed method of handling stormwater runoff	☑	☐

Continued from Column #1. (Page 3)			Continued from Column #2. (Page 3)		
3. Letter from institution indicating intent to finance.	☐	☐	2. The direction of the flow of the runoff, through the use of arrows and a description of the type of flow (e.g., sheet flow, concentrated flow, etc.)	☑	☐
iii. If a registered corporation a Certificate of Good Standing from:			3. Location, elevation, and size of all catch basins, dry wells, drainage ditches, swales, retention basins, and storm sewers	☑	☐
- Secretary of State, or	☐	☐	4. Engineering calculations were used to determine drainage requirements based on the 25-year, 24-hour storm frequency.	☑	☐
- the statement signed by a corporate officer	☐	☐	5. Methods of minimizing erosion and controlling sedimentation during and after construction.	☑	☐
19. Technical Capacity (address both).			c. A groundwater impact analysis prepared by a groundwater hydrologist for projects involving on-site water supply or sewage disposal facilities with a capacity of 2,000 gallons or more per day	☐	☐
i. Prior experience relating to developments in the Town.	☑	☐	d. Name, registration number, and seal of the Maine Licensed Professional Architect, Engineer, Surveyor, Landscape Architect, and/or similar professional who prepared the plan.	☑	☐
ii. Personnel resumes or documents showing experience and qualification of development designers	☑	☐	e. A utility plan showing, in addition to provisions for water supply and wastewater disposal, the location and nature of electrical, telephone, cable TV, and any other utility services to be installed on the site.	☑	☐
D. Plan Requirements – Existing Conditions			f. A planting schedule keyed to the site plan indicating the general varieties and sizes of trees, shrubs, and other vegetation to be planted on the site, as well as information of provisions that will be made to retain and protect existing trees, shrubs, and other vegetation.	☑	☐
i. Location Map adequate to locate project within the municipality	☑	☐			
ii. Vicinity Plan. Drawn to a scale of not over 400 feet to the inch, and showing area within 250 feet of the property line, and shall show the following:	☑	☐	g. Digital transfer of any site plan data to the town (GIS format) **after Final Approval**	☐	☐
a. Approximate location of all property lines and acreage of the parcel(s).	☑	☐			
b. Locations, widths, and names of existing, filed, or proposed streets, easements, or building footprints.	☑	☐			
c. Location and designations of any public spaces.	☐	☐	h. A traffic impact study if the project expansion will generate 50 or more trips during the AM or PM peak hour, or if required by the Planning Board)	☐	☐
d. Outline of the proposed site plan, together with its street system and an indication of the future probable street system of the remaining portion of the tract.	☑	☐			
iii. North Arrow identifying Grid North; Magnetic North with the declination between Grid and Magnetic; and whether Magnetic or Grid bearings were used.	☑	☐			
iv. Location of all required building setbacks, yards, and buffers.	☑	☐			
v. Boundaries of all contiguous property under the total or partial control of the owner or applicant.	☑	☐			
vi. Tax map and lot number of the parcel(s) on which the project is located	☑	☐	**PDF\Electronic Submission.**	☑	☐

The undersigned *hereby makes an application to the Town of Windham for approval of the proposed project and declares the foregoing to be true and accurate to the best of his/her knowledge.*

	June 11, 2026	Tanner Goodine
APPLICANT OR AGENT'S SIGNATURE	DATE	PLEASE TYPE OR PRINT NAME

AGENT AUTHORIZATION

~~APPLICANT/ OWNER~~	Name	Town of Windham c/o Robert Burns		
PROPERTY DESCRIPTION	Physical Address	N. Windham Public Safety Franklin Drive, Windham	Map	70
			Lot	14
APPLICANT'S AGENT INFORMATION	Name	Tanner Goodine		
	Phone	(207) 200-2121	Business Name & Mailing Address	Sebago Technics, Inc. 75 John Roberts Road, Suite 4A South Portland, ME 04106

10-2-2025

APPLICANT SIGNATURE DATE

Robert Burns, Town Of Windham

APPLICANT'S AGENT SIGNATURE DATE

Tanner Goodine, Sebago Technics, Inc.

240431-01

Section 1

Performance Standards and Approval Criteria Responses

Exhibit 1.1: Performance Standards and Approval Criteria

Article 8 – Site Plan Review, § 120-807. Review procedures for major developments.

A. Preapplication conference.
Response: The pre-application for the development proposal occurred in 2024.

B. Information required.
Response: Acknowledged.

C./D./E. Sketch Plan.
Response: The Sketch Plan submittal review by the Planning Board occurred on April 27, 2026.

F. Final site plan review procedures.
Responses:

(1) **(a) Site Law Permit approval is pending (See Section 12). Evidence of receipt of the approval shall be included as a condition of Town approval.**

(b) MDEP, under the Natural Resources Protection Act, Stormwater Law, and MEPDES wastewater discharge licenses are not necessary.

(c) Maine Department of Transportation for Traffic Movement Permit, highway entrance/driveway access permits are not required.

(d) Windham PWD curb cut authorization does not apply to the site access driveway off Franklin Drive.

(e) Letters or ability and capacity have been circulated to the Portland Water District. Responses are in Section 6.

(f) Permitting for a central water supply system is not required.

(g) Individual wells are not proposed.

(h) Subsurface wastewater disposal is not proposed.

(i) Septic tanks are not proposed as part of site development.

(j) US Army Corps of Engineers review is not required. Jurisdictional natural resources are not affected by the development proposal.

(k) A new street name is not proposed. The site is accessed by a new driveway extending from Franklin Drive.

(2) **Previous review of the overall site of Jonlee and vicinity did not identify areas listed or eligible for listing on the National Register of Historic Places.**

(3) Submission materials are submitted to the Planning Department, as required.

(4) The application will be heard by the Board after the Planner determines the application complete.

(5) After a completeness review, the review item will be placed on the Planning Board's agenda.

(6) Town staff, Town consultants will review the application and make recommendations to the Board.

(7) The Planner will give written notice of the date, time, and place of the meeting at which the application will be considered to the applicant.

(8) The Planning Board will determine whether to hold a public hearing on the final plan.

G. Final site plan; public hearing procedures.
Response: Acknowledged by applicant.

Exhibit 1.2: Performance Standards and Approval Criteria

Article 8 – Site Plan Review, § 120-812. Performance standards and approval criteria.

A. Utilization of the site.
Response: The plan, as designed, reflects the natural capabilities of the site to support development. The proposed buildings and support features are clustered in the most suitable location for development.

B. Vehicular traffic.
Response: The road system has adequate capacity to accommodate the additional traffic generated by the new public safety building development. Reference is made to *Section 9-Traffic*, containing additional traffic information included in the submittal document.

In accordance with the requirements of this section, vehicular access to and from the development site is safe and convenient, with internal circulation providing safe movement of passenger, service, and emergency vehicles, including delivery SU-30 vehicles.

C. Parking and loading requirements.
Response: The off-street parking layout is located on the site to observe required lot line setbacks, and stall and aisle layout conform to the standards of Table 1, as required. Parking at the public safety building will meet the needs of the anticipated uses on the site. No provision for off-site parking is proposed. Reference is made to the appended plan set for the parking location, size, and general site circulation, including proposed lighting for safe pedestrian movement.

D. Pedestrian traffic.
Response: Pedestrian ways within the site connect building entrances/exits, parking areas, and the Franklin Drive right-of-way. The sidewalk system links the project site to nearby facilities and uses.

E. Stormwater management.
Response: A comprehensive review of proposed stormwater management features is part of the ongoing Maine DEP Site Location of Development application review. The collection and disposal of stormwater runoff will not harm abutting or downstream properties. In accordance with the requirements of this section, major site plans will treat stormwater from 24-hour storms of the 2-year, 10-year, and 25-year frequencies such that peak flow from the project site does not exceed peak flows before the undertaking of the project. Stormwater will be reviewed for compliance with all applicable MDEP Chapter 500 and local standards, as required. It is understood that a qualified third-party inspector shall, at least annually, inspect the stormwater management facilities, in accordance with all municipal and state inspection, cleaning, and maintenance requirements of the approved stormwater management plan, offer required documentation, and the applicant shall take corrective action(s) to address any noted deficiencies. A comprehensive review of proposed stormwater management features is part of the ongoing Maine DEP Site Location of Development application review.

F. Erosion control.
Response: The proposed site improvements harmonize with existing topography to the fullest

extent possible, as required. An erosion and sedimentation control plan utilizing best management practices (BMPs) consistent with Maine DEP Chapter 500 rules and local requirements is located within the appended site plan set. The applicant intends to utilize contractors certified in ESC through Maine DEP's voluntary contractor certification program.

G. Water supply provisions.
Response: Water service and fire protection service will be provided by the Portland Water District. An ability and capacity request has been submitted to PWD, and the response is enclosed in *Section 6-Utilities*.

H. Sewage disposal provisions.
Response: Sewage disposal includes wastewater disposal by the municipal collection that is managed by the Portland Water District (PWD). A letter requesting confirmation of ability and capacity has been requested from PWD, and the response is available in *Section 6-Utilities.*

I. Utilities. The development shall be provided with electrical, telephone, and telecommunication service adequate to meet the anticipated use of the project. New utility facilities shall be screened from view to the extent feasible. Utility lines shall be placed underground.
Response: The proposed site improvements include electrical and communications to meet the proposed public safety use. New facilities are screened from view to the greatest extent feasible, and utility lines are underground, as required. See appended site plans for service locations.

J. Groundwater protection.
Response: The proposed site development and use will not adversely impact either the quality or quantity of groundwater available to abutting properties or to public water supply systems. On-site water supply and sewage disposal are not proposed. Provision for groundwater protection is part of the ongoing Maine DEP Site Location of Development review.

K. Water quality protection.
Response: Water quality is protected by proper location and storage of liquid, gaseous, or solid material that may run off, seep, percolate, or wash into surface waters or cause nuisances, unsightliness, or be harmful to human, animal, plant, or aquatic life. If applicable, storage of materials will meet the standards of MDEP and the State Fire Marshal's Office. The project requires review under Chapter 500 of MDEP Stormwater Law that is included in the Site Location of Development review that is currently under review by Maine DEP, which will review and approve the design, including water quality protection. See *Section 10 – Stormwater Management* for the current copy of the Stormwater Report.

L. Hazardous, special, and radioactive materials.
Response: External storage of hazardous or special materials is not proposed. Interior handling and storage of materials identified by the standards of federal or state agencies will be done in accordance with the standards of these agencies, mirroring the adherence that is currently utilized at the existing fire stations within Windham.

L. Shoreland relationship.
Response: The proposed fire station site design does not adversely affect the water quality or shoreline of any adjacent water body and is not subject to the provisions of Chapter 185,

Shoreland Zoning.

M. Technical and financial capacity.
Response: The Town of Windham has adequate financial capacity to construct the proposed improvements and meet the criteria of the standards of these regulations. The applicant has retained qualified design, management, and construction consultants. Reference is made to *Section 4-Technical Ability & Financial Capacity*.

N. Solid waste management. The proposed development shall provide for adequate disposal of solid wastes. All solid waste shall be disposed of at a licensed disposal facility having adequate capacity to accept the project's wastes.
Response: Solid waste disposal will occur by extension of the existing municipal removal services from town-owned facilities by Casella, which disposes of MSW at EcoMaine. Contractors will utilize licensed facilities with adequate capacity to accept the relocated fire station project's waste. We note that a thorough review of solid waste removal of MSW and construction debris (CD) removal the Maine DEP as part of the Site Location of Development Amendment for the public safety building.

O. Historic and archaeological resources.
Response: The site is located within an existing development previously and subsequently reviewed for historic and archaeological resources during the initial Maine DEP Site Location of Development review (Approval Order L-04289-23-A-X, 1978). Historic or archaeological resources have not been identified on or near the project site.

P. Floodplain management.
Response: No portion of the site is located within a special flood hazard area as identified by the Federal Emergency Management Agency. See Exhibit 2.3, *Section 2-Location and Resource Maps.*

Q. Exterior lighting. The proposed development shall have adequate exterior lighting to provide for its safe use during operating hours.
Response: Lighting for security, safety, and operational needs will not produce deleterious effects on abutting properties and will not impair vehicle operator vision on adjacent roadways. The proposed lighting fixtures are shielded and dark sky compliant. Reference is made to Section 7-Lighting, including photometrics and light fixture cut sheets, verifying illumination at lot lines does not exceed 0.5 footcandle.

R. Noise.
Response: Post construction site uses will not exceed the maximum permissible sound pressure level on the site, with the exception of the necessary short-term siren use by fire and police vehicles exiting the facility for calls. Sound will be limited by the time period and by the abutting commercial land use as listed below.

	Sound Pressure Level Limits Using the Sound Equivalent Level of One Minute (leq 1) [Measured in dB(a) Scale]	
Abutting Use	7:00 a.m. to 10:00 p.m.	10:01 p.m. to 6.59 a.m.
Commercial	65	55

S. Storage of materials.

Response: Exposed storage and machinery are screened as required by this section with fencing or dense plantings to provide a visual buffer sufficient to minimize their impact on users of public streets. Dumpsters are located on a level paved surface. Potential safety hazard to children is not anticipated.

Town of Windham
Planning Department:
8 School Road
Windham, Maine 04062
Tel: (207) 894-5960 ext. 2
Fax: (207) 892-1916 -
www.windhammaine.us

APPLICANT/PLANNER'S CHECKLIST FOR MAJOR SITE PLAN REVIEW
COMMERCIAL DISTRICT DESIGN STANDARDS SECTION 120-813

The following checklist includes Design Standards for nonresidential developments within Windham's Commercial* 1, Commercial 1 North, Commercial 2, Commercial 3, Village Commercial, and Windham Center Districts.** ***Where there is a conflict between provision of the Design Standards and any other ordinance provision, the more restrictive provision shall apply. In addition to meeting all Design Standards required in the applicable zoning districts, development must comply with he minimum of eight (8) other Design Standards.

For purposed of this section ,"development" shall mean that portion of the project that:

a. Is subject to the site plan review under Article 8 Site Plan Review; or

b. Will renovate twenty percent (20%) or more of the entire wall area of a structure on the site. (For this type of renovation, the renovation will be subject to the required Design Standards in Section A. but will not be subject to other required Design Standards.)

Design Standards Framework

			C-1	C-1N	C-2	C-3	VC	WC	Checklist	
A.	**Architecture/Building**								**Applicant**	**Staff**
	1	Building Style	R[1]	R	R	R	R	R	☐	☐
	2	Materials	R	R	R	R	R	R	☑	☐
	3	Color	R	R	R	R	R	R	☑	☐
	4	Roofline	R	R	R	R	R	R	☑	☐
	5	Façade	R	R	R	R	R	R	☑	☐
	6	Building style coordination (multi-building)	R	R	R	R	R	R	☑	☐
	7	Entrance	R	R	R	R	R	R	☑	☐
	8	Architectural Details	R	R	R	R	R	R	☐	☐
	9	LEED certification							☐	☐
B	**Site/Parking**									
	1	Parking location							☐	☐
	2	Internal traffic flow							☐	☐
	3	Interconnected Parking lots							☐	☐
	4	Orientation of Building							☐	☐
	5	Screening, Parking			R			R	☐	☐
	6	Screening, utilities and service areas/structures	R	R	R		R	R	☑	☐
	7	Parking Lot Landscaping							☐	☐
	8	Low-Impact Design Stormwater							☐	☐
	9	Shared Stormwater Treatment							☐	☐
C	**Landscaping/Lighting**									
	1	Lighting/Photometric Plan	R	R			R		☑	☐
	2	Lighting coordinated with architecture	R	R			R		☑	☐
	3	Light coordinated with landscaping	R	R			R		☑	☐
	4	Existing trees preserved				R		R	☐	☐
	5	Snow area designated	R	R	R	R	R	R	☑	☐
	6	Planting variety							☐	☐
	7	Planting suitability							☐	☐
	8	Mass plantings							☐	☐
	9	Illumination levels							☐	☐
D.	**Bike/Ped**									
	1	Internal walkways	R	R					☑	☐
	2	Links to community	R	R	R		R	R	☑	☐
	3	Outdoor activity area							☐	☐
	4	Sidewalk	R	R				R	☑	☐
	5	Crosswalk	R	R					☑	☐
	6	Bike parking/racks	R	R	R		R	R	☑	☐

1. Any item with an **R** in the Table is a required Design Standards in that zoning district.

Exhibit 1.3: Performance Standards and Approval Criteria

Article 8 – Site Plan Review, § 120-813. Commercial district design standards.
Reference is made to Section 13-Architectural Plans for proposed building design specifics prepared by Invivid Architecture dated June 12, 2026.

Design standards have been established for nonresidential development within Windham's Commercial districts. The site is located in the C-1 District, requiring the following:

1. Items listed with an R in the tabe is a required design standard in the zoning district.
Response: Acknowledged. See applicable responses A 1-8, B 6, C 1-3, 5, and D 1, 2, 4-6, below.

A. Architecture/building.

(1) Building style.

Response: The building style is unique to the use in a traditional public safety building style that will be visually appealing without being overly stylized.

(2) Materials

Response: Traditional high-quality materials common to northern New England and public safety buildings are proposed. Reference is made to the architectural plans in Section 13.

(3) Color.

Response: Façade colors are of low reflectance. The building does not include the use of high-intensity, high reflectance, chrome, metallic, or fluorescent colors on the primary building face.

(4) Roofiline.

Response: The proposed roofliness meet the pitch, projection expectations, does not include flat areas exceeding 50 feet, and rooftop equipment screening is provided, as allowed.

(5) Façade

5a. Response: The public street-facing facades meet the horizontal length standards of this section.

5b. Response: Retail and food service uses are not proposed.

5c. Exterior vending machines are not proposed.

5d. Windows, doors, and proposed ventilation fixtures will be trimmed to create a frame around openings with a trim that matches those used on the façade of the building, as required.

5e. Horizontal facades meet the design features of the Town.

(6) Building style coordination. (multibuilding developments)

Response: The proposed construction includes provision for a future Phase 2, which will be a structure expansion. It is understood that nonhabitable freestanding structures are

treated as architectural elements that must meet the same design guidelines as larger buildings.

(7) Entrance required in C-1…

Responses:

(a) The proposed new building has clearly defined and visible entrances that incorporate a number of the desired design elements of this section.

[1] Significant variations in roofline
[2] Distinctive lighting and landscaping
[3] Canopies or porticos
[4] Overhangs, recesses, or projections
[5] Pedestrian arcades.
[6] Raised corniced parapets over the door
[7] Peaked roof forms in scale with the building
[8] Outdoor patios
[9] Display windows
[10] Architectural details such as tile work and moldings which are integrated into the building structure and design.

(b) Not applicable; site improvements do not include linear commercial buildings.

(8) Architectural details.

Response: Architectural detailing and trim are proportional to the scale and design of the entire building.

B. Site/parking.

(6) Screening, utilities, and service areas/structures

Response: The delivery areas, trash receptacles, and mechanical equipment are screened to minimize visibility from sensitive viewpoints. Screening is further enhanced by formal landscaping.

C. Landscaping/lighting.

(1) Lighting fixture locations are shown on the appended site plans. A professionally prepared photometric plan and associated light cut sheets are included in Section 8.

(2) The proposed lighting is coordinated with the proposed architecture and will not create glare or visual distraction. Neon illumination is not proposed.

(3) Lighting and landscaping are coordinated with consideration given to the ultimate size of trees, as required.

(5) Snow storage areas are designated on the site plan. The chosen areas do not conflict with landscaping and will not cause problems to visibility, drainage, or icing during winter months.

D. Bicycle/pedestrian.

(1) Continuous internal site walkways are provided from existing public infrastructure to the principal building entrance.

(2) Linkages to surrounding uses are provided by providing internal walks extending to existing sidewalks.

(4) Sidewalks are provided in accordance with this section.

(5) A crosswalk is provided in accordance with the provisions of this section. Reference is made to the appended site plans.

(6) A rack providing parking for the required two bicycles is shown on the site plan.

Section 2

Site Location and Resource Maps

Section 2: Site Location and Resource Maps

2.1 Location Map: This Section includes an excerpt from the USGS quadrangle showing the project site for identification purposes. The project site is located on Franklin Drive in the Town of Windham, Maine.

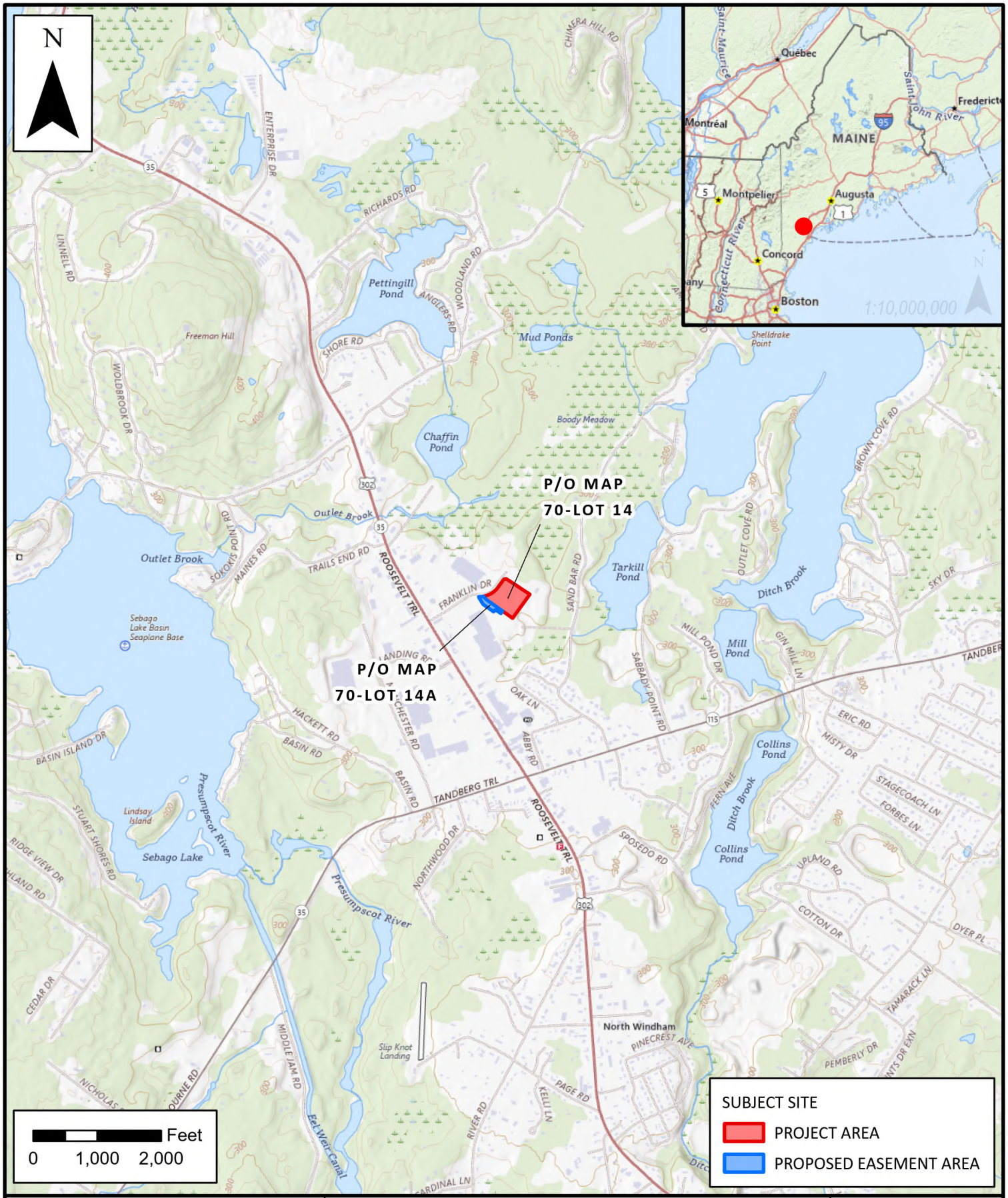
2.2 Tax Parcels: The development site can further be identified as an area totaling 5.2±-acres consisting of a portion of Tax Map 70/Lot 14 and an easement area over a portion of Map 70/Lot 14A.

2.3 Flood Map: The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 23005C0479F, effective June 20, 2024, shows that the site is not located in a flood hazard area. A copy of the FEMA National Flood Hazards map exhibit showing the project site is enclosed in this section.

2.4 Soils: Per the medium-intensity NRCS Web Soil Survey Mapping, the project is primarily located over soils identified as HIB, Hinckley loamy sand, 3-8% slopes.

2.5 Sand and Gravel Aquifer Map: Per the Maine Geological Survey mapping, the site is located over surficial deposits with good to excellent potential groundwater yield. A copy of the MGS Significant Sand & Gravel Aquifer Map is enclosed in this section.

2.6 Watershed: Per the enclosed USGS Watershed Map exhibit, the site is located in the Little Sebago Lake-Pleasant River Watershed, further identified as HUC: 010600010301.



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LOCATION MAP

NORTH WINDHAM PUBLIC SAFETY

SCALE: 1:24,000

DATE: 2/11/2026

LOCATION:
FRANKLIN DRIVE
WINDHAM, MAINE

INFORMATION:
MAINE GEOLIBRARY
USGS QUADRANGLE

TAX PARCELS

SITE: p/o Map/Lot: 070-014-000-000
& Easement on Map/Lot 070-014-00A
1 inch = 282 Feet

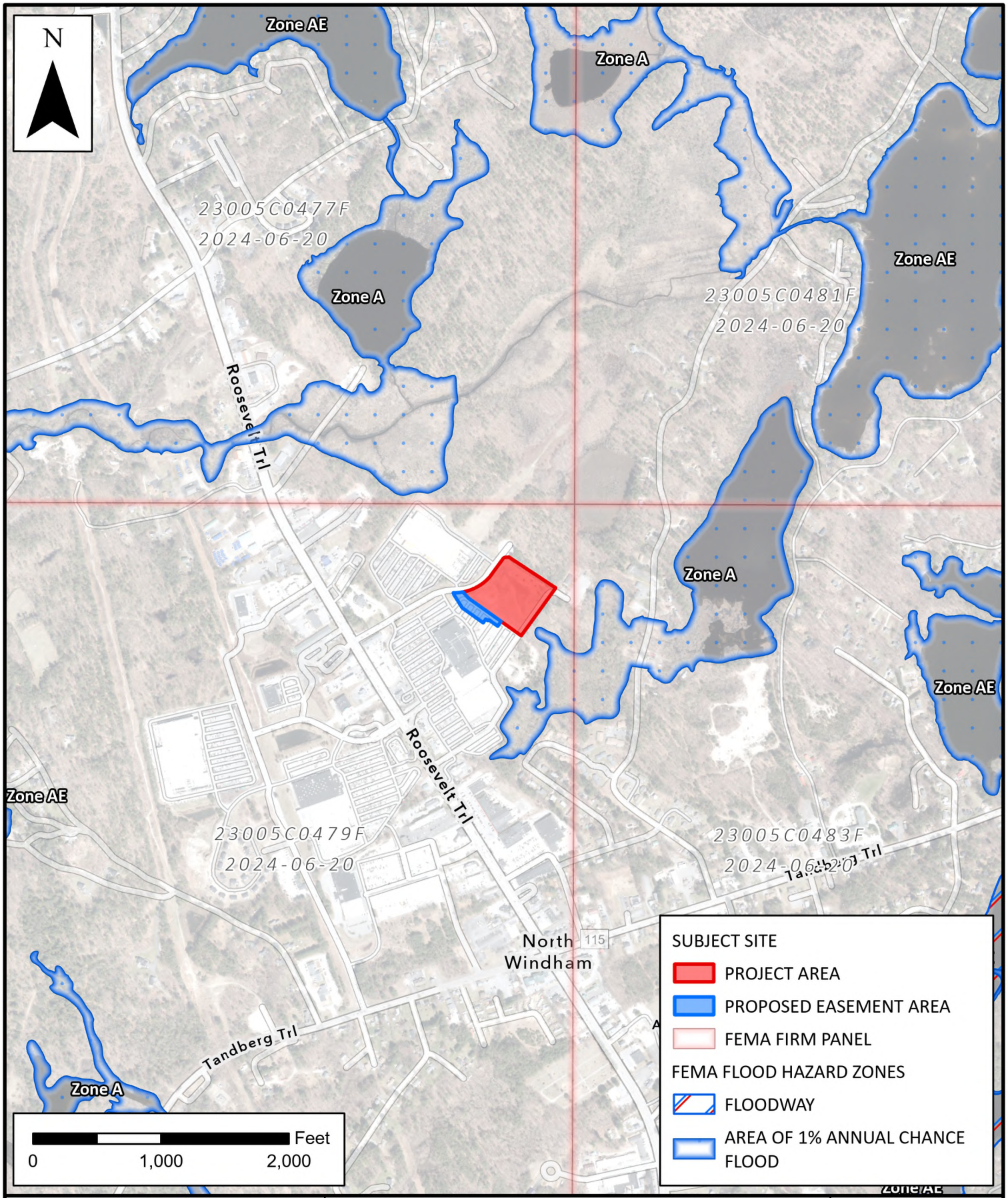
0 282 564 846

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February 11, 2026



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FEMA NATIONAL FLOOD HAZARDS

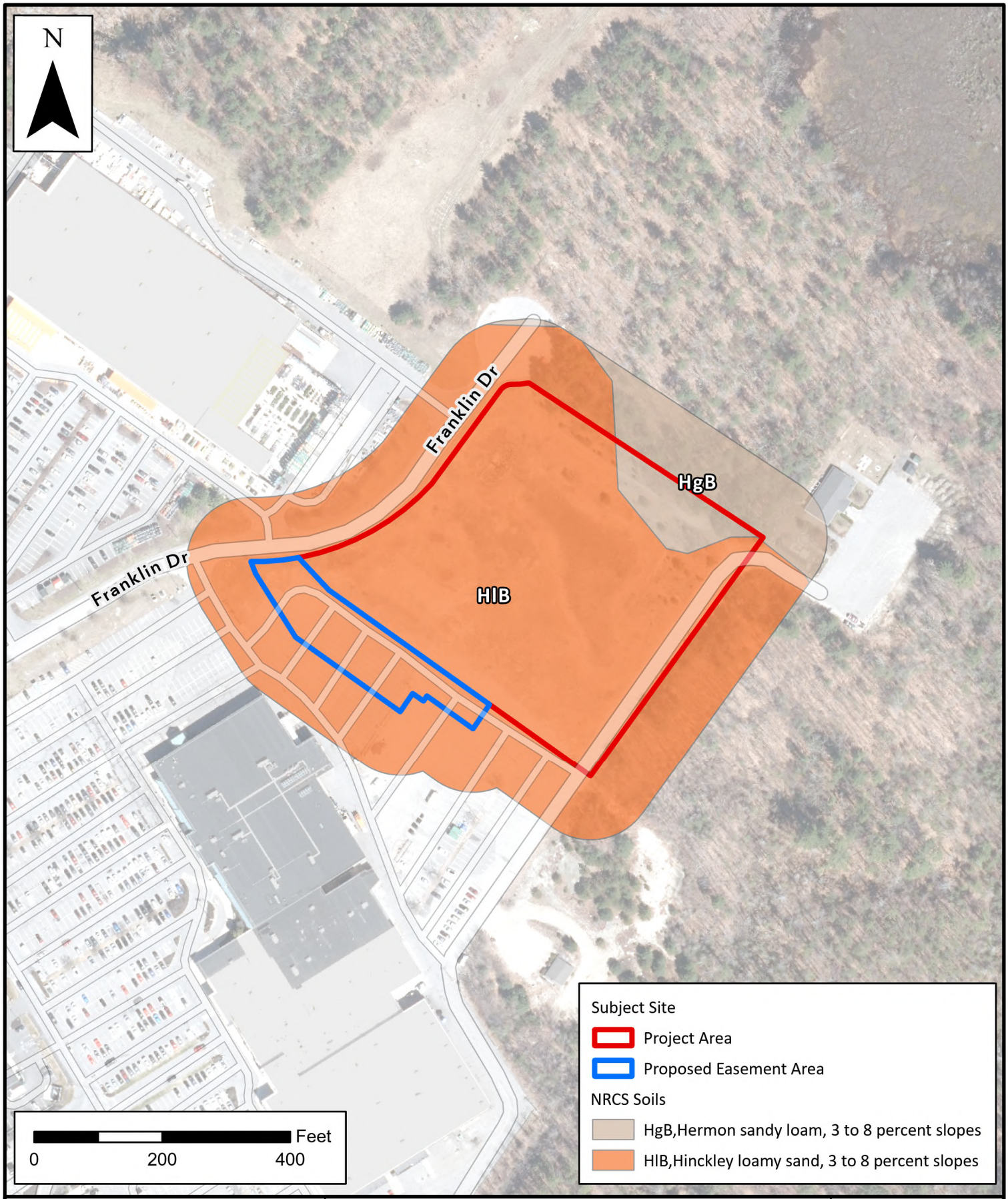
NORTH WINDHAM PUBLIC SAFETY

SCALE: 1:12,000

DATE: 2/11/2026

LOCATION:
FRANKLIN DRIVE
WINDHAM, MAINE

INFORMATION:
FEMA NATIONAL FLOOD HAZARD LAYER
EFFECTIVE JUNE 20, 2024



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NRCS SOIL SURVEY MAP

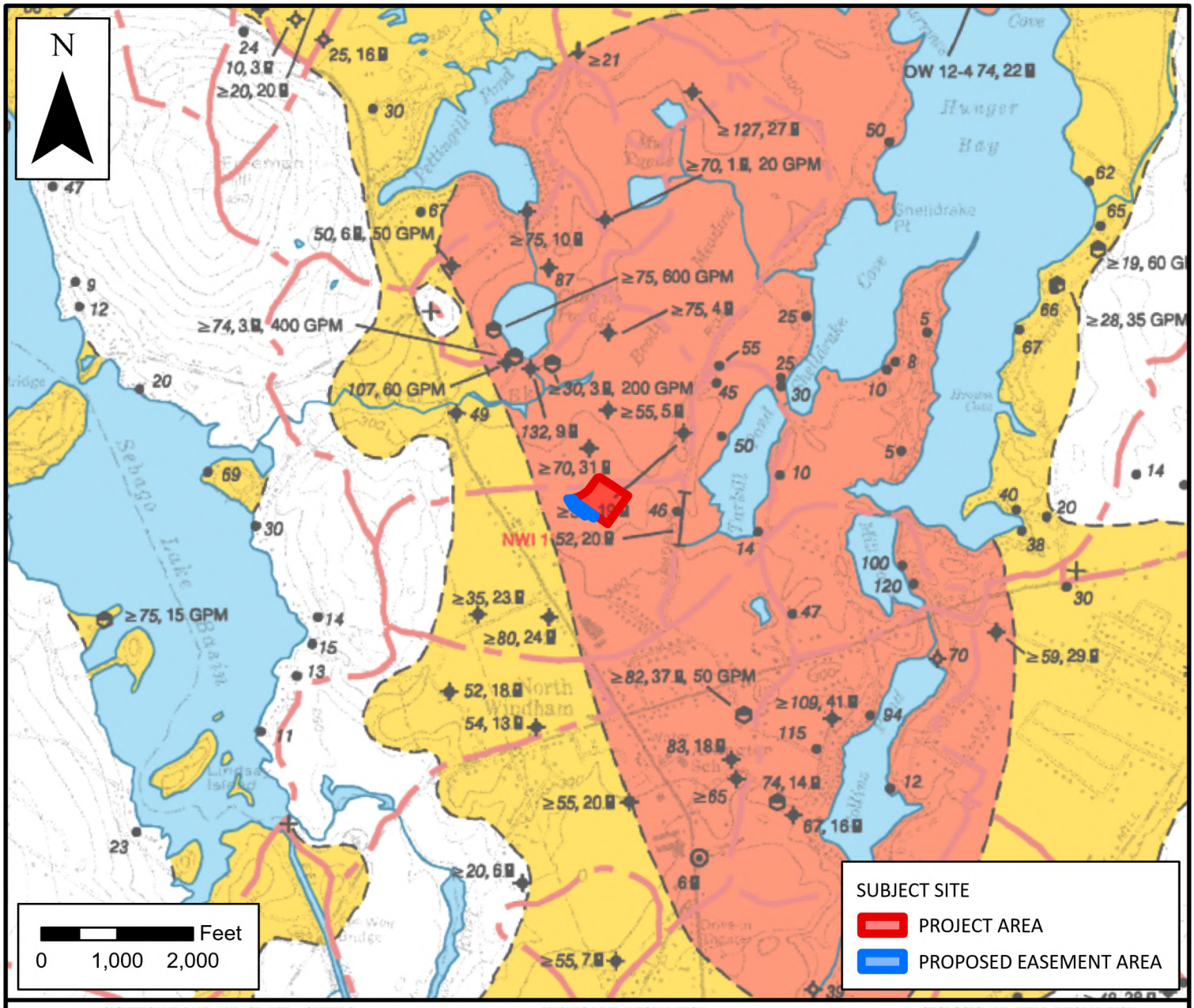
NORTH WINDHAM PUBLIC SAFETY

SCALE: 1:2,400

DATE: 2/11/2026

LOCATION:
FRANKLIN DRIVE
WINDHAM, MAINE

INFORMATION:
MAINE GEOLIBRARY
USDA NRCS SOIL SURVEY 2020



SIGNIFICANT SAND AND GRAVEL AQUIFERS
(yields greater than 10 gallons per minute)

Approximate boundary of surficial deposits with significant saturated thickness where potential ground-water yield is moderate to excellent.

Surficial deposits with good to excellent potential ground-water yield; yields generally greater than 50 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yield zones are based on subsurface data where available, and may vary from mapped extent in areas where data are unavailable.

Surficial deposits with moderate to good potential ground-water yield; yields generally greater than 10 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yields may exceed 50 gallons per minute in deposits hydraulically connected with surface-water bodies, or in extensive deposits where subsurface data are available.

SURFICIAL DEPOSITS WITH LESS FAVORABLE AQUIFER CHARACTERISTICS
(yields less than 10 gallons per minute)

Areas with moderate to low or no potential ground-water yield (includes areas underlain by till, marine deposits, eolian deposits, alluvium, swamps, thin glacial sand and gravel deposits, or bedrock); yields in surficial deposits generally less than 10 gallons per minute to a properly constructed well.

SEISMIC-LINE INFORMATION

Profiles for 12-channel seismic lines are shown in Figure 6 of Open-File Report 87-24a (Adamik and others, 1987). Length of 12-channel seismic lines as shown on the map is to scale. All single-channel lines ranged from 80 to 250 feet long and are not shown to scale.

53 Depth to bedrock, in feet below land surface.

≥53 Depth to bedrock exceeds depth shown (based on calculations).

12 Depth to water level, in feet below land surface.

MAP-7 131, 23 Twelve-channel seismic line, with depth to bedrock and depth to water shown at the midpoint of the line, in feet below land surface.

69, 12 / MAP-E / 72, 12 Single-channel seismic line, with depth to bedrock and depth to water shown at each end of the line, in feet below land surface. Unless otherwise indicated, data shown above the line-identifier box refers to the northern end of the seismic line.

The 3-letter identifier for a line is an abbreviation for the topographic quadrangle. If the 3-letter identifier for the line is followed by a number (ex: MAP - 7, MAP - 4), the line is a 12-channel line. If the identifier is followed by a letter (ex: MAP - E, MAP- P), the line is a single-channel line. Single-channel seismic interpretations by J. T. Adamik. Twelve-channel seismic interpretations by J. T. Adamik and C. D. Neil.

GEOLOGIC AND WELL INFORMATION

56 Depth to bedrock, in feet below land surface

≥ 13 Penetration depth of boring; ≥ symbol refers to minimum depth to bedrock based on boring depth or refusal

6 Depth to water level in feet below land surface (observed in well, spring, test boring, pit, or seismic line)

Gravel pit (overburden thickness noted in feet, e.g. 5-12')

Quarry

4 GPM Yield (flow) of well or spring in gallons per minute (GPM)

Spring, with general direction of flow

Drilled overburden well

Dug well

Observation well (project well if labeled; nonproject well if unlabeled)

Test boring (project boring if labeled; nonproject boring if unlabeled)

Driven point

Test pit

Drilled bedrock well

Potential point source of ground-water contamination

Bedrock outcrop

Surface-water drainage-basin boundary; surface-water divides generally correspond to ground-water divides. Horizontal direction of ground-water flow generally is away from divides and toward surface-water bodies.

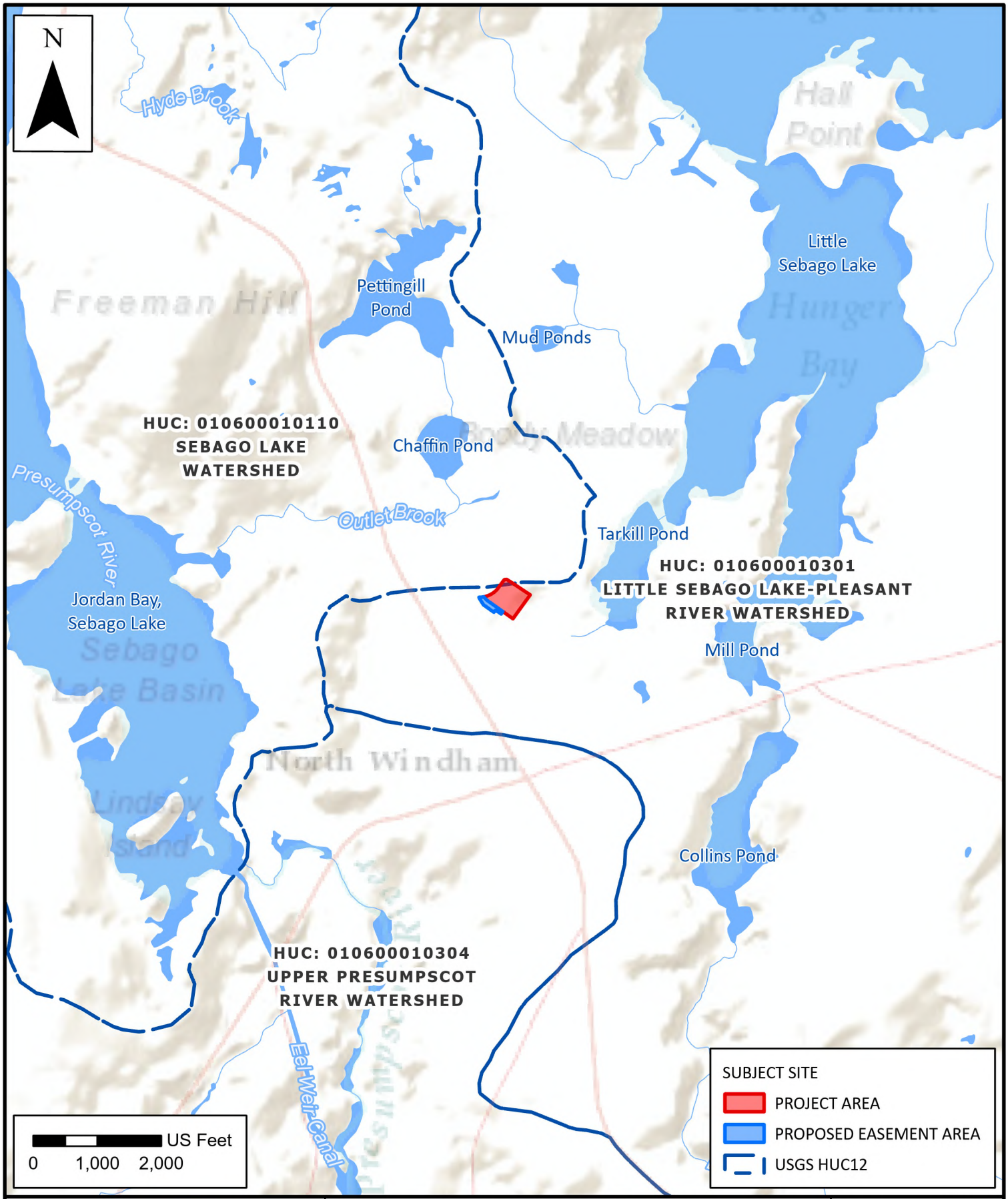
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SIGNIFICANT SAND & GRAVEL AQUIFER MAP
NORTH WINDHAM PUBLIC SAFETY

SCALE: 1:24,000
DATE: 2/11/2026

LOCATION:
FRANKLIN DRIVE
WINDHAM, MAINE

INFORMATION:
MAINE GEOLOGICAL SURVEY:
SAND & GRAVEL AQUIFERS 24K SCALE



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USGS WATERSHED MAP

NORTH WINDHAM PUBLIC SAFETY

SCALE:	1:24,000
DATE:	2/11/2026

LOCATION:
FRANKLIN DRIVE
WINDHAM, MAINE

INFORMATION:
MAINE GEOLIBRARY
USGS WATERSHED BOUNDARY DATASET

Section 3

Abutter List

Section 3: Abutter List

The names and addresses of abutters within 500’ of the project development site from Town GIS online resources, including a reference map, are included in this section.

070-011-000-000, 070-011-B00-000
C N BROWN COMPANY
1 C N BROWN WAY
SOUTH PARIS, ME 04281

070-007-000-000
CUMBERLAND COUNTY TEACHERS
FEDERAL CREDIT UNION
101 GRAY ROAD
FALMOUTH, ME 04105

070-008-000-000
ROOSEVELT TRAIL LLC
C/O ELAINE SARAGAS
166A MERRIMACK STREET
METHUAN, MA 01844

18A-048-C00-000
COVERED MARINA LLC
209 SANDBAR ROAD
WINDHAM, ME 04062

067-089-000-000
229 SEWALL STREET LLC
217 GRAY ROAD
CUMBERLAND, ME 04021

070-003-000-000
ROOSEVELT TRAIL PLAZA LLC
21A TIARA DRIVE
GORHAM, ME 04038

070-009-000-000, 070-010-000-000
JOY REAL ESTATE OF WINDHAM II LLC
290 BRIDGTON RD STE 2
WESTBROOK, ME 04092

018-031-A00-000, 018-031-A01-000, 018-032-H00-000
NEW MARBLEHEAD SENIORS HOUSING CORP;
AVESTA NEW MARBLEHEAD ONE LP;
NEW MARBLEHEAD NORTH HOUSING CORP
307 CUMBERLAND AVENUE
PORTLAND, ME 04101

018-026-002-A01, 018-026-002-A02, 018-026-002-A03
NEW GEN ESTATES LLC
50 MAINE MALL ROAD
SO PORTLAND, ME 04106

018-032-J00-000
DEMERS PROPERTY SERVICES LLC
37 HOLSTEIN DRIVE
WINDHAM, ME 04062

070-006-000-000
DT RETAIL PROPERTIES LLC
500 VOLVO PARKWAY
CHESAPEAKE, VA 23320

067-092-000-000
BARD PRISCILLA L
11 OAK LANE
WINDHAM, ME 04062

067-089-B00-000
WONG DANIELLE L
18 OAK LANE
WINDHAM, ME 04062

071-026-A01-000
WENDCO OF MAINE LLC
2121 DOVER RD
EPSOM, NH 03234

067-093-A00-000
SUMMIT PROPERTIES LLC
217 GRAY ROAD
CUMBERLAND, ME 04021

071-002-000-000
YARMOUTH ROUTE ONE LLC
c/o VIP INC
24 HARRIMAN DRIVE
AUBURN, ME 04210

070-005-000-000, 18A-048-A00-000
ROOSEVELT TRAIL ACQUISITION LLC,
WS NO WINDHAM PROPERTIES LIMITED
c/o WS ASSET MANAGEMENT INC
33 BOYLSTON ST, STE 3000
CHESTNUT HILL, MA 02467

071-001-000-000
K MAN LLC
42 MARKET ST
PORTLAND, ME 04101

070-026-001-000, 018-026-002-000,070-014-002-000, 070-014-L03-000
JONLEE WINDHAM LLC, JLB WINDHAM LLC
c/o RESTONE INVESTMENTS
5050 BELMONT AVENUE
YOUNGSTOWN, OH 44505

018-032-001-000
MB PROPERTIES INC
30 WINDHAM CENTER RD
WINDHAM, ME 04062

067-047-A00-000
GALLANT C AMANDA
10 OAK LANE
WINDHAM, ME 04062

067-089-C00-000
DAMM MAXIMO
12 TORREY PINES
COTO DE CAZA, CA 92679

070-017-A00-000
NEW LEAF REALTY LLC
2001 MARINA DR UNIT 414
QUINCY, MA 02171

067-093-000-000
SIX PINEHURST LLC
217 GRAY RD
CUMBERLAND, ME 04021

070-019-000-000
524 GRAY ROAD LLC
217 GRAY ROAD
CUMBERLAND, ME 04021

018-032-E00-000
MAYBERRY JACQUELINE REED
247 TANDBERG TRAIL
WINDHAM, ME 04062

Municipal Copy
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

<u>New Easement Parcel:</u> 070-014-A00-000
HANNAFORD BROS CO
ATTN: REAL ESTATE DEPT
PO BOX 1330
SOUTHBURY, NC 28145

<u>LOCUS/Record Owner:</u> 070-014-000-000
JONLEE WINDHAM LLC
5050 BELMONT AVENUE
YOUNGSTOWN, OH 44505

<u>500'r Abutters</u>
N. Windham Public Safety

240414-01

070-026-A00-000
NORWAY SAVINGS BANK
PO BOX 347
NORWAY, ME 04268

18A-048-A01-000
WS ROUTE 302 LIMITED PARTNERSHIP
C/O MCDONALDS CORP
536 LINCOLN STREET
LEWISTON, ME 04240

018-032-F00-000, 018-032-G00-000
MAYBERRY ASSOCIATES
60 SANDBAR ROAD
WINDHAM, ME 04062

067-091-000-000
SOUTHARD KEVIN L - RTDD
9 OAK LANE
WINDHAM, ME 04062

070-017-000-000
R FARM PROPERTIES LLC
95 PINE STREET
FRYEBURG, ME 04037

070-001-000-000
FLEET BANK OF MAINE
C/O BANK OF AMERICA NC1-001-03-81
ATTN REAL PROPERTY TAX
CHARLOTTE, NC 28232

070-018-000-000
WINDHAM SHOPPING PLAZA INC
C/O DIRIGO MANAGEMENT CO
PORTLAND, ME 04101

070-004-000-000
MAINE BANK & TRUST
ONE M&T PLAZA
BUFFALO, NY 14203

070-015-000-000
EVERGREEN CREDIT UNION
PO BOX 1038
PORTLAND, ME 04104

018-032-I00-000
WINDHAM VETERANS' ASSOC INC
35 VETERANS MEMORIAL DR
WINDHAM, ME 04062

070-022-000-000
KEY BANK OF MAINE
C/O TAX SERVICES
PO BOX 22055
ALBANY, NY 12201-5055

067-089-A00-000
KNEELAND RICHARD L &
KNEELAND JOAN E - LIFE ESTATE
PO BOX 321
WINDHAM, ME 04062

067-047-000-000
100M LLC
71 SAWYER STREET
WESTBROOK, ME 04092

070-014-L02-000
BURGER KING CORPORATION #3170
PO BOX 460189
HOUSTON, TX 77056

070-020-000-000
WALLINGFORD MICHAEL &
WALLINGFORD DEBORAH
PO BOX 702
RAYMOND, ME 04071

018-032-000-000
NEXT LEVEL PROPERTIES LLC
84G WARREN AVENUE
WESTBROOK, ME 04092-4433

500'r Abutters

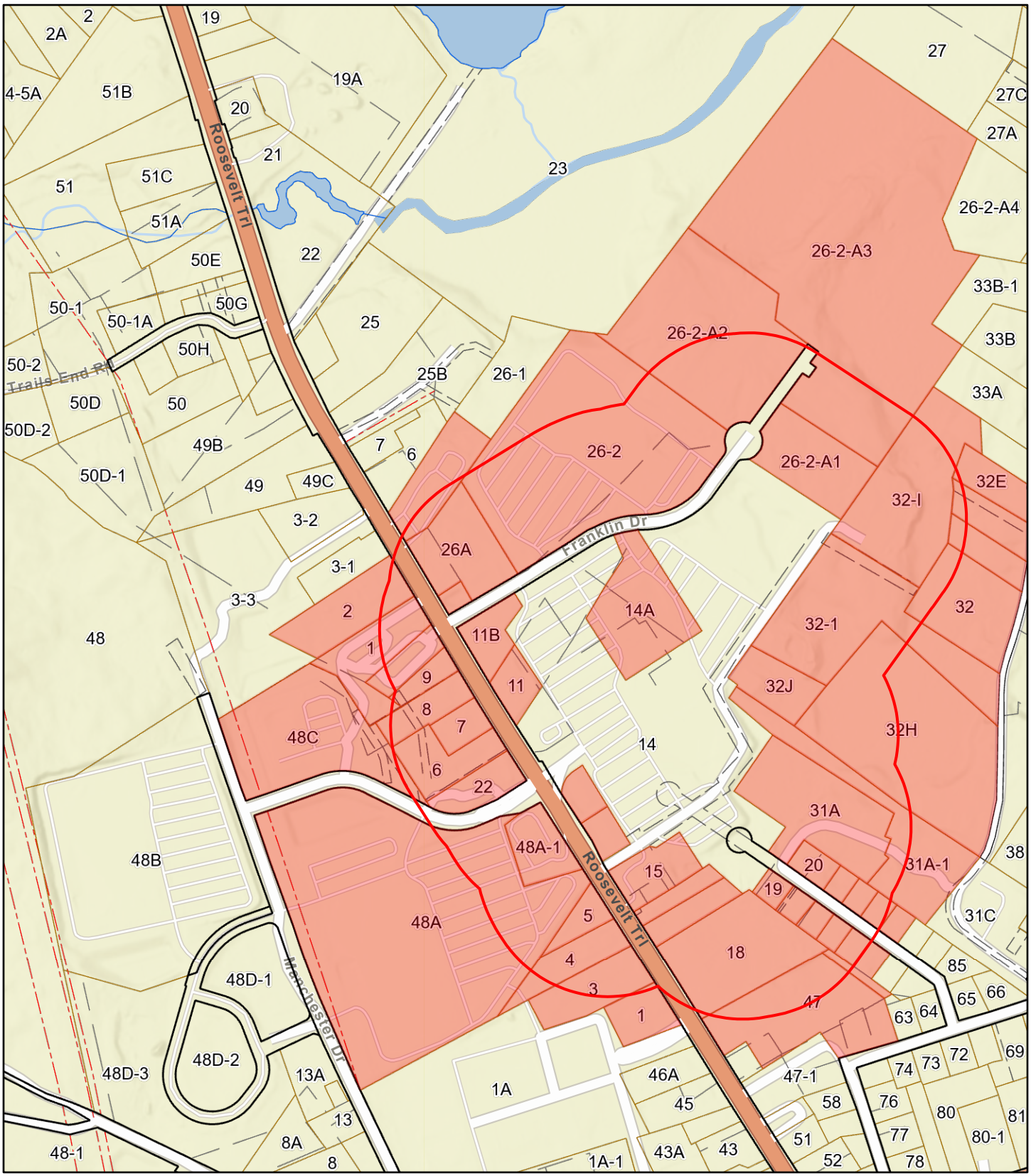
Town of Windham, ME

1 inch = 544 Feet

0 544 1088 1632

February 11, 2026

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Section 4

Right, Title, or Interest

Section 4: Right, Title, or Interest

4.1 The property is subject to a Purchase and Sale Agreement between the record owner and the applicant. Reference is made to the amendment to the agreement included in this section.

4.2, 4.21 Property cards for the development parcel (70-14) and the easement property (70-14A) are enclosed for reference.

4.3 The record owner of the project site is Jonlee Windham LLC. Reference is made to the copy of deed book 14194/page 0120 recorded in the Cumberland County Register of Deeds (CCRD) on October 1, 1998, within this section.

4.4 The Record owner of the proposed easement location is Hannaford Bros Co, per CCRD deed book 9919/page 201, with subsequent corporate mergers described in CCRD deed book 12300/page 188, all enclosed in this section.

AMENDMENT TO
PURCHASE AND SALE AGREEMENT

This AMENDEMENT TO PURCHASE AND SALE AGREEMENT (the "Amendment") is made this 28 day of January, 2026 (the "Effective Date"), by and between, **JONLEE WINDHAM, LLC**, a Maine limited liability company with a place of business at and a mailing address of 5050 Belmont Avenue, Youngstown, OH 44505 ("Seller"), and the **Town of Windham**, a municipal corporation organized and existing under the laws of the State of Maine, with a mailing address of 8 School Road, Windham, ME 04062 ("Buyer").

W I T N E S S E T H:

WHEREAS, Buyer and Seller entered into that certain Purchase and Sale Agreement pertaining to that certain tract of land totaling approximately 5.02 acres, being a portion of the land located at 795 Roosevelt Trail, Windham, Maine, (the "Purchase Agreement"); and

WHEREAS, Purchaser and Seller desire to amend the Purchase Agreement as hereinafter set forth to, among other things, extend the time for Seller and Buyer to finalize the Declaration contemplated by the Purchase Agreement and obtain consents of Hannaford Bros. Co., LLC, and Home Depot U.S.A., Inc., to the extent required.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in consideration of the foregoing and subject to the terms and conditions hereof, Seller and Buyer hereby agree as follows.

1. Each capitalized term used but not defined herein shall have the meaning ascribed to such term in the Purchase Agreement.

2. To the extent the Purchase Agreement has expired or has otherwise been terminated, the parties agree that it is reinstated.

3. Notwithstanding the provisions of the Purchase Agreement, the Due Diligence Period is hereby extended to and shall expire on July 31, 2026.

4. Section 3 (Closing) of the Agreement is hereby amended so that the "Closing" or "Closing Date" shall occur on or before August 31, 2026.

5. This Amendment may be executed by counterpart signatures, and each of which when so executed and delivered shall be an original, but which together shall constitute one and the same instrument. Signatures delivered by fax, email or electronic signature (such as DocuSign or Kofax) shall be as effective as an original

6. Except as expressly stated herein, the original Agreement remains in full force and effect.

IN WITNESS WHEREOF, the parties hereto, hereunto duly authorized, have executed and delivered this Agreement as January 28, 2026.

SELLER:
Jonlee Windham LLC

Witness:

By:
Lee Burdman
Its: Manager

BUYER:
TOWN OF WINDHAM

Witness:

By:
~~Barry A. Tibbetts~~ Robert J. Burns
Its: Town Manager

4921-0773-1046, v. 2

Property Card: 795 ROOSEVELT TR

Town of Windham, ME

Parcel Information

Parcel ID:	070014000000	**Map:**	70
Vision ID:	5657	**Lot:**	14
Owner:	JONLEE WINDHAM LLC	**Use Description:**	SHOPNGMALL
Co-Owner:		**Zone:**	
Mailing Address:	5050 BELMONT AVENUE YOUNGSTOWN, OH 44505	**Land Area in Acres:**	27.11

Sale History

Book/Page:	14194/0120
Sale Date:	10/1/1998
Sale Price:	$0

Assessed Value

Land:	$4,218,700
Buildings:	$4,205,900
Extra Bldg Features:	$100,800
Outbuildings:	$1,017,800
Total:	$9,543,200

Building Details: Building # 1



Model:	Commercial	**Int Wall Desc 1:**	Drywall/Sheet
Living Area:	121070	**Int Wall Desc 2:**	
Appr. Year Built:	2004	**Ext Wall Desc 1:**	Concr/Cinder
Style:	Local Shop Cntr	**Ext Wall Desc 2:**	
Stories:	1	**Roof Cover:**	Tar & Gravel
Occupancy:	1	**Roof Structure:**	Flat
No. Total Rooms:		**Heat Type:**	Forced Air-Duc
No. Bedrooms:		**Heat Fuel:**	Gas
No. Baths:		**A/C Type:**	Central
No. Half Baths:			

CAI Technologies
www.cai-tech.com
This information is believed to be correct but is subject to change and is not warranteed.

Property Card: **803 ROOSEVELT TR**

Town of Windham, ME

Parcel Information

Parcel ID:	070014A00000	**Map:**	70
Vision ID:	5660	**Lot:**	14-A
Owner:	HANNAFORD BROS CO	**Use Description:**	SUPERMKT
Co-Owner:	ATTN: REAL ESTATE DEPT	**Zone:**	
Mailing Address:	PO BOX 1330 SOUTHBURY, NC 28145	**Land Area in Acres:**	3.22

Sale History		Assessed Value	
Book/Page:	12300/0188	**Land:**	$1,132,500
Sale Date:	12/30/1995	**Buildings:**	$6,152,100
Sale Price:	$0	**Extra Bldg Features:**	$233,300
		Outbuildings:	$116,400
		Total:	$7,634,300

Building Details: Building # 1

Model:	Commercial	**Int Wall Desc 1:**	Drywall/Sheet
Living Area:	62212	**Int Wall Desc 2:**	
Appr. Year Built:	2013	**Ext Wall Desc 1:**	Concr/Cinder
Style:	Supermarket	**Ext Wall Desc 2:**	
Stories:	1	**Roof Cover:**	Tar & Gravel
Occupancy:	1	**Roof Structure:**	Flat
No. Total Rooms:		**Heat Type:**	Forced Air-Duc
No. Bedrooms:		**Heat Fuel:**	Gas
No. Baths:		**A/C Type:**	Central
No. Half Baths:			

CAI Technologies
www.cai-tech.com
This information is believed to be correct but is subject to change and is not warranteed.

BK 14194 PG 120

70456

QUITCLAIM DEED WITH COVENANT

Provost, Inc., a Maine corporation with a principal place of business at 120 Exchange Street, Portland, County of Cumberland and State of Maine, for consideration paid, does hereby grant with quitclaim covenants to Jonlee Windham LLC, a Maine limited liability company, with a place of business at 5050 Belmont Avenue, Youngstown, Ohio 44505, all that certain real property together with all buildings, fixtures and improvements thereon situated on U.S. Route 302 in Windham, Maine, and being more particularly described as follows:

See Exhibit "A" attached hereto

Being the same premises conveyed to the Grantor herein by deed from Fleet Bank of Maine dated December 17, 1997, and recorded in Book 13504, Page 113, of the Cumberland County Registry of Deeds.

MAINE REAL ESTATE TAX PAID

IN WITNESS WHEREOF, the undersigned has caused this instrument to be executed by Michael Scarks, its President, thereunto duly authorized, this __ day of October, 1998.

Provost, Inc.

S H Merrill
Witness

By: Michael Scarks
Its: President

STATE OF MAINE
CUMBERLAND, SS.

October 1, 1998

Then personally appeared the above named Michael Scarks and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of Provost, Inc..

Before me,

S H Merrill
~~Notary Public~~ Attorney at law.
Print Name: Samuel H. Merrill

SCHEDULE A

A certain lot or parcel of land situated on the northeasterly side of U.S. Route 302 in Windham, in the County of Cumberland and State of Maine, and being more particularly bounded and described as follows:

Beginning on the northeasterly side of U.S. Route 302 at the southerly corner of land now or formerly owned by Ripley & Fletcher Co., Inc.; thence running North 52° 43' 21" East along said land now or formerly of Ripley & Fletcher Co., Inc. a distance of one hundred ninety-one and seventy-nine hundredths (191.79) feet to a point, thence North 15° 46' 39" West a distance of two hundred sixty-four and forty-five hundredths (264.45) feet to a point; thence North 53° 01' 19" East a distance of one hundred eighteen and fifty-two hundredths (118.52) feet to a point; North 14° 17' 17" West parallel to the Easterly line of said Route 302, a distance of sixty-one and eighty hundredths (61.80) feet to a point; thence South 75° 42' 43" West at a right angle to the last mentioned line, a distance of two hundred seventy-two and fifty-seven hundredths (272.57) feet to a point in the Easterly line of said Route 302; thence North 14° 17' 17" West along the Easterly line of said Route 302, a distance of sixty and no hundredths (60.00) feet to a point; thence North 75° 42' 43" East at a right angle to the Easterly line of said Route 302, a distance of three hundred fifty-nine and seventeen hundredths (359.17) feet to a point; thence North 62° 52' 45" East a distance of eight hundred ninety-eight and forty-eight hundredths (898.48) feet to a point; thence South 29° 39' 32" East a distance of one hundred two and sixty-six hundredths (102.66) feet to an existing, capped iron rod set in the ground stamped 492 at the Northeasterly corner of land conveyed to Windham Mall

Associates by CRE I Real Estate Corp. by Deed dated June 14, 1990 and recorded in said Registry in Book 9216, Page 342; thence running South 40° 14' 20" East along land now or formerly of Lawrence E. Smith, et al., a distance of six hundred thirty-four and twenty-three hundredths (634.23) feet to land now or formerly of Jasper E. Mayberry; thence running South 50° 47' 38" West along said Jasper E. Mayberry land a distance of seven hundred eighty-three and eighteen hundredths (783.18) feet to a corner in said Mayberry land; thence running South 40° 32' 03" East along said Jasper E. Mayberry land a distance of fifty and no hundredths (50.00) feet to the northerly corner of land now or formerly of New Marblehead Seniors Housing Corporation; thence running South 50° 47' 38" West along said land of New Marblehead Seniors Housing Corporation a distance of sixty and no hundredths (60.00) feet to a corner in said land; thence running South 19° 04' 19" East along said land of New Marblehead Seniors Housing Corporation a distance of two hundred twenty-nine and twenty-four hundredths (229.24) feet to land now or formerly of Windham Seniors Housing Corporation; thence running South 51° 25' 48" West along said land of Windham Seniors Housing Corporation a distance of two hundred eleven and fifty-five hundredths (211.55) feet to a corner in said land of Windham Seniors Housing Corporation; thence running South 38° 34' 12" East along said land of Windham Seniors Housing Corporation a distance of two hundred forty-seven and ninety-two hundredths (247.92) feet to an iron pin at the northerly corner of land conveyed by Northeast Bank of Westbrook to Windham Seniors Housing, Inc. by deed dated June 4, 1974 and recorded in the Cumberland County Registry of Deeds in Book 3554, Page 240, said land also being Lot No. 18 as shown on a Plan of Oak Grove

by E. A. Saunders, C. E., dated 1965 and recorded in said Registry of Deeds in Plan Book 70, Page 17; thence running South 51° 47' 26" West along the northwesterly side of said Lot No. 18 a distance of one hundred nineteen and seventy-three hundredths (119.73) feet to an iron pin at the westerly corner of said Lot No. 18; thence running South 38° 26' 53" East along the southwesterly side of said Lot No. 18 a distance of fifty and no hundredths (50.00) feet to an iron pin; thence running southwesterly across a proposed street known as Oak Lane, as shown on said Plan of Oak Grove, a distance of fifty and no hundredths (50.00) feet to an iron pin at the northerly corner of land conveyed by Northeast Bank of Westbrook to Charles R. DeCrow and Deanna L. DeCrow by deed dated September 7, 1976 and recorded in said Registry of Deeds in Book 3989, Page 57; thence running South 51° 43' 54" West along said DeCrow land a distance of one hundred twenty-five and eighty-four hundredths (125.84) feet to land now or formerly of East Coast Centers; thence running North 38° 25' 36" West along said land of East Coast Centers a distance of forty-six and forty-nine hundredths (46.49) feet to an angle point; thence running North 40° 22' 43" West along land now or formerly of Philip Cook a distance of one hundred thirteen and fifty-one hundredths (113.51) feet to an iron pipe at the easterly corner of land conveyed by Warren C. Fernald, et al., to Kenmore Commoss, et al., by deed dated October 13, 1965, and recorded in said Registry of Deeds in Book 2927, Page 484; thence running North 36° 07' 43" West along said Commoss land a distance of fifty-nine and seventy-four hundredths (59.74) feet to the northerly corner of said Commoss land; thence running South 73° 21' 33" West along said Commoss land a distance of one hundred fifty-nine and twelve hundredths (159.12) feet to land of Norway Savings Bank;

thence running North 16° 05' 25" West along said land of Norway Savings Bank a distance of one hundred ninety and no hundredths (190.00) feet to the northerly corner of said land; thence running South 73° 21' 33" West along said land of Norway Savings Bank a distance of two hundred five and no hundredths (205.00) feet to the northeasterly side of U.S. Route 302; thence running North 16° 05' 25" West along said U.S. Route 302 a distance of sixty-three and no hundredths (63,00) feet to an existing capped iron rod; thence running North 07° 01' 03" West along said U.S. Route 302 a distance of one hundred three and ninety-one hundredths (103.91) feet to an existing capped iron rod; thence running North 16° 05' 25" West along said U.S. Route 302 a distance of one hundred twenty-five and no hundredths (125.00) feet to an existing capped iron rod; thence running North 16° 05' 25" West along said U.S. Route 302 a distance of two hundred twenty-five and no hundredths (225.00) feet to an existing capped iron rod; thence running South 74° 00' 00" West along said U.S. Route 302 a distance of sixteen and no hundredths (16.00) feet to an existing capped iron rod; thence running North 16° 05' 25" West along said U.S. Route 302 a distance of one hundred seventy-seven and sixty-one hundredths (177.61) feet to said land of Ripley &.Fletcher Co., Inc. and the point of beginning.

Excepting therefrom a certain lot or parcel of land bounded and described as follows:

Beginning at an existing 3/4 inch iron rod set in the ground in the Easterly line of Route 302, so called, at the Northwesterly corner of land conveyed to Windham Mall Associates by CRE I Real Estate Corp. by Deed dated June 14, 1990 and recorded in the

Registry of Deeds for Cumberland County in Book 9216, Page 342, thence: North 52° 43' 21" East along the Northerly line of said Windham Mall Associates' land, a distance of one hundred ninety-one and seventy-nine hundredths (191.79) feet to a capped rod at the southwesterly corner of land conveyed by C.N. Brown Company to Windham Mall Associates, thence: North 51° 19' 31" East a distance of three hundred twenty-two and fourteen hundredths (322.14) feet to the true point of beginning for this parcel, thence:

1. North 49° 08' 53" East along the Northerly line of said Windham Mall Associates' land, a distance of four hundred four and fifty-four hundredths (404.54) feet to a point, thence:

2. South 15° 38' 17" East a distance of four hundred sixty-eight and eighty hundredths (468.80) feet to a point, said point being on a line which is the prolongation of the Southeasterly face of the masonry wall of the Shop 'N Save store presently located on the parcel herein described, thence:

3. South 74° 21' 43" West along said Southeasterly face of said masonry wall of said Shop 'N Save store and the prolongation thereof, a distance of three hundred sixty-six and no hundredths feet to a point, thence:

4. North 15° 38' 17" West a distance of two hundred ninety-six and forty-seven hundredths (296.47) feet to the point of beginning.

Bearings are magnetic - 1978.

RECEIVED
RECORDED REGISTRY OF DEEDS
1998 OCT -2 AM 10: 49
CUMBERLAND COUNTY
John B O'Brien

Instr 9344 Bk 9919 Pg 201

9344

WARRANTY DEED

WINDHAM MALL ASSOCIATES, a Maine limited partnership having a place of business in Wellesley, Massachusetts for full value and consideration paid, hereby grants to ANALYTICAL SERVICES, INC., a Maine corporation whose mailing address is P.O. Box 1000, Portland, Maine 04104, Attention: Real Estate Department, with WARRANTY COVENANTS, the following real estate:

A certain lot or parcel of land situated in North Windham in Cumberland County, State of Maine, bounded and described as follows:

MAINE REAL ESTATE TAX PAID

Beginning at an existing 3/4 inch iron rod set in the ground in the Easterly line of Route 302, so called, at the Northwesterly corner of land conveyed to Windham Mall Associates by CRE I Real Estate Corp. by Deed dated June 14, 1990 and recorded in the Registry of Deeds for Cumberland County in Book 9216, Page 342, thence: North fifty-two degrees forty-three minutes twenty-one seconds East (N 52° 43' 21" E) along the Northerly line of said Windham Mall Associates' land, a distance of one hundred ninety-one and seventy-nine hundredths (191.79) feet to a capped iron rod at the southwesterly corner of land conveyed by C.N. Brown Company to Windham Mall Associates, thence: North fifty-one degrees nineteen minutes thirty-one seconds East (N 51° 19' 31" E), a distance of three hundred twenty-two and fourteen hundredths (322.14) feet to the true point of beginning for this parcel, thence:

1. North forty-nine degrees eight minutes fifty-three seconds East (N 49° 08' 53" E) along the southeasterly line of land conveyed by Lawrence E. Smith et al to Windham Mall Associates, a distance of four hundred four and fifty-four hundredths (404.54) feet to a point, thence:

2. South fifteen degrees thirty-eight minutes seventeen seconds East (S 15° 38' 17" E) a distance of four hundred sixty-eight and eighty hundredths (468.80) feet to a point, said point being on a line which is the prolongation of the Southeasterly face of the masonry wall of the Shop 'N Save store building presently located on the parcel herein described, thence:

3. South seventy-four degrees twenty-one minutes forty-three seconds West (S 74° 21' 43" W) along said Southeasterly face of said masonry wall of said Shop 'N Save store building and the prolongation thereof, a distance of three hundred sixty-six and no hundredths (366.00) feet to a point, thence:

4. North fifteen degrees thirty-eight minutes seventeen seconds West (N 15° 38' 17" W) a distance of two hundred ninety-six and forty-seven hundredths (296.47) feet to the point of beginning.

Containing 3.22 acres. Said Parcel is shown on an Amended Subdivision Plan for the Windham Mall dated October 8, 1991 and revised through October 21, 1991 prepared by Aliberti, LaRochelle & Hodson Professional Associates, Inc. and recorded in the Cumberland County Registry of Deeds in Plan Book 191, Page 191.

Bearings are magnetic - 1978.

Being a portion of the land conveyed to Windham Mall Associates by CRE I Real Estate Corp. by Deed dated June 14, 1990 and recorded in the Registry of Deeds for Cumberland County in Book 9216, Page 342 and all of the land reserved by Analytical Services, Inc., in its deed to Rocca Group Developments, Ltd. dated April 30, 1980 and recorded in said Registry of Deeds in Book 4597, Page 17. The Warranty Covenants contained in this deed shall not apply to the portion of the property described herein which is owned by the Grantee by virtue of said reservation in said 1980 deed.

IN WITNESS WHEREOF, WINDHAM MALL ASSOCIATES has caused this deed to be executed on February 24, 1992.

WINDHAM MALL ASSOCIATES
By: WINDHAM MALL MANAGEMENT CORP.

By: J. Robt Connor President
J. Robert Connor
Its President

STATE OF MAINE
County of Cumberland

February 24, 1992

Personally appeared the above-named J. Robert Connor, President of Windham Mall Management Corp., general partner of Windham Mall Associates, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said corporation and partnership.

Before me,

James C. Palmer
~~Notary Public~~/Attorney at Law
James C. Palmer

JCP/d38030.BR8

Recorded
Cumberland County
Registry of Deeds
02/24/92 04:14:10PM
Robert P. Titcomb
Register

BK 12300 PG 188

Filing Fee $80.00

01573

For Use By The Secretary of State	
File No.	
Fee Paid	
C.B.	
Date	

STATE OF MAINE

ARTICLES OF MERGER OF

See Exhibit B

Subsidiary Corporation, A Maine Corporation

INTO

Hannaford Bros. Co.

Parent Corporation, A Maine Corporation

For Use By The Secretary of State
FILED
_____ 19 ___
Deputy Secretary of State
A True Copy When Attested By Signature
Deputy Secretary of State

Pursuant to 13-A MRSA §904, the undersigned corporations adopt the following Articles of Merger:

FIRST: Hannaford Bros. Co., herein referred to as the parent corporation, is a corporation organized under the laws of the State of Maine and owning at least 90% of the outstanding shares of each class of See Exhibit B, a corporation organized under the laws of the State of Maine and herein referred to as the subsidiary corporation.

SECOND: The plan of merger set forth in Exhibit A attached hereto was approved by the Board of Directors of the undersigned parent corporation as the surviving corporation in the manner prescribed by the Maine Business Corporation Act.

THIRD: The number of outstanding shares of each class of the participating subsidiary corporation and the number of shares of each class owned by the parent, surviving corporation are as follows:

Name of Subsidiary Corporation	Number of Outstanding Shares	Designation of Class	Number and Per Cent of Shares Owned by Surviving Parent
See Exhibit B			

FOURTH: The date of the mailing to each shareholder of the subsidiary corporation of a copy of the plan of merger is N/A (Parent is sole shareholder), 19____.

FIFTH: Effective date of the merger (if other than date of filing of the Articles) is December 30, 1995.

(Not to exceed 60 days from date of filing of the Articles.)

SIXTH: The address of the registered office in Maine of the surviving corporation is One Portland Square, P.O. Box 586, Portland, Maine 04112.
(street, city, state and zip code)

The address of the registered office in Maine of the subsidiary corporation is One Portland Square, P.O. Box 586, Portland, Maine 04112.
(street, city, state and zip code)

Dated: December 6, 1995

Hannaford Bros. Co. BK12300PG189
(Surviving Corporation)

By _____
(signature)

Hugh G. Farrington, President
(type or print name and capacity)

By _____
(signature)

Charles H. Crockett, Assistant Secretary
(type or print name and capacity)

This document *MUST* be signed by (1) the **Clerk** *OR* (2) the **President** or a vice-president *AND* the **Secretary**, an assistant secretary or other officer the bylaws designate as second certifying officer *OR* (3) if no such officers, a majority of the **directors** or such directors designated by a majority of directors then in office *OR* (4) if no directors, the holders, or such of them designated by the **holders of record of a majority of all outstanding shares** entitled to vote thereon *OR* (5) the **holders of all outstanding shares.**

FORM NO. MBCA-10B Rev. 88

SUBMIT COMPLETED FORMS TO: Secretary of State, Station 101, Augusta, ME 04333

EXHIBIT A

AGREEMENT
AND
PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER, dated as of the 1st day of December, 1995, by and among,

HANNAFORD BROS. CO., a Maine corporation (hereinafter referred to as "Hannaford" and as the "Surviving Corporation"), and

COTTLE'S SHOP 'N SAVE, INC., a Maine corporation; **THE SAMPSON SUPERMARKETS, INC.**, a Maine corporation; **SHOPPING CENTER PROPERTIES, INC.**, a Maine corporation; **ANALYTICAL SERVICES, INC.**, a Maine corporation; **SHOP 'N SAVE REALTY, INC.**, a Maine corporation; **M-B SUPER, INC.**, a Maine corporation; **HANNAFORD PROPERTIES, INC.**, a Maine corporation; and **WAREHOUSE PROPERTIES, INC.**, a Maine corporation (hereinafter collectively referred to as the "Merging Corporations").

W I T N E S S E T H :

WHEREAS, all of the Merging Corporations are wholly-owned subsidiaries of the Surviving Corporation; and

WHEREAS, pursuant to 13-A M.R.S.A. §904 and other applicable laws and regulations, the Directors of the Surviving Corporation and the Directors of the Merging Corporations have each approved and adopted the Plan embodied herein, and have deemed it advisable for the benefit of the Merging Corporations that they merge with and into the Surviving Corporation on the terms hereinafter set forth.

NOW, THEREFORE, on the Effective Date (as hereinafter defined) and in accordance with the provisions of Chapter 9 of the Maine Business Corporation Act, the Merging Corporations shall be merged into Hannaford, which shall continue its corporate existence and be the surviving corporation resulting from the merger, all to be effected in the manner and upon the terms and conditions hereinafter set forth:

ARTICLE I

1.1 Merger. Subject to the terms hereinafter set forth, the Merging Corporations shall be merged into Surviving

Corporation which shall continue in existence as the surviving corporation and thereupon the separate existence of the Merging Corporations shall cease.

1.2 Manner of Converting Shares. Each share of common stock of the Merging Corporations that is issued and outstanding on the Effective Date shall, by virtue of the merger and without any action on the part of the holder thereof, be canceled. Each share of common stock of Surviving Corporation that is issued and outstanding on the Effective Date shall, by virtue of the merger, remain unchanged.

1.3 Effective Time and Date. The merger provided for in this Agreement shall become effective at 11:59 P.M. (the "Effective Time") on December 30, 1995 (the "Effective Date"). Consummation of the merger shall be effected on or before such date by the filing of Articles of Merger in substantially the form annexed hereto with the office of the Secretary of State of the State of Maine.

1.4 Effect of Merger. The merger provided for in this Agreement shall have the full effect provided under Section 905 of the Maine Business Corporation Act. All rights, privileges, immunities and franchises; all property, real, personal or mixed; all debts due on any account; and all other interests and assets of every kind and description of the Merging Corporations as they exist at the Effective Time on the Effective Date of the merger, shall pass to and vest in the Surviving Corporation without any conveyance, transfer or other further action. The Surviving Corporation shall be responsible for all the liabilities and obligations of the Merging Corporations as of the Effective Time on the Effective Date. Any action or proceeding, whether civil, criminal or administrative, pending by or against the Merging Corporations shall continue as if the merger had not taken place, and the Surviving Corporation may be substituted in such action or proceeding. The Surviving Corporation's identity, existence, purposes, rights, immunities, properties, liabilities and obligations shall be unaffected and unimpaired by the merger, except as expressly provided herein.

1.5 Notice of Merger. At any time, or from time to time, after the Effective Date, the last acting officers of each of the Merging Corporations may, in the name of the respective corporation, execute, deliver, file and record all such deeds, assignments, notices and other instruments and take or cause to be taken all such further action as the Surviving Corporation may deem necessary or desirable in order to confirm and provide public notice of the Surviving Corporation's title to and possession of all of the Merging Corporations' rights, interests and assets pursuant to this Agreement and Plan of Merger, and otherwise to carry out the purposes of this Agreement and Plan of Merger.

ARTICLE II

2.1 Articles of Incorporation. The Articles of Incorporation of Hannaford on the Effective Date shall continue to be the Articles of Incorporation of the Surviving Corporation from and after the Effective Date, subject to the right of the Surviving Corporation to amend its Articles of Incorporation in accordance with the laws of the State of Maine.

2.2 Bylaws. The Bylaws of Hannaford on the Effective Date shall continue to be the Bylaws of the Surviving Corporation from and after the Effective Date, subject to the right of its stockholders and/or directors to amend its Bylaws as provided therein.

2.3 Board of Directors and Officers. Until the election and qualification of their successors, the members of the Board of Directors and the officers of Hannaford on the Effective Date shall continue to be the members of the Board of Directors and officers, respectively, of the Surviving Corporation from and after the Effective Date.

ARTICLE III

3.1 Amendment. This Agreement and Plan of Merger, or any of the terms or conditions thereof, may not be amended, modified or waived except in writing signed by each of the parties hereto.

3.2 Termination. This Agreement and Plan of Merger may be terminated or abandoned by vote of the Board of Directors of the Surviving Corporation at any time prior to the Effective Date.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed by their respective officers thereunto duly authorized as of the day and year first above written.

SURVIVING CORPORATION: **HANNAFORD BROS. CO.**

By: _____
Garrett D. Bowne, IV
Its Vice President and
Treasurer

MERGING CORPORATIONS: **COTTLE'S SHOP 'N SAVE, INC.**

By: _____
Charles H. Crockett
Its Secretary

THE SAMPSON SUPERMARKETS, INC.

By: _____
Charles H. Crockett
Its Secretary

SHOPPING CENTER PROPERTIES, INC.

By: _____
Charles H. Crockett
Its Secretary

ANALYTICAL SERVICES, INC.

By: _____
Charles H. Crockett
Its Secretary

SHOP 'N SAVE REALTY, INC.

By: _____
Charles H. Crockett
Its Secretary

MB-SUPER, INC.

By: _____
Charles H. Crockett
Its Secretary

HANNAFORD PROPERTIES, INC.

By: _____
Charles H. Crockett
Its Secretary

WAREHOUSE PROPERTIES, INC.

By: _____
Charles H. Crockett
Its Secretary

EXHIBIT B

Name of Subsidiary Corporation	Number of Outstanding Shares	Designation of Class	Number and Percent of Shares Owned by Surviving Parent, Hannaford Bros. Co.
Cottle's Shop 'n Save, Inc.	440,000	Common	440,000 - 100%
The Sampson Supermarkets, Inc.	49,900	Common	49,000 - 100%
Shopping Center Properties, Inc.	1	Common	1 - 100%
Analytical Services, Inc.	5	Common	5 - 100%
MB-Super, Inc.	1	Common	1 - 100%
Shop 'n Save Realty, Inc.	250	Common	250 - 100%
Hannaford Properties, Inc.	100	Common	100 - 100%
Warehouse Properties, Inc.	100	Common	100 - 100%

File No. 19020009 D Pages 8
1944002D,19650186D,19831742D,
19680009D, 19862110,19781554D,
19731560D
Fee Paid $ 80.00
DCN 1953461600016 MERG
---------- FILED ----------
12/12/1995

Harv Cooper
Secretary of State
AGENT

A true copy attest:

Harv Cooper
Secretary of State
Agent

RECEIVED
RECORDED REGISTRY OF DEEDS
96 JAN -8 AM 11:19
CUMBERLAND COUNTY
John B O'Brien

Section 5

Technical Ability & Financial Capacity

Section 5: Technical Ability & Financial Capacity

Technical Ability:
The Town of Windham routinely develops a variety of building and site projects. The applicant has retained the services of several consulting firms to comprise the project team for the proposed public safety building as follows:

Great Falls Construction, Inc. of Gorham, Maine, has been selected to represent the Town for preconstruction services, construction management, and general contracting associated with the project. GFC is an experienced firm providing quality services in Maine and New Hampshire since 1988.

Sebago Technics, Inc. is a multi-disciplinary engineering firm founded in 1981, offering a wide range of services specializing in land development design, planning, permitting, landscape architecture, and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general, civil, transportation, traffic, and structural engineering, road design, utility infrastructure, construction management, planning and permitting, landscape architecture, environmental services, surveying and geomatics, GIS spatial data, including custom mapping, and UAV/drone services. Sebago Technics, Inc. prepared this local permit application and the Maine Department of Environmental Protection Site Location of Development Amendment (L-04289, 1978) that is currently under review. Reference is made to the enclosed selection of resumes of personnel working on this project.

Invivid Architecture. (IA) Invivid Architecture, in collaboration with the initial project architect Grant Hays, Associates (GHA), provides the comprehensive architectural design for the project. Invivid was founded in 2017 by Principal Architect, Virginia Stanley, AIA, and offers extensive local architectural design and consulting services. We note that GHA has previously completed designs for the Town of Windham Maintenance Facility, Town of Windham Public Library Renovation, and numerous other local municipal and industrial projects.

Financial Capacity
Windham voters approved Article 22, a proposal to construct a new North Windham Public Safety Building, agreeing to its $10 million cost through a combination of $4 million in Tax Increment Financing, using $2.4 million from the town's General Fund, using impact fees of $1.1 million and obtaining a general obligation bond of $2.5 million at the annual Town Meeting held on June 14, 2025.

TANNER F. GOODINE, EI

Senior Civil Engineer



Tanner Goodine joined Sebago Technics in 2021. He holds a bachelor's degree in Civil Engineering from the University of Maine. Tanner brings comprehensive expertise across multiple project sectors, with experience spanning municipal infrastructure systems, athletic facilities, commercial developments, and transportation projects. His particular strength in complex stormwater management solutions has established him as a technical leader in sustainable infrastructure design. As Lead Engineer and Project Manager on numerous significant initiatives, including high-profile projects such as the Portland International Jetport parking expansion and the Windham Public Safety Building, Tanner has consistently demonstrated exceptional capabilities in site design, regulatory permitting processes, and implementing comprehensive infrastructure solutions that meet both client objectives and community needs. His elevation to Senior Civil Engineer reflects his proven ability to navigate complex project requirements while maintaining focus on practical, cost-effective outcomes, making him a trusted advisor to Sebago's clients and an invaluable contributor to the firm's continued success across Maine's diverse engineering landscape.

EXPERIENCE

Windham Fire Station – Windham, ME: Sebago Technics, in partnership with Great Falls Construction, is assisting the Town of Windham with the site design and permitting for the proposed Windham Public Safety Building. The site includes a new 10,000 SF Public Safety Building, a new 10,000 SF ice rink building, a playground, and walking trails. As the Project Manager and design engineer, Tanner led the engineering effort to deliver the Pricing Set to the Town for the July 2025 Referendum, which included site grading, stormwater drainage and treatment, utility services to the buildings, and coordination with the municipality and the Portland Water District. The project is moving toward local and state submissions in December of 2025.

Aircraft Rescue & Fire Fighting Facility (ARFF) - Portland Jetport, ME: Lead engineer for the relocation of the AARF facility at the Portland Jetport. The goals of the project are to improve response time for emergency services and deliver adequate water supply and sewer capacity. The project is currently nearing the completion of the conceptual phase, where Tanner has completed various in-depth concepts and cost estimates to support the funding initiative for the project.

Boothbay/Boothbay Harbor Route 27 Sidewalk – Boothbay, ME: Design Lead for Phase 2 of the project through the Maine Department of Transportation (MDOT) overseeing the layout, grading, drainage, and right-of-way impacts for the proposed approximately 2,000 linear feet sidewalk extension. Coordinating with the Project Manager and MDOT to determine the design requirements of the project, and facilities. Additionally, Tanner was the resident inspector for the Phase 1 portion of the project, which extended approximately 2,400 linear feet from the Boothbay Regional School towards the Route 27 roundabout.

Bowdoin College - Brunswick, ME: Lead engineer for multiple infrastructure projects including the new Athletic Fieldhouse Complex, Sills Hall, the Bowdoin Observatory, the Outing Club, and campus masterplanning efforts.

Portland Harbor Common Lot, Lead Engineer: Redevelopment design of a parking lot on the Portland Waterfront into a working park-amenity area on Commercial Street. The project consists of grading and stormwater improvements, notably designing the project to be resilient against rising sea level and coastal storm damage.

Brunswick Midcoast Athletic Region Complex – Brunswick, ME: Assisted CHA with construction oversight, construction administration, site design, and permitting for a multi-phase sports complex on the Brunswick Naval Air Station campus. The project included basketball, pickleball, and tennis courts, a skatepark, and multi-purpose turf and natural grass fields. As the project is located on the Naval Air Station campus, the drainage design is located in an Urban Impaired watershed, requiring complex stormwater management systems that are sensitive to the surrounding environment.

EDUCATION

University of Maine - Orono, ME
B.S., Civil Engineering
2020

REGISTRATIONS

Engineer-Intern (Maine EI7867)

CERTIFICATIONS

Erosion and Sediment Control Certification Program

Local Project Administration (LPA)

OSHA-10

SEBAGO TECHNICS

PAUL D. OSTROWSKI, PE

Senior Project Engineer / Project Delivery Engineering & Design Manager



Paul Ostrowski joined Sebago Technics in 2013 as a Senior Project Engineer. He holds a bachelor's degree in Civil Engineering from the University of Maine. He brings over two decades of experience in civil engineering, with extensive expertise in the design and inspection of municipal utility projects. Paul's unique background includes construction inspection experience, which he leverages to perform constructability reviews and develop innovative design solutions for complex projects.

In his current position, Paul oversees team training and development, manages the QA/QC process, and ensures the efficient advancement of design assignments throughout the organization. He continues to serve as the lead engineer on specialized projects, where his talent and creativity enable him to influence challenging sites and develop unique solutions for clients. His leadership has been instrumental in shaping some of the organization's most successful and recognized projects, establishing a standard of excellence in the industry.

EXPERIENCE

Scarborough Public Safety – Scarborough, ME: Lead engineer for the construction of a new public safety building for the Town of Scarborough within the Oak Hill neighborhood. Sebago Technics provided permitting assistance for both the Town of Scarborough and Maine Department of Environmental Protection (Maine DEP), as well as performing site layout, site grading, utility layout, and stormwater management. The stormwater management system includes a subsurface sand-filter providing both stormwater detention and treatment for the site, located within a fill section of the development, reducing the amount of fill required to raise the site to grade.

Lewiston Fire Substation – Lewiston, ME: Lead engineer for the construction of a new substation for the Lewiston Fire Department located off North Temple Street. Sebago Technics developed a concept layout that would provide an emergency response vehicle circulation that was separate from visitor access to avoid delay in response times. Sebago Technics was tasked with site grading that accounted for the existing topography of the site to reduce excessive cuts and fills for the development, utility layout and site detailing. Permitting services provided by Sebago Technics entailed a Site Plan Review application through the City of Lewiston as well as a Stormwater Management Permit through Maine DEP, which was administered by the City under their delegated capacity through the Maine DEP.

Town of Berwick Utility and Drainage Projects – Berwick, ME: Lead engineer for the Town of Berwick's utility project consisting of relocating aerial electric and telecommunications services underground along Sullivan Street. Designing the project requires coordination of the Town's project with a private developer's off-site improvement project and a Maine Department of Transportation project. The project is being designed in phases for budgeting purposes with the Town and associated funding sources. The Town recently completed a storm drain upgrade along Saw Mill Hill where Paul provided construction oversight

Thornton Heights Sewer Separation – South Portland, ME: Assisted in the design and bid document preparation for Phase 1 of a three-phase sewer separation project in the Thornton Heights neighborhood. Responsibilities included sizing of the storm drain system to accommodate future phase separation, quantity take-offs and cost estimates. Paul leads the design of the Portland Water District's work in Thornton Heights.

Forest Avenue to Mt. Sinai Cemetery CSO Project – Portland, ME: Design engineer for this project which separated the combined storm drainage within the West Side Interceptor sewer into a 42- to 48-inch diameter storm drain which parallels the existing interceptor sewer. Coordination was required with Portland Water District for the relocation of existing infrastructure (16-inch, 6-inch, and 4-inch mains) within Forest Avenue.

EDUCATION

University of Maine, Orono, ME
B.S., Civil Engineering, 2000

REGISTRATIONS

Registered Professional Engineer:
Maine #11175

CERTIFICATIONS

NETTCP Paving Inspector # 4527

MEMBERSHIPS

American Society of Civil Engineers

SEBAGO TECHNICS

MADISON ALA, EI

Civil Engineer



Madison Ala joined Sebago Technics in 2023. She holds a bachelor's degree in Civil Engineering from the University of Maine with a concentration in Structural Design. Madi brings valuable expertise in structural engineering principles and project delivery processes, including extensive knowledge of site development and infrastructure design. She contributes to numerous initiatives through her work in site grading, stormwater management, utility design, cost estimation, specification writing, and regulatory coordination. Madi's structural design background and strong technical foundation enable her to create comprehensive engineering solutions and enhance project outcomes for clients.

EXPERIENCE

Bibber Memorial Chapel Expansion (pending approval) – Wells, ME
Design engineer for the expansion and retrofitting of existing funeral home facility and site elements. Coordinated design with owners, architects, and team members to manage grading constraints and meet an expedited local submission timeline for amended site plan approval.

Fairgrounds Variety – Acton, ME
Assisted in developing grading, stormwater treatment, and utility design plans for a new gas station and convenience store. Sited stormwater treatment

Mercy Chapel – Sanford, ME
Design engineer for the expansion of existing parking facilities an addition of an ADA accessible parking and building entrance. Provided stormwater treatment for the new development and protected existing drainage infrastructure for the abutting Sanford Airport property.

Deering Oaks Park – Portland, ME
Design engineer for the sidewalk reconstruction at Deering Oaks Park in Portland. Assisted in developing demolition and site plans to provide ADA accessible walkways and protect historic landscaping elements and prepared construction documents.

Gull Crest Affordable Housing Feasibility Study – Cape Elizabeth, ME
Assisted in the preparation of preliminary site development plans to evaluate the potential for affordable multifamily housing at the subject site and compiled results into a comprehensive report.

EDUCATION

University of Maine, Orono, Maine
B.S., Civil Engineering
Minor: Structural Design
2023

MEMBERSHIPS

American Society of Civil Engineers

SEBAGO TECHNICS

THARYN S. NEIN-LARGE, PLA

Maine Licensed Landscape Architect



Tharyn Nein-Large joined Sebago Technics in 2023. He holds a Master's Degree in Landscape Architecture from the University of Massachusetts and brings an impressive professional background spanning both Massachusetts and Maine. Tharyn's technical expertise in advanced visualization technologies enables him to create compelling 3D renderings that help clients and stakeholders envision project outcomes with exceptional clarity. His comprehensive understanding of permitting processes ensures efficient project approval workflows, while his construction oversight capabilities guarantee that design intent is successfully translated into built reality. He is an active member of the Portland-South Portland Waterfront Alliance, further illustrating his dedication to community engagement and professional collaboration. Tharyn's passion for creating sustainable and aesthetically pleasing landscapes aligns seamlessly with Sebago Technics' vision.

EXPERIENCE

Windham Fire Station – Windham, ME: Currently advancing site layout design through the design development phase for a 10,920 square foot public safety facility expansion featuring five fire bays, bunk rooms, and a dedicated evidence building. Contributing to comprehensive site development and planning for this municipal infrastructure project designed to modernize critical emergency services facilities and address existing spatial limitations.

City of South Portland Facilities Renovation and Construction Study – South Portland, ME: Developed conceptual site layout design for a municipal facilities consolidation project including renovation of the former Mahoney School to house centralized city services, new police station construction, and fire station expansion as part of Sebago Technics' design team. Contributed to Phase 1 feasibility study and site development planning for this $77+ million multi-phase project that will modernize and centralize critical city operations including City Hall, Library, Public Safety, and community services.

***Bourne Police Station – Bourne, MA:** Led conceptual site design and layout for a new facility. Advanced project through Town permitting and on through to construction phase.

***Mendon Police – Mendon, MA:** Led conceptual site design and layout for a new facility. Advanced project through Town permitting and on through to construction phase.

***Sandwich Public Safety Complex – Sandwich MA:** Led conceptual site design and layout for a new 5 apparatus bay fire station with police station. Advanced project through Town permitting and on through to construction phase.

***Needham Public Safety Headquarters – Needham, MA:** Led conceptual site design and layout for a new 8 apparatus (4 double 'drive thru') bay with an additional 5 bay EMS fire station with police headquarters. Advanced project through Town permitting and on through to construction documents.

***Harwich Fire Station – Harwich, MA:** Led conceptual site design and layout for a new 6 apparatus (3 double 'drive thru') bay fire station. Advanced project through Town permitting and on through to construction phase.

***Sudbury Fire Department – Sudbury, MA:** Led conceptual site design, layout and due diligence for a new 6 apparatus (3 double 'drive thru') bay fire station with additional bay for Ladder Truck.

***Pembroke Police Station – Pembroke, MA:** Led conceptual site design, layout and due diligence for a new facility. Researched and studied 3 sites.

***Plainville Public Safety Campus – Plainville, MA:** Led conceptual site design and layout for a new 10 apparatus (5 double 'drive thru') bay fire station and Police Headquarters. Sited New Town Hall. Advanced project through Town permitting and on through to construction phase.

**Prior to employment at Sebago Technics.*

EDUCATION

University of Massachusetts, Amherst
Master's Degree, Landscape Architecture, 2015

Graduate Certificate in
Cultural Landscape Management, 2015

A.S. in Turfgrass Management, 2001

University of Southern Maine, Portland
Bachelor of Arts, History, 1998

REGISTRATIONS

Professional Landscape Architect
ME: LAR5267; VT: 125.0133779

CERTIFICATIONS

Waterfront Edge Design Guidelines
Professionals Course

MEMBERSHIPS

Waterfront Alliance Portland & South Portland
Maine - Portland, ME (2023)

Waterfront Edge Design Guidelines Associate
(WEDG) - New York, NY (2022)

Town of Palmer Conservation Commission,
Chair - Palmer, MA (2015-16)

SEBAGO TECHNICS

STEFANIE K. NICHOLS

Permitting Specialist/Project Coordinator



Mrs. Nichols joined Sebago Technics, Inc. (STI) in 2018 as a Permitting Specialist/Project Coordinator and is a Regulatory Specialist with over 40 years of diverse experience. During this time, she has worked with many different disciplines in the various aspects of site permitting and site inventory, and associated reports and graphics. Other duties over the years include civil drafting-hand and ACAD, project bid tracking and construction submittal processing, sourcing landscape materials, livestock procurement/travel permits, and short-term fostering.

EXPERIENCE

Uncommon Clean - Cumberland, ME: Mixed-use, commercial and residential development
Applications: Municipal, MDEP NRPA, Stormwater, USACE

Robie Street Subdivision - Gorham, ME: Phased residential development
Applications: Municipal, MDEP NRPA, Stormwater, USACE

Solar Array Projects: Berwick, Kenduskeag, Lewiston, Livermore Falls, Mechanic Falls, Minot, Orrington, Oxford, Prospect, Searsmont, Stockton Springs, etc.
Applications: MDEP Site Law, NRPA, Stormwater, Transfer, Extension, Decommissioning, USACE, MDOT Driveway, and Municipal

Allagash Brewing - Portland, ME: Permitting for future manufacturing expansion and operational needs
Applications: Municipal Zoning Amendment, Site Plan Amendment

Hammond Lumber - Portland, ME: Retail facility and parking expansion
Applications: Site Plan Amendment, MDEP Site Law Modification

Copart of Connecticut - Windham, ME: Vehicle Auction Facility/Offices
Applications: MDEP Site Law, NRPA, AST Variance, Municipal

Homestead Farms Subdivision - Falmouth, ME: Single-Family Clustered Development
Applications: MDEP Site Law, NRPA, USACE, Municipal

Harborchase - South Portland, ME: Senior Housing/Memory Care
Applications: MDEP NRPA, FAA, Municipal

Maine Medical Center - Portland, ME: Large Medical Facility Expansion
Applications: Municipal Level III Site Plan Application, FAA

Colby College - Waterville, ME (2003-2018): Site modifications
Applications: MDEP Site Law, NRPA, USACE, Municipal

Sugarloaf - Carrabassett Valley, ME (2003-2016): Site modifications
Applications: MDEP Site Location, NRPA, USACE, Municipal

EDUCATION

Northern Maine Technical College
Presque Isle, ME
Drafting Technology

Central Maine Technical College
Auburn, ME

Maine Technical Source (MTS)
Yarmouth, ME
AutoCAD I

SEBAGO TECHNICS

Section 6

Natural and Cultural Resources

Section 6: Natural and Cultural Resources

6.1 The Department of Inland Fisheries and Wildlife (MDIFW) has previously reviewed the site and area for the known locations of endangered, threatened, and special concern species when the overall mall property was initially permitted and during subsequent project site reviews on the same property. We note that the Home Depot site review, which is located across the street from the proposed public safety building site, did not identify unusual wildlife habitats. Since the project is considered redevelopment, a site-specific project review was not requested from MDIFW for this permit amendment. A desktop review of *Beginning with Habitat* online natural resource information provided by the state, federal, and non-profit conservation partners also did not identify wildlife habitat within or adjacent to the project site. As such, we anticipate that the construction of this project will not present any adverse impacts on wildlife and fisheries. A copy of the map generated from the BWH Map Viewer is enclosed in this section.

6.2 The Maine Historic Preservation Commission (MHPC) previously reviewed the property of the record owner, Jonlee Windham, LLC, and stated that projects will not affect any structure or site of historic, architectural, or archaeological significance defined by the National Historic Preservation Act of 1966. An updated review request was not requested of MHPC based on the previous MHPC response, review of the National Register of Historic Places, and local historical information.

6.3 Previous site review from the Maine Natural Areas Program (MNAP states that, in their review, there are no rare or botanical features documented specifically within the project area. The available Beginning with Habitat online mapping tool verifies that natural features are not located within the project site. See enclosure, this section.

Beginning With Habitat



February 19, 2026

1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

- Parcels- Unorganized Townships
- Parcels- Organized Towns\Cities
- Shellfish Beds
- Stream Buffer (75 feet)
- Great Ponds, Rivers and Coastal Buffer (250 feet)
- Atlantic Salmon Habitat
- Shorebird Habitat
- Seabird Nesting Island
- Tidal Waterfowl / Wading Bird Habitat
- Inland Waterfowl / Wading Bird Habitat
- Significant Vernal Pools
- Deer Wintering Areas
- Essential Wildlife Habitats
- Endangered, Threatened, and Special Concern Species

Vantor

Section 7

Utilities

Section 7: Utilities

7.1 Water Supply Method

This proposed new public safety facility will be serviced by an existing public water main within Franklin Drive, provided by the Portland Water District (PWD). The building service includes a 2" diameter domestic line and 6" diameter fire, with one additional 6" diameter fire service line with a hydrant assembly proposed for external use. An Ability to Serve response from PWD dated June 9, 2026 is enclosed in this section.

7.2 Wastewater Disposal

This proposed public safety facility will be serviced by the North Windham Sewer District, in partnership with the Portland Water District (PWD). The proposed development is estimated to generate approximately 2,380 gallons per day of sewer flow. The proposed design includes connection to an existing sewer main within Franklin Drive. More specifically, a 6" diameter service line will convey wastewater to a proposed pump station located on the site before discharging to a proposed force main extending to an existing sewer manhole. A trench drain is proposed at the base of the apparatus bay driveway to accommodate outdoor truck washing. Runoff from washing activities will be discharged to an oil/water separator prior to reaching the proposed pump station. An Ability to Serve letter dated June 9, 2026, is enclosed in this section.

7.3 Electrical/Communications

Electrical and communications services will be extended from existing infrastructure and coordinated with the respective companies, as necessary. Reference is made to the enclosed utility plan showing the proposed location of services.

Portland Water District
FROM SEBAGO LAKE TO CASCO BAY

June 9, 2026

Madison Ala, Civil Engineer
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, ME 04106

Re: Windham Public Safety Building, Franklin Drive, WI
Ability to Serve with PWD Water

Dear Ms. Ala:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on December 16, 2025. Based on the information provided per plans dated June 4, 2026, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter constitutes approval of the water and wastewater system as currently designed and is valid for eighteen (18) months after the date of issue. Any changes affecting the approved water and wastewater system will require further review and approval by PWD and may result in additional administrative fees.**

Conditions of Service

The following conditions of service apply:

- A new 2-inch copper domestic service with a 1.5-inch meter may be installed from the water main in Franklin Drive. The service should enter through the property's frontage on Franklin Drive at least 10-feet from any side property lines. An approved testable RPZ backflow prevention device must be installed on the service line directly after the meter prior to service activation.
- A new 6-inch ductile iron fire service may be installed from the water main in Franklin Drive. The service should enter through the property's frontage on Franklin Drive at least 10-feet from any side property lines. An approved testable RPZ backflow prevention device must be installed on the service line directly before the sprinkler riser prior to service activation.
- A new connection to the sewer managed by Portland Water District in Franklin Drive is approved. PWD requires a minimum of 72-hours notification before the work. A PWD inspector must be present to witness connections to a sewer main or manhole.
- The Town of Windham has allocated capacity for this development to be served by the North Windham Wastewater Treatment Facility.

Prior to construction, the owner or contractor will need to complete a Service Application and pay all necessary fees for each proposed service. When the project is ready for construction, an Application for each service can be requested by contacting the MEANS Group at MEANS@pwd.org or 207-774-5961 ext. 3199. Once a completed Application has been submitted with payment, please allow seven (7) days for processing.

Existing Site Service

According to District records, the project site does not currently have existing water service.

Water System Characteristics

According to District records, there is an 12-inch diameter ductile iron water main in Franklin Drive and a public fire hydrant located approximately 500 feet from the site. The estimated static pressure in the area is 82 psi.

Public Fire Protection

The installation of new public hydrants to be accepted into the District water system will most likely not be required. It is your responsibility to contact the Town of Windham Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project.

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact MEANS to request a hydrant flow test and we will work with you to get more complete data.

Should you disagree with this determination, you may request a review by the District's Internal Review Team. Your request for review must be in writing and state the reason for your disagreement with the determination. The request must be sent to MEANS@PWD.org or mailed to 225 Douglass Street, Portland Maine, 04104 c/o MEANS. The Internal Review Team will undertake review as requested within 2 weeks of receipt of a request for review.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District



Robert A. Bartels, P.E.
Senior Project Engineer

Section 8

Lighting

Section 8: Lighting

A Photometric Plan prepared by Charron Reflex Lighting, dated June 11, 2026, is enclosed in this section. Fixture and pole cut sheets. are also enclosed for Board consideration.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Description	Tilt	Lum Watts	Lum Lumens
	8	E1	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT-SPA-DDBXD	0.00°	87.8	11,000
	1	E1A	Single	KENNEBUNKPORT CR OF RADITIUS -TREADTILLED	0.00°	87.8	11,000
	1	E2A	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	1	E2B	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	1	E3A	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	1	E3B	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	1	EX1	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	1	S1	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	4	W1	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	4	W4B	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000
	4	W4E	Single	CURTIS: DSX1-LED-P1-40K-T4M-MVOLT	0.00°	87.8	11,000

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
ENTIRE AREA	FC	0.43	14.5	0.0	N.A.	N.A.
PARKING	FC	1.85	14.5	0.5	3.70	29.00
PARKING EXT ENTRY CURB	FC	0.97	2.4	0.5	1.94	4.80
PARKING ENTRANCE	FC	1.47	2.4	0.5	2.94	4.80

Drawn By: Michael O'Brien
Checked By:
Date:6/11/2026
Contact: mobrien@reflexlighting.com

Scale: NTS

#	Date	Comments

Revisions

FIRE STATION

FRANKLIN DRIVE
WINDHAM, ME

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

BRT6 Bollard

Round LED Pedestrian Luminaire

Product Features

BAA · TAA · BABA · DLC LISTED · DLC LISTED PREMIUM

Product Certifications

ISO CERTIFIED · 3G VIB · IP66 · IK10 · UL CERTIFIED · DARKSKY APPROVED [1] · 5 YEAR LIMITED WARRANTY

Interactive Menu

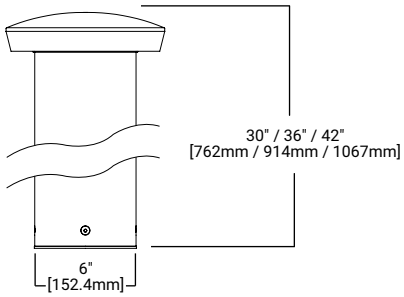
- Ordering Information page 2
- Product Specifications page 2
- Optical Distributions page 2
- Energy and Performance Data page 3

Quick Facts

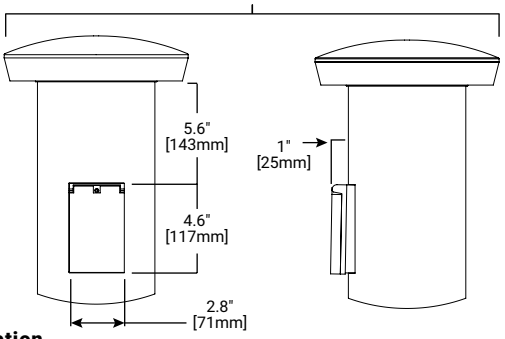
- 4 Optical Distributions
- Available in 30", 36", and 42"
- Lumen packages range from 560 - 4400 (5W - 49W)
- Efficacy up to 122 lumens per watt
- Zero uplight on all configurations

Dimensional Details

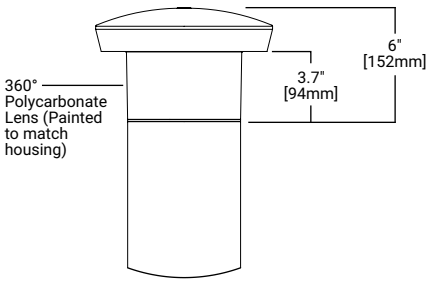
Side View



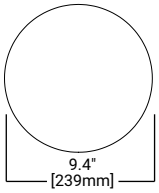
GFI and USB Options



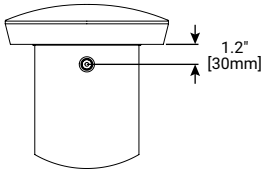
SM2 Option



Top View



CBP Option



Height	Weight
30"	7.2lb (3.3kg)
36"	8.7lb (4.0kg)
42"	10.3lb (4.7kg)
* Base model without options or controls	

NOTES:
1. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: **BRT6-A3-740-U-T4-36-GM**

Product Family	Configuration [1]	Color Temperature	Voltage	Distribution	Height	Finish
BRT6=Bollard, 6" Round Base **BAA-BRT6**=Bollard, 6" Round Base, Buy American Act Compliant [13] **TAA-BRT6**=Bollard, 6" Round Base, Trade Agreements Act Compliant [13] **BABAF-BRT6**=Bollard, 6" Round Base, Build America Buy America [18]	**A1**=1000lm Nominal [11] **A2**=2000lm Nominal **A3**=3000lm Nominal **A4**=4000lm Nominal	**727**=70CRI, 2700K **730**=70CRI, 3000K **740**=70CRI, 4000K **750**=70CRI, 5000K **830**=80CRI, 3000K **AMB**=Amber, 590nm [2]	**U**=120-277V **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [5] **9**=347V	**T3**=Path Asymmetric **T4**=Wide Path Asymmetric **T5**=Type V Symmetric **T5S**=Type V Square Symmetric	**30**=30" **36**=36" **42**=42"	**AP**=Gray **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately) [14]
DIM=External 0-10V Dimming Leads [4, 7] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fuse (208, 240 or 480V Specify Voltage) **CC**=Coastal Construction [3] **HA**=50°C High Ambient **20K**=20kV UL 1449 fused surge protective device **CBP**=Battery Pack, Cold Weather Rated [9, 12] **DALI**=DALI Driver [4, 11] **LAB**=Less Anchor Bolts & Template [6] **GFI**=GFCI Outlet [8, 17] **USB**=USB charging receptacle [15, 17]	**BPC**=Button Type Photocontrol [10] **SM2**=Microwave Occupancy Sensor, 18' max range [16]	**BRT6ANCHOR**=Anchor bolt kit and template [6]

NOTES:

1. Nominal output based on symmetric distributions at 4000K CCT. See lumen table and IES files for details.
2. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Available with configuration A1 only.
3. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
4. Not available with other controls options
5. 480V must utilize Wye system only. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems.)
6. Bollard ships with anchor bolts and template included, unless LAB is specified, in which case the BRT6ANCHOR accessory must be ordered separately.
7. Low voltage control leads brought out 18" from fixture
8. GFCI 125-Volt duplex tamper-proof outlet rated for 15A. Available in 120V only. Cannot be used in conjunction with USB option.
9. Operates at -20°C to +40°C. Not available with HA, GFI, USB or SM2 options. 6W initial output. 16.2Wh capacity.
10. Not available with "U" voltage, must specify voltage.
11. Available in 120V only, except with Amber (AMB).
12. Specify 120V or 277V.
13. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
14. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
15. 120V only. Weather-resistant, tamper-resistant duplex 15A, 125V AC receptacle with (1) USB Type-A and (1) USB Type-C port. Must be installed on a GFCI-protected circuit. 1-Year Warranty. Model WRR26USBAC6BK. Cannot be used in conjunction with GFI Outlet option.
16. Includes microwave sensor with integral polycarbonate lens painted to match fixture. Does not include photocontrol. Use in conjunction with BPC or external photocontrol for dusk-to-dawn operation. Not available with HA High Ambient option.
17. Mounted to weatherproof, spring-loaded box suitable for covered areas. Not while-in-use capable.
18. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. BABAE designates the product will meet the standards set for FHWA. As noted these projects must receive Government Funding by October 1, 2025. BABAF designates the product will meet the standards set for FHWA and FTA. As noted these projects must receive Government Funding by October 1, 2026. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Product Specifications

Construction

- Extruded aluminum housing with cast base and top
- Patent-pending base plate design offers superior rigidity
- 3G vibration rated
- IK10 impact rating for housing and optic assembly

Optics

- High-efficiency injection-molded AccuLED optics technology
- 4 optical distributions; 2 symmetric and 2 asymmetric

Electrical

- Standard with 0-10V dimming
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- 10kV surge module standard

Finish

- Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- RAL and custom color matches available
- Coastal Construction (CC) option available

Compliance

- IDA Certified for 3000K CCT and warmer only• This exception allows any product to satisfy BABA requirements regardless of domestic content manufacturing for projects funded by FHWA through Oct 1st 2025
- FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with specific

  accessories and options meet BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams.
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

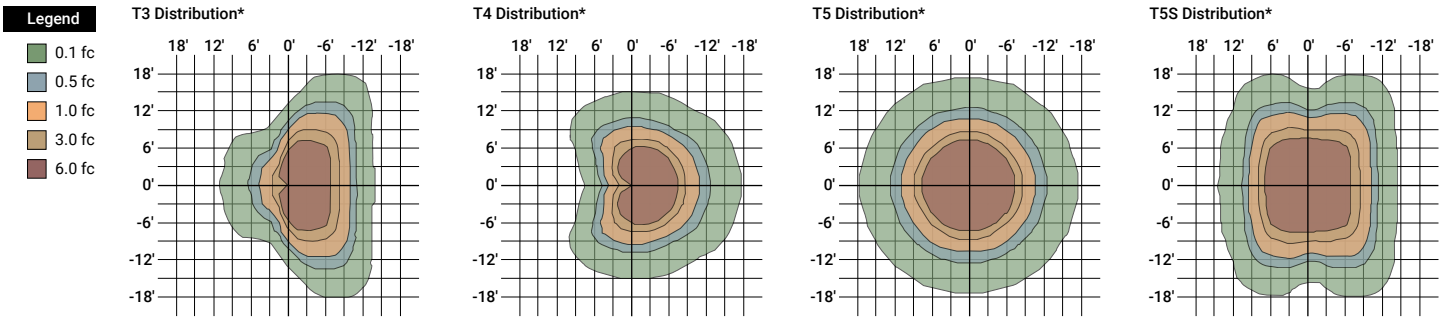
Typical Applications

- Outdoor, Walkway, Perimeter, Landscapes, Hardscapes

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Optical Distributions



***NOTE:** A4 lumen package, 4000K CCT, 3.5' MH

Energy and Performance Data

Asymmetric Power and Lumens

Optics			Configuration			
			A1	A2	A3	A4
4000K / 5000K CCT, 70 CRI	T3	Wattage	5	11	17	22
		Lumens	537	1075	1627	1961
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1
		Lumens per Watt	99	99	94	91
	T4	Wattage	5	10	15	21
		Lumens	559	1101	1616	2193
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1
		Lumens per Watt	110	115	110	104
3000K CCT, 70 CRI	T3	Wattage	5	11	17	22
		Lumens	489	979	1482	1786
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1
		Lumens per Watt	99	99	94	91
	T4	Wattage	5	10	15	21
		Lumens	509	1003	1472	1997
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1
		Lumens per Watt	110	115	110	104
3000K CCT, 80 CRI	T3	Wattage	5	11	17	22
		Lumens	427	854	1293	1558
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1
		Lumens per Watt	99	99	94	91
	T4	Wattage	5	10	15	21
		Lumens	444	875	1284	1743
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1
		Lumens per Watt	110	115	110	104
2700K CCT, 70 CRI	T3	Wattage	5	11	17	22
		Lumens	449	899	1361	1640
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1
		Lumens per Watt	99	99	94	91
	T4	Wattage	5	10	15	21
		Lumens	467	921	1351	1834
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1
		Lumens per Watt	110	115	110	104
AMB 590nm	T3	Wattage	13	--	--	--
		Lumens	457	--	--	--
		BUG Rating	B0-U0-G0	--	--	--
		Lumens per Watt	34	--	--	--
	T4	Wattage	11	--	--	--
		Lumens	352	--	--	--
		BUG Rating	B0-U0-G0	--	--	--
		Lumens per Watt	32	--	--	--

Symmetric Power and Lumens

Optics			Configuration			
			A1	A2	A3	A4
4000K / 5000K CCT, 70 CRI	T5	Wattage	9	18	29	42
		Lumens	1149	2210	3244	4401
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	122	120	111	105
	T5S	Wattage	10	21	35	49
		Lumens	1125	2230	3338	4367
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	110	107	97	89
3000K CCT, 70 CRI	T5	Wattage	9	18	29	42
		Lumens	1046	2013	2954	4008
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	122	120	111	105
	T5S	Wattage	10	21	35	49
		Lumens	1025	2031	3040	3977
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	110	107	97	89
3000K CCT, 80 CRI	T5	Wattage	9	18	29	42
		Lumens	913	1757	2578	3497
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	122	120	111	105
	T5S	Wattage	10	21	35	49
		Lumens	894	1772	2653	3470
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	110	107	97	89
2700K CCT, 70 CRI	T5	Wattage	9	18	29	42
		Lumens	960	1848	2712	3680
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	122	120	111	105
	T5S	Wattage	10	21	35	49
		Lumens	941	1865	2791	3652
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1
		Lumens per Watt	110	107	97	89
AMB 590nm	T5	Wattage	21	--	--	--
		Lumens	575	--	--	--
		BUG Rating	B0-U0-G0	--	--	--
		Lumens per Watt	28	--	--	--
	T5S	Wattage	25	--	--	--
		Lumens	676	--	--	--
		BUG Rating	B1-U0-G0	--	--	--
		Lumens per Watt	27	--	--	--

Energy and Performance Data

Input Current (mA)

Optics		Voltage	Configuration			
			A1	A2	A3	A4
Asymmetric	T3	120V	47	97	152	190
		208V	--	59	89	110
		240V	--	52	78	97
		277V	--	48	70	85
		347V	--	40	59	72
		480V	--	29	43	53
	T4	120V	44	84	128	183
		208V	--	52	75	105
		240V	--	47	66	92
		277V	--	44	59	81
		347V	--	35	49	68
		480V	--	25	36	50
Symmetric	T5	120V	81	159	257	373
		208V	--	93	146	209
		240V	--	82	128	183
		277V	--	73	113	159
		347V	--	65	96	148
		480V	--	48	70	108
	T5S	120V	90	185	314	454
		208V	--	107	177	251
		240V	--	94	155	219
		277V	--	83	135	190
		347V	--	69	114	172
		480V	--	51	82	125

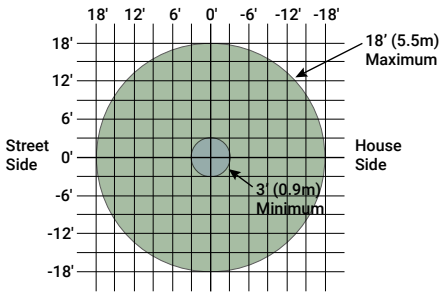
Lumen Maintenance (TM-21)

Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
25°C	95.9%	92.9%	91.7%	87.1%	271,000
40°C	95.7%	92.5%	91.3%	86.5%	256,000
50°C	95.3%	91.9%	90.6%	85.7%	242,000

* Supported by IES TM-21 standards
**Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

View BRT6 IES files

SM2 Coverage*



***NOTE:** Applicable to heights of 30", 36" and 42"

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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Specifications and dimensions subject to change without notice.

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Light ARchitect™

Product Certifications

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 17

Quick Facts

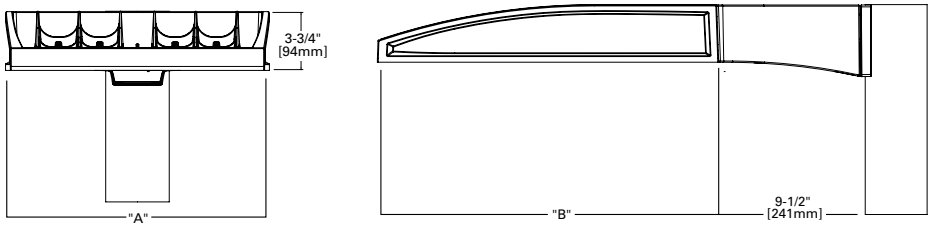
- Lumen packages range from 3,300 - 102,700 (33W - 658W)
- 22 optical distributions
- Efficacy up to 178 LPW

Connected Systems

- Wavelinx LITE Wireless
- Wavelinx PRO Wireless
- AirMesh Wireless

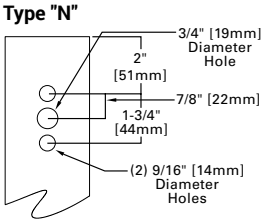
Dimensional Details

Standard Pole Mount Arm



Pole Drilling Pattern

Type "N"



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES: For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. IDA Certified (3000K CCT and warmer only, fixed mounting options)

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1, 2]	Light Engine Configuration			Color Temperature	Voltage	Distribution	Mounting	Finish
	Light Square	Square Count	Lumen Output					
GALN=Galleon II **BAA-GALN**=Galleon II Buy American Act Compliant [26] **TAA-GALN**=Galleon II Trade Agreements Act Compliant [26] **BABA-GALN**=Galleon II BABA/IIJA Compliant [38]	**SA**=16 LED Light Square **SB**=26 LED Light Square	**1**=1 Light Square **2**=2 Light Squares **3**=3 Light Squares **4**=4 Light Squares **5**=5 Light Squares **6**=6 Light Squares **7**=7 Light Squares **8**=8 Light Squares **9**=9 Light Squares	**A**=Output Level 1 **B**=Output Level 2 **C**=Output Level 3 **D**=Output Level 4 [4, 16] **Z**=Configured Output [32]	**722**=70CRI, 2200K **727**=70CRI, 2700K **730**=70CRI, 3000K **735**=70CRI, 3500K **740**=70CRI, 4000K **750**=70CRI, 5000K **760**=70CRI, 6000K **827**=80CRI, 2700K **830**=80CRI, 3000K **835**=80CRI, 3500K **840**=80CRI, 4000K **930**=90CRI, 3000K **935**=90CRI, 3500K **940**=90CRI, 4000K **950**=90CRI, 5000K **AMB**=Amber [14, 16]	**U**=120-277V **H**=347V-480V [7, 29] **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [7, 29] **9**=347V [7] **DV**=277V-480V DuraVolt Drivers [28, 29, 30]	**T1**=Type I **T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **5NQ**=Type V Narrow **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline **T2BC**=Type II w/ Backlight Control [39] **T3BC**=Type III w/ Backlight Control [39] **T4BC**=Type IV w/ Backlight Control [39] **LBC**=90° Left w/ Backlight Control [39] **RBC**=90° Right w/ Backlight Control [39]	**[Blank]**=Standard Pole Mount Arm **QU**=Quick Mount Universal Arm **QM**=Pole Mount Arm with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=3" Slipfitter, Adjustable [8] **SP2**=2-3/8" Slipfitter, Adjustable [8] **QMA**=Quick Mount Mast Arm, Fixed **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White **RALXX**=Custom Color

Options (Add as Suffix)

DIM=External 0-10V Dimming Leads [19]
F=Single Fuse (120, 277 or 347V Specify Voltage)
FF=Double Fuse (208, 240 or 480V Specify Voltage)
20K=20kV UL 1449 fused surge protective device [10]
2L=Two Circuits [10]
HA=50°C High Ambient [16]
HSS=Installed House Side Shield [17]
BCS=Backlight Control Shield [17, 37]
GRSBK=Glare Reducing Shield, Black [22]
GRSWH=Glare Reducing Shield, White [22]
LCF=Light Square Trim Painted to Match Housing [25]
TH=Tool-less Door Hardware [5]
CC=Coastal Construction finish [3]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
3SDCM=3 Standard Deviation Color Matching [36]
AHD145=After Hours Dim, 5 Hours [21]
AHD245=After Hours Dim, 6 Hours [21]
AHD255=After Hours Dim, 7 Hours [21]
AHD355=After Hours Dim, 8 Hours [21]
DALI=DALI Drivers
CDW=Non-programmable Drivers [41]

Controls and Systems Options (Add as Suffix)

BPC=Button Type Photocontrol. Must specify voltage 120V, 208V, 240V or 277V. [6]
PR=NEMA 3-PIN Photocontrol Receptacle
PR7=NEMA 7-PIN Photocontrol Receptacle [20]
FADC=Field Adjustable Dimming Controller [31]
PSC=Photocontrol Shorting Cap
SPB2=Dimming Motion Sensor, 9'-20' mounting [23]
SPB4=Dimming Motion Sensor, 21'-40' mounting [23]
SPB2/X=Dimming Motion Sensor, limited square count, 9'-20' mounting [23]
SPB4/X=Dimming Motion Sensor, limited square count, 21'-40' mounting [23]
MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting [33, 40]
MS/DIM-L40=Motion Sensor for Dimming Operation, 21'-40' Mounting [33, 40]
WLS2XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [12, 18, 34]
WLS4XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [12, 18, 34]
WPS2XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 13, 18, 34]
WPS4XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 13, 18, 34]
DIM10-L20=AirMesh Occupancy Sensor (9'-20' Mounting) [18, 35]
DIM10-L40=AirMesh Occupancy Sensor (21'-40' Mounting) [18, 35]

Accessories (Order Separately) [27]

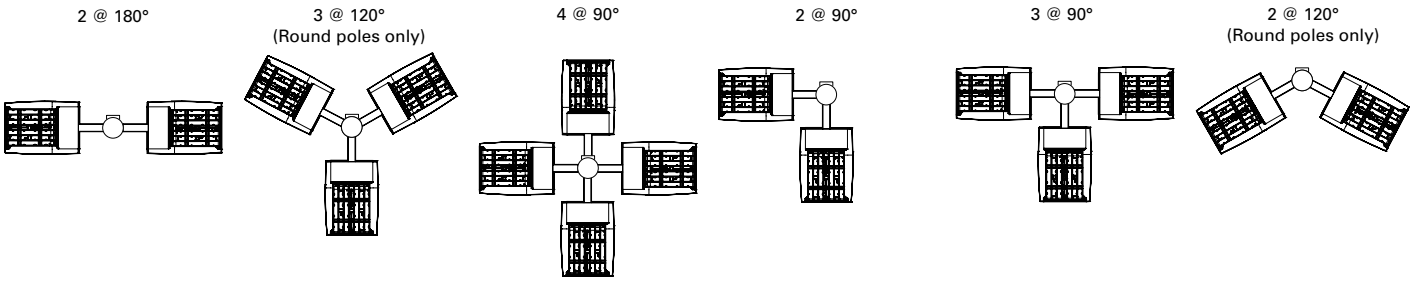
OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
MA1252=10kV Surge Module Replacement
MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1197-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1188-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1189-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1190-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1191-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1039-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1192-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon
MA1193-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1194-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1195-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon
SRA238=Adapter kit for mounting 3" SP arm to 2-3/8" O.D. vertical tenon
FSIR-100=Wireless Configuration Tool for MS/DIM [33]
LS/HSS=Field Installed House Side Shield for SA Light Squares [9, 17]
LS/HSS-SB=Field Installed House Side Shield for SB Light Squares [9, 17]
LS/BCS=Backlight Control Shield [9, 17, 37]
LS/GRSBK-2PK =Glare Reducing Shield, Black [9, 22]
LS/GRSWH-2PK =Glare Reducing Shield, White [9, 22]
LS/PFS=Perimeter Shield, Black [15]
WOLC-7P-10A=WaveLinx Outdoor Control Module [11, 18, 13]
TL7-G1-HV= AirMesh 7-PIN node, 110-480V [11, 18, 35]
CBSSW-450-002= AirMesh central base station with 5-button control [35]

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with TH option.
4. When using SA light squares, Output Level 4 not available with color temperatures 722, 727, 827, 830 or 930 when HSS is used.
5. TH option not 3G rated. Not available with Coastal Construction (CC) option.
6. Not available with voltage options H, 8 or 9.
7. Not available with SB1A or SB2A configurations. Not available in combination with HA high ambient and sensor options at Output Level 3. H voltage not available with sensor options, choose voltage 8 or 9.
8. SP arm limited to 3" O.D. vertical tenon. SP2 limited to 2-3/8" O.D. vertical tenon.
9. One required for each Light Square.
10. 2L is not available with SB light squares. Not available with SPB at 347V or 480V. Not available with WaveLinx or 20kV surge option.
11. Requires PR7.
12. Replace XX with sensor color (WH, BZ or BK.).
13. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose Output Level 1; supplied at 500mA drive current only. Not available with SB light squares. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
15. Set of 4 pcs. One set required per Light Square.
16. HA option not available with Output Level 4 or AMB Amber.
17. Not for use with T1, 5NQ, 5MQ, 5WQ or RW optics.
18. Cannot be used with other control options.
19. Low voltage control lead brought out 18" outside fixture. Not available with DALI or integrated controls options.
20. Not available if any SPB, or WaveLinx sensor is selected. Motion sensor has an integral photocell.
21. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. Not available with SB light squares when using Output Level 4.
22. Not for use with T1, T4FT, T4W or SL optics. See IES files for details. Not available with SB light squares.
23. Sensor configuration mobile application required for configuration. See controls page for details.
24. Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page.
25. Not available with HSS, GRSWH or GRSBK.
26. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
27. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
28. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
29. 480V not to be used with ungrounded or impedance grounded systems.
30. Not available with SA1A or SA1B. Not available with SB1, or any SB configuration using Output Level 1. Not available with any control option except SPB
31. Cannot be used with DALI, PR7, or other motion response control options. Not available with SB light squares when using Output Level 4.
32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. Not available with SB light squares.
33. Uses the FSP-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
34. Controls system is not available with photocontrol receptacles (PR , PR7) or other controls systems (FADC, SPBx).
35. Requires AirMesh central base station CBSSW-450-002 and Synapse commissioning for operation.
36. 3-step MacAdam ellipse binning. Available in 740 CRI/CCT only. Longer lead times apply, consult your lighting representative at Cooper Lighting Solutions for more information.
37. Not available with SB light squares.
38. Only product configurations with these prefixes are built to be compliant with theBuy American Act of 1933 (BAA) or the Build America Buy America Act (BABA).BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment JobsAct (IIJA). Individual Government Agencies may have more stringent compliancestandards. Please refer to the DOMESTIC PREFERENCES website or consult the CLSDomestic Preferences team for more information. Components shipped separatelymay be separately analyzed under domestic preference requirements.
39. Select SA light square. Only available with Output Levels 1, 2 or 3. Not compatible with HSS, GRS, BCS or PFS shield options, or LCF.
40. Not compatible with DALI.
41. Uses non-NFC (Near Field Communication) drivers to eliminate field-programmability.

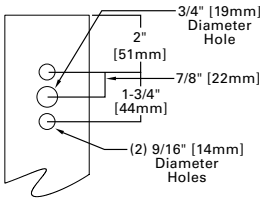
Mounting Details

Pole Configuration Options

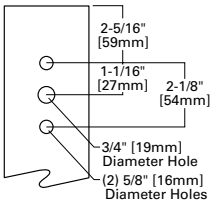


Pole Drilling Patterns

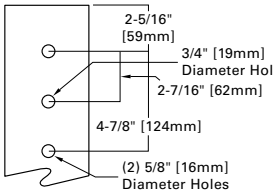
Type "N"



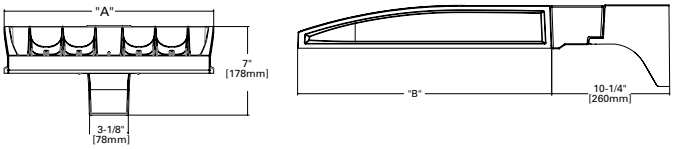
Type "R"



Type "M"

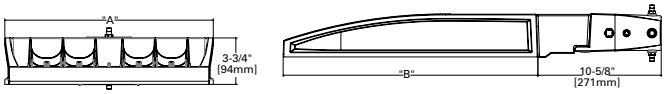


Quick Mount Universal Arm (QU)



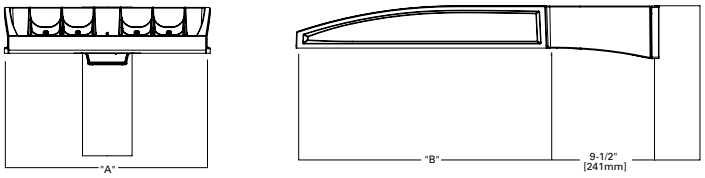
*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

Quick Mount Mast Arm (QMA)



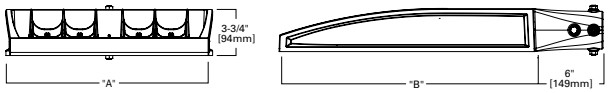
*NOTE: Fits 2-3/8" O.D. tenon

Pole Mount Arm with Quick Mount Adaptor (QM)



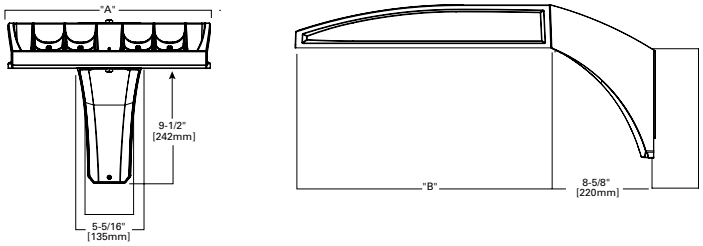
*NOTE: Use Type N drilling pattern

Mast Arm, Fixed (MA)



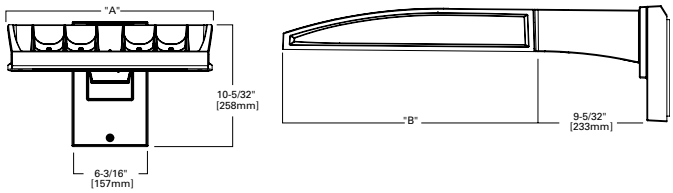
*NOTE: Fits 2-3/8" O.D. tenon

Upswept Arm (UP)



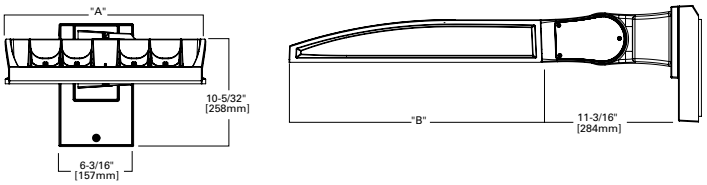
*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

Wall Mount, Fixed (WM)

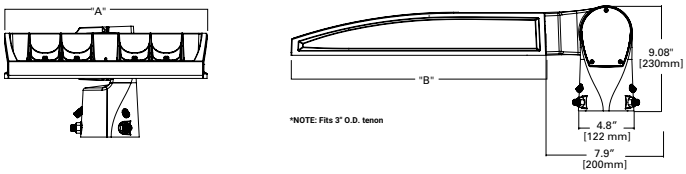


Mounting Details

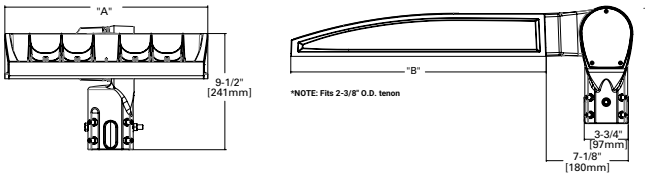
Wall Mount, Adjustable (WA)



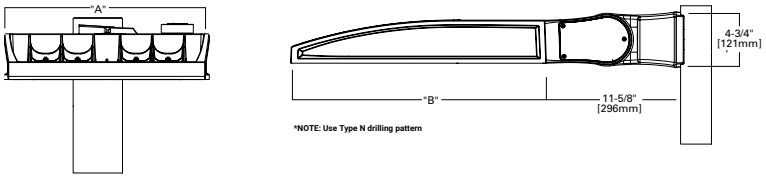
3" Slipfitter, Adjustable (SP)



2-3/8" Slipfitter, Adjustable (SP2)

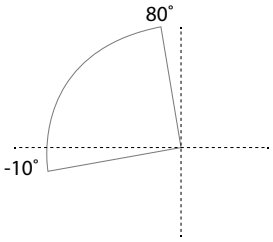


Pole Mount, Adjustable Arm (PA)



Adjustable Arm Range of Motion

- Includes WA, SP, SP2 and PA mounting options
- Adjustable in increments of 5°
- Must maintain downward facing orientation

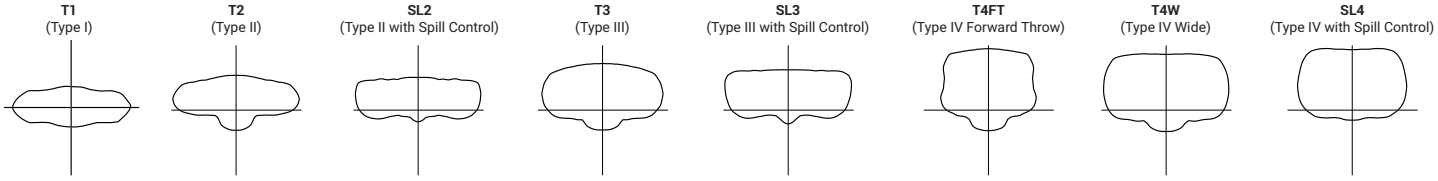


Fixture Weights and EPAs

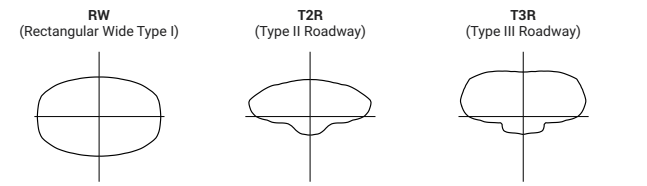
Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

Optical Distributions

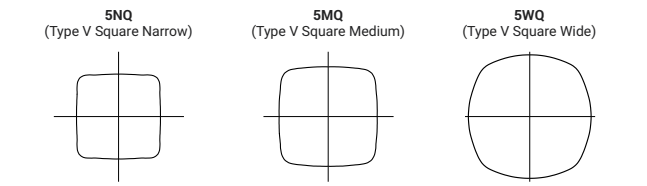
Asymmetric Area Distributions



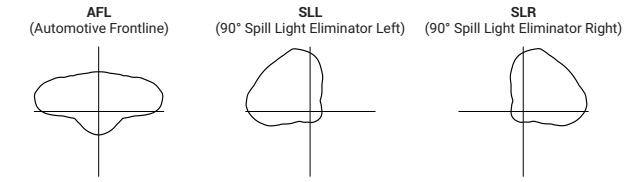
Asymmetric Roadway Distributions



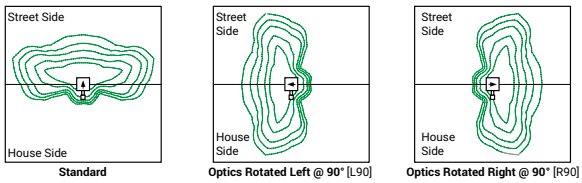
Symmetric Distributions



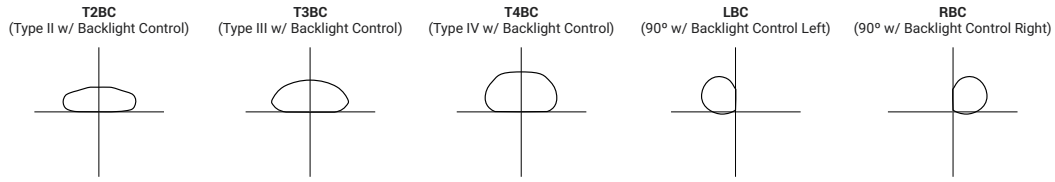
Specialized Distributions



Rotated Optics



Backlight Control Distributions



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 22 optical distributions for area site and roadway applications
- 4 shielding options include HSS, BCS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)
- 5 step MacAdam ellipse binning (5 SDCM) standard with 70CRI and 80CRI. 3SDCM option available with 740 CRI/CCT. 3 step MacAdam ellipse binning standard with 90CRI

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Compliance
- Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified
- IDA Certified (3000K CCT and warmer only, fixed mounting options)
- Declare compliant
- This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards.
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

Typical Applications
- Outdoor, Parking Lots, Walkways, Roadways, Building Areas
- Sports lighting, including tennis, pickleball, basketball courts

Warranty
- Five-year limited warranty. Consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

Lumen Maintenance (TM-21)

Output Level	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Output Levels 1-3	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
Output Level 4	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0ºC	1.02
10ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.97

FADC Settings
SA1-SA3 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

FADC Settings
SA4-SA6 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	14%
2	25%
3	32%
4	43%
5	49%
6	57%
7	65%
8	72%
9	80%
10	100%

Note: +/-5% typical value

FADC Settings
SA7-SA9 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Note: +/-5% typical value

Drive Currents

Lumen Output	SA Light Squares	SB Light Squares
Output Level 1	615mA	350mA
Output Level 2	800mA	450mA
Output Level 3	1050mA	615mA
Output Level 4	1200mA	900mA

Control Options

0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB and MS/DIM-LXX)
These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB (FSP-321 or FSP-311) or MS/DIM (FSP-211) sensor options are selected, the occupancy sensor is connected to a dimming driver and the luminaire dims when no motion is detected. After a set period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. Both sensors are factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM sensor requires the FSIR-100 programming tool to adjust factory defaults. The SPB sensor default parameters are listed in the table below and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares (See SPB/X Availability Table below.) An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish*
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

*SPB bezel color automatically selected based on luminaire finish

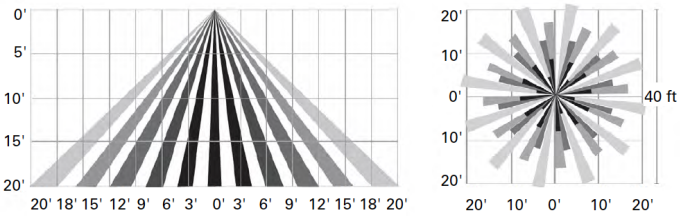
SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

Default Program Settings (Out of the Box Functionality)

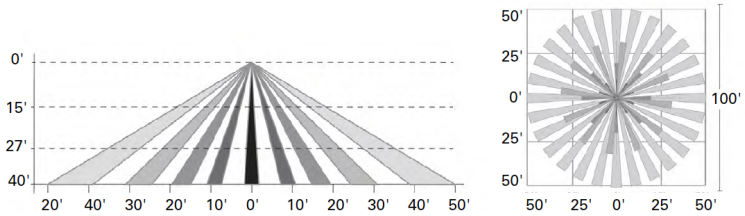
Occupancy Sensor				
Setting	MS/DIM	SPB	WaveLinx Lite (WLS4 / WLS2)	WaveLinx (WPS)
High Mode %	100%	100%	100%	100%
Low Mode %	10%	10%	50%	50%
Time Delay	5 min	5 min	15 min	15 min
Cut Off Delay	1 hr	1 hr	Disabled	Disabled
Photocell Enabled	No	No	Yes	Yes

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (WPS2 and WLS2)



For mounting heights up to 40' (WPS4 and WLS4)



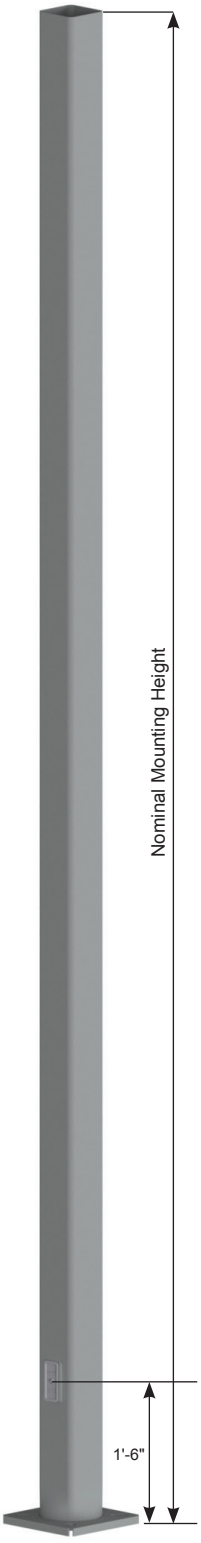
AirMesh (DIM10)
AirMesh integrated wireless controls system includes factory installed DIM10 Synapse control module and FSP-201 motion sensor; requires additional AirMesh components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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Specifications and dimensions subject to change without notice.

Job Name:	Client Name:
Job Location - City: State:	Created By: Date:
Product: DS330 Quote:	Customer Approval: Date:



Tenon Top*



Pole Cap - Plastic



Cross Section



Soft Square

Handhole



Full Base Cover (Standard)



Dart Square - 2T (Optional)



*Consult factory on loading criteria for pole top mounted luminaires and/or brackets.

SPECIFICATIONS

Pole Shaft - The pole shaft is fabricated from hot rolled welded steel tubing of one-piece construction with a minimum yield strength of 55 KSI.

Pole Top – A removable pole cap is provided for poles receiving drilling patterns for side-mount luminaire arm assemblies. For top mount luminaire and/or bracket consult the factory. Consult the luminaire manufacturer for correct tenon size or drill pattern. Other pole top options include pole cap only (PC) or plain top (PL) which is typical when the pole top diameter matches the necessary slip fit dimensions.

Handhole – A reinforced handhole with grounding provision is provided at 1'-6" from the base end of the pole assembly. Each handhole includes an easy to install, self-contained Swing Latch handhole cover assembly. U.S. Patent Swing Latch cover is fabricated from durable polycarbonate/ABS blend plastic. All pole assemblies are provided with a 2.50" x 5.00" rectangular handhole. Handhole dimensions are nominal.

Base Cover – A two-piece full base cover fabricated from ABS plastic is provided with each pole assembly. Additional base cover options, including the dart square (2T) cast aluminum cover, are available upon request.

Anchor Bolts - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an “L” bend on one end and are galvanized a minimum of 12" on the threaded end.

Hardware - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

Finish - Standard finishes are either Galvanized (GV) or Finish Painted (FP). Additional finish options including Finish Paint over Galvanizing (FPGV) or any of the V-PRO™ Finish Coating Systems are available upon request. See the product ordering code for color options.

Design Criteria - Please reference Design Criteria Specification for appropriate design conditions.

DS330
Fatigue Resistant Soft Square Steel Post

valmont STRUCTURES

Job Name: _____ Client Name: _____

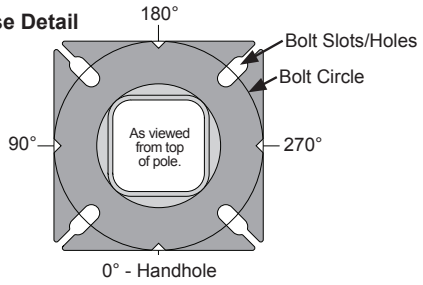
Job Location - City: _____ State: _____ Created By: _____ Date: _____

Product: DS330 Quote: _____ Customer Approval: _____ Date: _____

ANCHORAGE DATA

POLE		BASE PLATE				ANCHOR BOLTS		
POLE BASE SQUARE (IN)	WALL THK (GA)	BOLT CIRCLE DIA (IN)	BOLT CIRCLE ± (IN)	SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)
4.00	11	8.50	0.50	8.25	0.750	0.75 x 17.00 x 3.00	3.50	0.25
4.00	7	8.50	0.50	8.25	0.875	0.75 x 17.00 x 3.00	3.63	0.25
5.00	11	11.00	1.00	11.00	1.000	0.75 x 17.00 x 3.00	3.75	0.25
5.00	7	11.00	1.00	11.00	1.000	0.75 x 17.00 x 3.00	3.75	0.25
6.00	7	12.00	1.00	12.50	1.000	1.00 x 36.00 x 4.00	4.25	0.25

Anchor Base Detail



DESIGNATION,LOAD AND DIMENSIONAL DATA

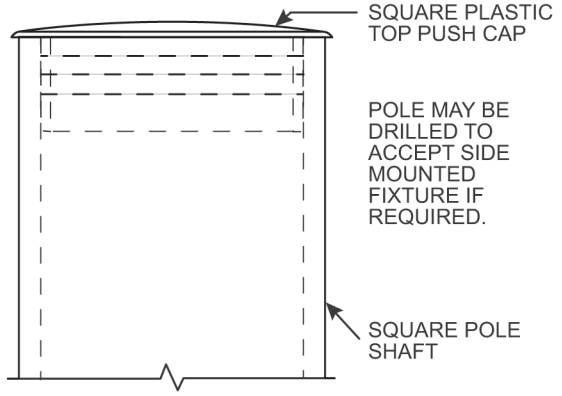
DESIGN INFORMATION							POLE DIMENSIONS[3]				DESIGNATION
	80 MPH w/1.3 GUST		90 MPH w/1.3 GUST		100 MPH w/1.3 GUST						
NOMINAL MOUNTING HEIGHT	MAX EPA[1] (SQ FT)	MAX WEIGHT[1] (LBS)	MAX EPA[1] (SQ FT)	MAX WEIGHT[1] (LBS)	MAX EPA[1] (SQ FT)	MAX WEIGHT[1] (LBS)	SHAFT BASE SQUARE[3] (IN)	SHAFT TOP SQUARE (IN)	WALL THK (GA)	STRUCTURE WEIGHT[2] (LBS)	
10'-0"	30.6	765	23.8	595	18.9	473	4.00	4.00	11	75	400Q100
12'-0"	24.4	610	18.8	470	14.8	370	4.00	4.00	11	90	400Q120
14'-0"	19.9	498	15.1	378	11.7	293	4.00	4.00	11	100	400Q140
16'-0"	15.9	398	11.8	295	8.9	223	4.00	4.00	11	115	400Q160
18'-0"	12.6	315	9.2	230	6.7	168	4.00	4.00	11	125	400Q180
20'-0"	9.6	240	6.7	167	4.5	150	4.00	4.00	11	140	400Q200
	17.7	443	12.7	343	9.4	235	5.00	5.00	11	185	500Q200
	28.1	703	21.4	535	16.2	405	5.00	5.00	7	265	500W200
25'-0"	4.8	150	2.6	100	1.0	50	4.00	4.00	11	170	400Q250
	10.8	270	7.7	188	5.4	135	4.00	4.00	7	245	400W250
	9.8	245	6.3	157	3.7	150	5.00	5.00	11	225	500Q250
	18.5	463	13.3	333	9.5	238	5.00	5.00	7	360	500W250
30'-0"	6.7	168	4.4	110	2.6	65	4.00	4.00	7	291	400W300
	4.7	150	2.0	50	N/A	N/A	5.00	5.00	11	265	500Q300
	10.7	267	6.7	167	3.9	100	5.00	5.00	7	380	500W300
	19.0	475	13.2	330	9.0	225	6.00	6.00	7	520	600W300
35'-0"	5.9	150	2.5	100	N/A	N/A	5.00	5.00	7	440	500W350
	12.4	310	7.6	190	4.2	105	6.00	6.00	7	540	600W350
40'-0"	7.2	180	3.0	75	N/A	N/A	6.00	6.00	7	605	600W400

1. Maximum EPA (Effective Projected Area) and weight values are based on side mounted fixtures only. Consult factory on loading criteria for pole top mounted luminaires and/or brackets. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
2. Structure weight is a nominal value which includes the pole shaft and base plate only.
3. Belled-bottom will have reduced thickness due to the cold-working process. However, the belled-bottom meets or exceeds the structural capacity of the original square section. In addition, the rounded section provides better fatigue resistance.

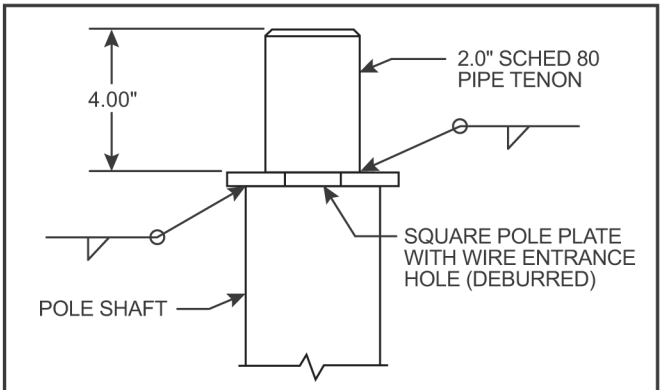
PRODUCT ORDERING CODES

MODEL	DESIGNATION	FIXTURE MOUNTING	FINISH SYSTEM	STANDARD COLOR OPTIONS	BASE COVER	ANCHOR BOLTS	SUPPLEMENTAL INFO
DS330				--	--	--	
	Select Correct Designation from the Load and Dimensional Data Chart.	**Drill Mounting (See Orientation)** D1 = (1) Drilling @ 270° D2 = (2) Drillings @ 90° & 270° D4 = (4) Drillings @ 0°, 90°, 180°, & 270° D5 = (2) Drillings @ 180° & 270° D6 = (3) Drillings @ 90°, 180°, & 270° **Tenon Mounting** P2 = 2.38" OD x 4" tenon P4 = 4.00" OD x 6" tenon P5 = 2.88" OD x 4" tenon P6 = 2.88" OD x 5" tenon P7 = 2.38" OD x 5" tenon P9 = Special Size (Specify) **Other Options** PC = Pole Cap PL = Plain Top (No Cap)	GV = Galvanized FP = Finish Painted **-----OPTIONAL-----** FPGV = Finish Paint over Galvanizing VP30 = V-PRO™ 30 System VP32 = V-PRO™ 32 System VP53 = V-PRO™ 53 System VP54 = V-PRO™ 54 System VP57 = V-PRO™ 57 System VP100 = V-PRO™ 100 System VP105 = V-PRO™ 105 System	GV = Galvanized BK = Black DB = Dark Bronze MB = Medium Bronze WH = White LG = Light Gray CB = Bronze DG = Dark Green ST = Sandstone HTG= Hunter Green SG = Slate Gray SL = Silver SC = Special Color (Specify)	FBC = Full Base Cover **-----OPTIONAL-----** 2T = Square Dart Cover	AB = With Anchor Bolts LAB = Without Anchor Bolts	

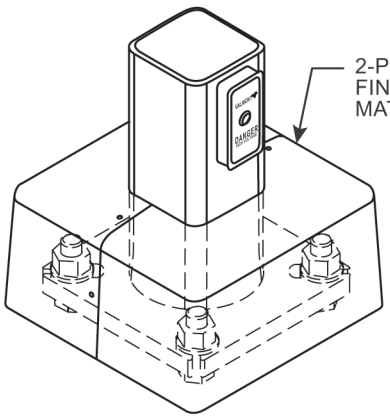
SPC7207 12/17 valmontstructures.com carries the most current spec information and supersedes these guidelines.



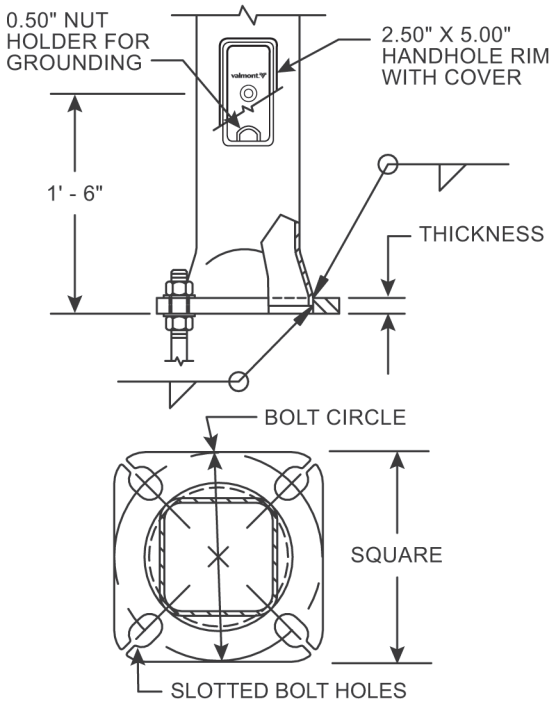
CAP DETAIL (STANDARD)



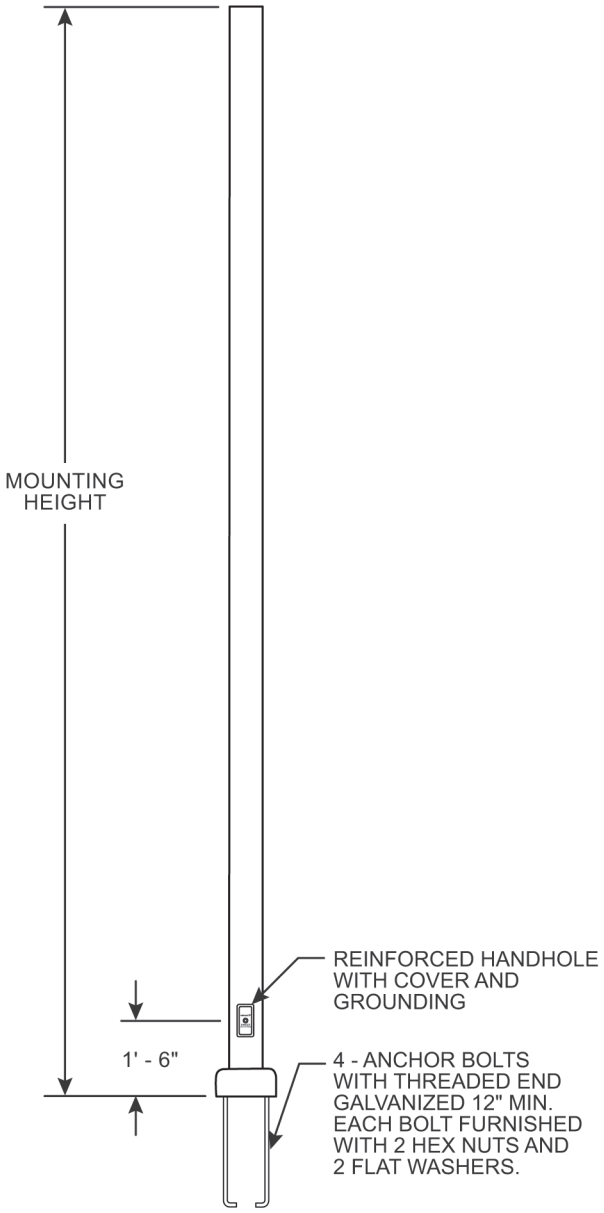
P2 TENON DETAIL (OPTIONAL)



FULL BASE COVER (STANDARD)



POLE BASE AND HANDHOLE DETAIL



DS330 POLE DETAIL

SPC7207 12/17 valmontstructures.com carries the most current spec information and supersedes these guidelines.

SHIELD+ 1





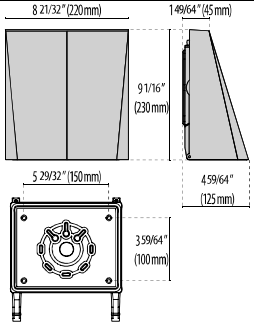
Long-lasting energy-efficient wall pack series. Fixtures consist of:

- Multi-step powder-coat painting process, optimized against UV rays and corrosion.
- Copper-free precision die-cast aluminum housing and mounting plate.
- Extra-clear, flat, tempered silk-screened soda-lime glass diffuser.
- Custom molded, anti-aging gasket(s).
- Stainless steel external hardware.
- High-efficiency COB, combined with an optimized passive cooling system, provides a long LED life.
- Specular vacuum metallized polycarbonate reflector provides full-cutoff, no glare design, and precision optical control.
- IESNA Type III light distribution.
- Input voltage: 120-277 V (50 / 60 Hz), integral 1-10 V dimming driver.
- Marine Grade finish.
- Suitable for Natatorium applications.
- Field settable integral tri-level lumen/wattage packages proprietary DIP switch driver for SHIELD+ 1 (stating factory setting at the lowest level).
- Standard knock-out template for multiple junction box mounting options.
- Suitable for three surface mounted conduit entry points with 1/2" NPS plugs.
- BUTTON and SWIVEL 120-277 V (50 / 60 Hz) photoelectric switch options available (ordered separately).
- Consult factory for dimming options, custom finishes (please specify RAL color), and non-cataloged CCT (Kelvin) options.
- Consult factory for remote emergency battery pack options (EMPK).
- 5-year warranty.
- Consult factory for any Buy American Act (BAA) or Build America Buy America Act (BABAA) requirements.

IP 66 · WET · PRONTO · FULL CUT OFF · cULus LISTED · 1-10 V · RAL · IK 07 2 J

FINISHES

- **AN-96** / Iron gray / Textured
- **GR-94** / Aluminum metallic / Textured
- **RB-10** / Iron rust / Textured
- **WH-87** / White / Textured
- **BK-81** / Black / Textured



Scan here for installation instructions

SHIELD+ 1

Lumen Output	27K	3K	35K	4K	5K
SHIELD+1 8W	929	957	984	1012	1039
SHIELD+1 10W	1209	1228	1247	1267	1286
SHIELD+1 13.5W	1448	1556	1664	1773	2516
SHIELD+1 18W	1906	2059	2211	2364	2516
SHIELD+1 27W	2478	2676	2874	3072	3270

SHIELD+1

Order Guide –

Order code example: SH1-10-80-3K-IG-UNV-NA-EMPK

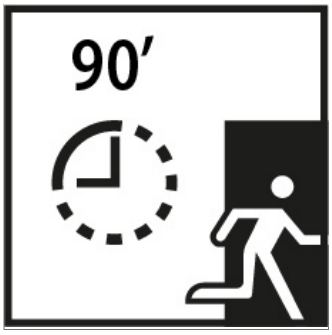
PERFORMANCE iN LIGHTING | powered by GEWISS

Series	Distribution	Wattage	CRI	CCT	Finish	Voltage	Controls	Accessories
SH1 Shield+1	**T3** Type 3 **T2** Type 2	**6** 6 watt (minimum) **8** 8 watt **10** 10 watt **13.5** 13.5 watt* **14.5** 14.5 watt **18.5** 18.5 watt* **27** 27 watt* **28** 28 watt* (EMPK max)	**80** 80 CRI* **90** 90 CRI	**27K** 2700K **3K** 3000K **35K** 3500K **4K** 4000K* **5K** 5000K **65K** 6500K **RED** Static Red **GRN** Static Green **BLU** Static Blue **AMB** Static Amber **RGBW** See below for details	**AM** Aluminum Metallic* **IG** Iron Gray* **WH** Textured White* **IR** Iron Rust* **BK** Textured Black **CC** Custom Color	**UNV** 120-277V*	**NA** Non-Dim **0-10V** 0-10V Dimming Driver* **ELV** 120V-Line Voltage Dimming Driver	**EMPK** Intergral Battery pack** **OCC** App Based Field programmable occupancy sensor ON/OFF **HI/LO** App Based Field programmable occupancy sensor HI/LO **REM** Remote Battery pack **PHC-B** Button Photocell **PHC-S** Swivel Photocell **FRST** Frosted Glass **BOL** 40" Bollard **BABAA** Build America Buy America Act compliant (not available for all options) **EMPK RATED FOR 90 MIN RUN TIME AT 4W 590lm Output in EM Mode Ambient EM Temp Range Min= 5°C / 41°F Max= 35°C / 95°F

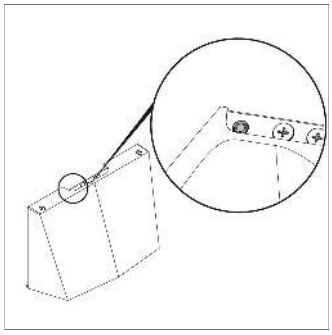
80 CRI STANDARD - OTHER OPTIONS AVAILABLE
STANDARD OPTION, SHORTER LEAD TIME, NO MOQ

OPTIONAL ACCESSORIES

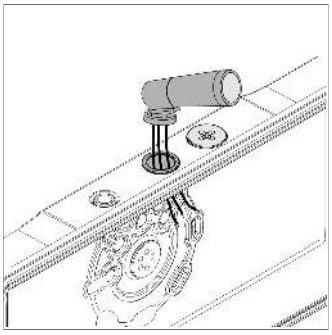
DESCRIPTION	FINISH	PART NUMBER
SHIELD+1		



EMPK



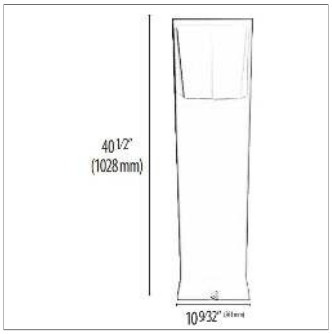
PHC-B



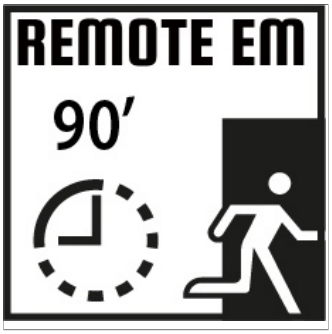
PHC-S



FRST



BOL



REM



OCC



HI/LO

Power Supply



17433
Kit driver 48V



17096
Kit driver 48V WP

RF Controls



3104173
RGBW RF controller 4 channel
(0.35A each CH)



31041730
RGBW RF controller WP 4 channel
(0.35A each CH)



310429
RGBW hand held remote

DMX Controls



178973
RGBW DMX enabler/decoder 4
channel (0.35A each CH)



1789730
RGBW DMX enabler/decoder WP 4
channel (0.35A each CH)

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

Impact Elite LED

Wall Mount Luminaire

Product Features

Product Certifications

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3
- Control Options page 4

Quick Facts

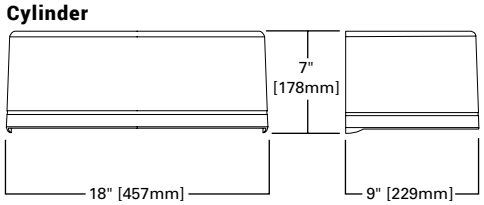
- 15 Optical Distributions
- Lumen packages range from 2,459 to 11,480 (20W - 95W)
- Efficacy up to 149 lumens per watt

Connected Systems

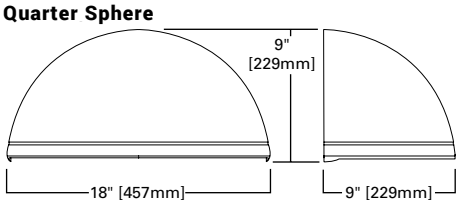
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless

Dimensional Details

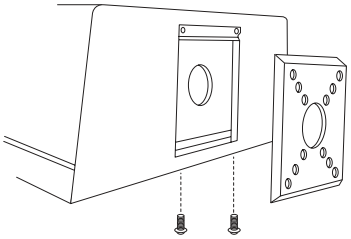
Cylinder



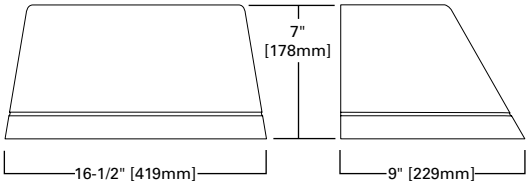
Quarter Sphere



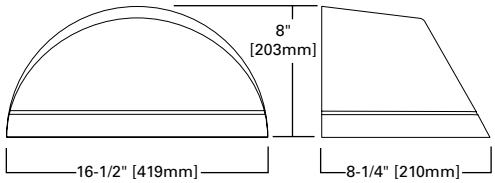
Hook -n- Lock



Trapezoid



Wedge



NOTES:
1. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: **ISC-SA1F-740-U-T3-BZ**

Product Family [1]	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
ISC=Impact Elite LED Small Cylinder **ISS**=Impact Elite LED Small Quarter Sphere **IST**=Impact Elite LED Small Trapezoid **ISW**=Impact Elite LED Small Wedge **BAA-ISC**=Impact Elite LED Small Cylinder Buy American Act Compliant [22] **TAA-ISC**=Impact Elite LED Small Cylinder Trade Agreements Act Compliant [22] **BABA-ISC**=Impact Elite LED Small Cylinder Built America Buy America [27] **BAA-ISS**=Impact Elite LED Small Quarter Sphere Buy American Act Compliant [22] **TAA-ISS**=Impact Elite LED Small Quarter Sphere Trade Agreements Act Compliant [22] **BABA-ISS**=Impact Elite LED Small Quarter Sphere Build America Buy America [27] **BAA-IST**=Impact Elite LED Small Trapezoid Buy American Act Compliant [22] **TAA-IST**=Impact Elite LED Small Trapezoid Trade Agreements Act Compliant [22] **BABA-IST**=Impact Elite LED Small Trapezoid Build America Buy America [27] **BAA-ISW**=Impact Elite LED Small Wedge Buy American Act Compliant [22] **TAA-ISW**=Impact Elite LED Small Wedge Trade Agreements Act Compliant [22] **BABA-ISW**=Impact Elite LED Small Wedge Build America Buy America [27]	**SA1**=1 Square (16 LED) **PA1**=1 Panel (24 LED) [24]	**A**=350mA **B**=450mA **C**=600mA **D**=800mA **E**=1000mA **F**=1200mA [2]	**722**=70CRI, 2200K **727**=70CRI, 2700K **730**=70CRI, 3000K **735**=70CRI, 3500K **740**=70CRI, 4000K **750**=70CRI, 5000K **760**=70CRI, 6000K **827**=80CRI, 2700K **830**=80CRI, 3000K **AMB**=Amber, 590nm [3, 4]	**U**=120-277V **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [5] **9**=347V	**SA1 Optics** **T2**=Type II **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **PA1 Optics** **5WQ**=Type V Square Wide **T2R**=Type II **T2U**=Type II Urban **T3**=Type III **T4W**=Type IV Wide	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White **RALXX**=Custom Color [26]

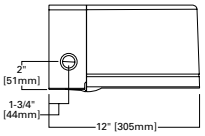
Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately) [23]
X=Driver Surge Protection (6kV) Only [16] **20K**=Series 20kV UL 1449 Surge Protective Device **CBP**=Battery Pack with Back Box, Cold Weather Rated [13, 14] **CBP-CEC**=Battery Pack with Back Box, Cold Weather Rated, CEC compliant [13] **HSS**=Factory Installed House Side Shield [15] **ULG**=Uplight Glow [6, 7, 24] **LCF**=Light Square Trim Plate Painted to Match Housing [27] **TR**=Tamper Resistant Hardware **CC**=Coastal Construction [20] **HA**=50°C High Ambient [8] **AHD145**=After Hours Dim, 5 Hours, 50% [9] **AHD245**=After Hours Dim, 6 Hours, 50% [9] **AHD255**=After Hours Dim, 7 Hours, 50% [9] **AHD355**=After Hours Dim, 8 Hours, 50% [9]	**BPC**=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) **PR7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [2, 6, 7] **SPB1**=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [12, 21] **SPB2**=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting [12, 21] **SPB4**=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting [12, 21] **MS/DIM-LXX**=Motion Sensor for Dimming Operation [7, 10, 11, 12] **WLS2XX**=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [7, 17, 19] **WLS4XX**=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [7, 17, 19] **WPS2XX**=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [7, 17, 19] **WPS4XX**=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [7, 17, 19]	**MA1253**=10kV Circuit Module Replacement **MA1254-XX**=Thruway Back Box - Impact Elite Trapezoid **MA1255-XX**=Thruway Back Box - Impact Elite Cylinder **MA1256-XX**=Thruway Back Box - Impact Elite Quarter Sphere **MA1257-XX**=Thruway Back Box - Impact Elite Wedge **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor **WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [7, 18]

NOTES:

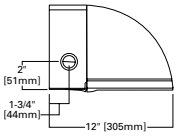
1. DesignLight Consortium® Qualified. Refer to www.designlights.org, Qualified Products List under Family Models for details.
2. Not available with ULG option.
3. Choose Drive Current "A" for Amber 590nm, which is provided at 500mA only.
4. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
5. 480V not to be used with ungrounded or impedance grounded systems.
6. Not available with ISS or ISW.
7. Cannot be used in conjunction with other control options.
8. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1000mA or less.
9. Requires the use of photocontrol. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information.
10. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting.)
11. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
12. Includes integral photocell.
13. Battery pack operating temperature of -20C to +40C. Operates downlight for 90-minutes.
14. Must specify 120V or 277V.
15. Not for use with 5NQ, 5MQ, 5WQ or RW optics. A black trim plate is used when HSS is selected.
16. Removes additional surge module.
17. Replace XX with sensor color (WH, BZ, or BK).
18. For WaveLinx applications, WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Gateway not required for WaveLinx Lite Commercial (LC) applications.
19. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
20. Smart device with mobile application required to change system defaults. See controls section for details.
21. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information Components shipped separately may be separately analyzed under domestic preference requirements.
22. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
23. Only available in 3000K, 4000K or 5000K CCT.
24. Not available with motion sensor controls, including SPB, MS/DIM or WaveLinx.
25. Specify RAL number for Custom Color. Custom color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
26. Not available with PA1 configuration.
27. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Thruway Back Box

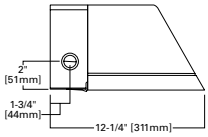
Cylinder



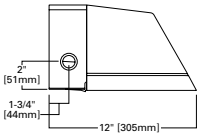
Quarter Sphere



Trapezoid



Wedge



Product Specifications

Construction

- Heavy-wall, die-cast aluminum housing and removable hinged door frame
- Optional tamper-resistant fasteners offer vandal resistant access
- Vandal resistant with IK10 impact rated housing and optic

Optics

- High-efficiency injection-molded AccuLED optics technology
- 15 optical distributions

Electrical

- Standard with 0-10V dimming
- Standard with Cooper Lighting Solutions proprietary circuit module designed to withstand 10kV of transient line surge
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration.

Mounting

- Utilizes "Hook-N-Lock" mounting mechanism, securing to a gasketed and zinc plated mounting attachment
- Two black oxide coated Allen set screws concealed but accessible from below

Finish

- Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- RAL and custom color matches available
- Coastal Construction (CC) option available

Compliance

- IDA Certified for 3000K CCT and warmer only
- FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Buy America Build America Act (BABA). BABA is the minimum Government compliance requirement for the Buy America Build America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

View Impact Elite IES files

1 Light Square (SA)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120 - 277V	20.1	25.4	34.2	45.2	58.2	66.0	20.1	25.4	34.2	45.2	58.2	66.0
Current (A)	120	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics (4000K, 70 CRI)													
T2	Lumens	2,802	3,500	4,618	5,778	7,231	7,895	2,772	3,475	4,576	5,733	7,175	7,834
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	139	138	135	128	124	120	138	137	134	127	123	119
T3	Lumens	2,778	3,470	4,578	5,729	7,169	7,827	2,731	3,424	4,508	5,648	7,069	7,718
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	121	117
T4FT	Lumens	2,751	3,436	4,534	5,673	7,099	7,751	2,762	3,462	4,559	5,712	7,149	7,805
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	133	126	122	117	137	136	133	126	123	118
T4W	Lumens	2,780	3,473	4,582	5,733	7,174	7,833	2,739	3,434	4,522	5,665	7,089	7,740
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	122	117
SL2	Lumens	2,763	3,451	4,554	5,698	7,130	7,785	2,730	3,422	4,507	5,646	7,066	7,715
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	137	136	133	126	123	118	136	135	132	125	121	117
SL3	Lumens	2,745	3,429	4,524	5,660	7,084	7,734	2,709	3,396	4,472	5,603	7,012	7,655
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	132	125	122	117	135	134	131	124	120	116
SL4	Lumens	2,680	3,348	4,417	5,526	6,916	7,551	2,666	3,342	4,401	5,514	6,900	7,534
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	133	132	129	122	119	114	133	132	129	122	119	114
SLL	Lumens	2,447	3,057	4,033	5,046	6,315	6,895	2,459	3,083	4,059	5,086	6,365	6,949
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	122	120	118	112	109	104	122	121	119	113	109	105
RW	Lumens	2,883	3,601	4,751	5,945	7,440	8,123	2,818	3,533	4,652	5,828	7,294	7,964
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
	Lumens Per Watt	143	142	139	132	128	123	140	139	136	129	125	121

1 Light Panel (PA)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120 - 277V	28.9	36.4	48.9	63.0	82.4	94.4	28.9	36.4	48.9	63.0	82.4	94.4
Current (A)	120V	0.24	0.31	0.41	0.53	0.69	0.79	0.24	0.31	0.41	0.53	0.69	0.79
	277V	0.11	0.14	0.18	0.23	0.30	0.34	0.11	0.14	0.18	0.23	0.30	0.34
Power (Watts)	347V or 480V	30.5	37.7	49.0	63.9	83.2	95.0	30.5	37.7	49.0	63.9	83.2	95.0
Current (A)	347V OR 480V	0.09	0.11	0.14	0.19	0.24	0.28	0.09	0.11	0.14	0.19	0.24	0.28
	480V	0.07	0.08	0.11	0.14	0.18	0.20	0.07	0.08	0.11	0.14	0.18	0.20
Optics (4000K, 70 CRI)													
T2R	Lumens	4,296	5,369	7,010	8,733	10,721	11,750	4,154	5,211	6,738	8,386	10,329	11,338
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	149	147	143	139	130	124	144	143	138	133	125	120
T2U	Lumens	4,241	5,300	6,920	8,621	10,584	11,600	4,123	5,172	6,688	8,323	10,252	11,253
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	Lumens Per Watt	147	146	142	137	128	123	143	142	137	132	124	119
T3	Lumens	4,193	5,240	6,842	8,524	10,464	11,468	4,079	5,117	6,616	8,235	10,143	11,133
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens Per Watt	145	144	140	135	127	121	141	141	135	131	123	118
T4W	Lumens	4,165	5,205	6,796	8,467	10,394	11,392	4,083	5,122	6,623	8,243	10,152	11,144
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens Per Watt	144	143	139	134	126	121	141	141	135	131	123	118
5WQ	Lumens	4,255	5,318	6,943	8,650	10,619	11,638	4,206	5,276	6,822	8,491	10,458	11,480
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G3	B4-U0-G3	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G3
	Lumens per Watt	147	146	142	137	129	123	146	145	140	135	127	122

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99

Control Options

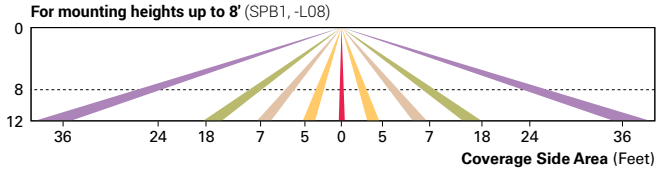
0-10V
This fixture is offered standard with 0-10V dimming driver(s).

Photocontrol (BPC and PR7)
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

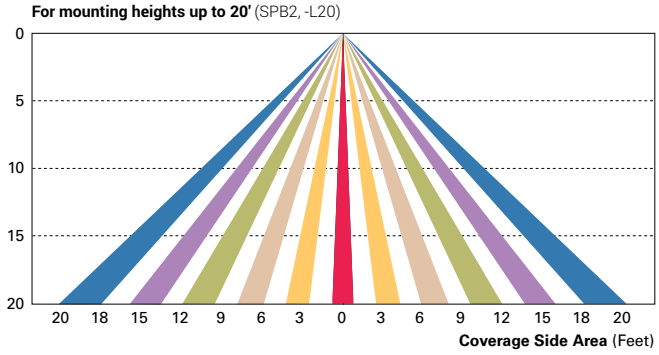
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.

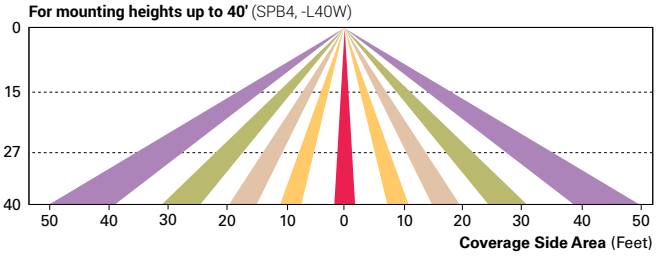
For mounting heights up to 8' (SPB1, -L08)



For mounting heights up to 20' (SPB2, -L20)

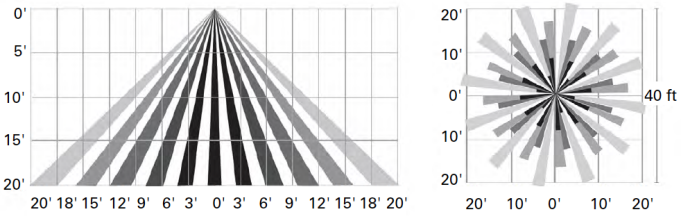


For mounting heights up to 40' (SPB4, -L40W)

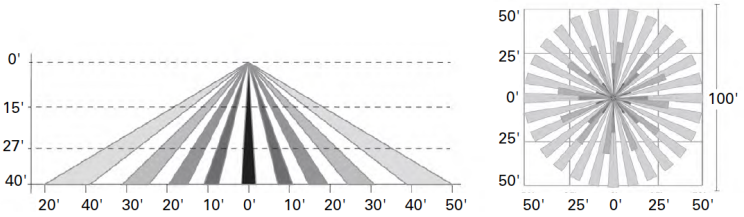


WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx Pro (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (WPS2 and WLS2)



For mounting heights up to 40' (WPS4 and WLS4)



Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
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Specifications and dimensions subject to change without notice.

Section 9

Soils

Section 9: Soils

A copy of the USDA NRCS custom soil report and map for the proposed municipal facility development is enclosed in **Section 11-Stormwater.** A copy of the Soils Map is enclosed in *Section 2-Site Location and Resource Maps*.

Geotechnical services were performed as part of the project site due diligence. Reference is made to the enclosed *Explorations and Geotechnical Engineering Services* prepared by S.W. Cole Engineering, Inc., dated January 21, 2026. This report details testing, subsurface site conditions, geotechnical evaluation, and recommendations. See *Section 12-Stormwater Report, Appendix 4-Subsurface Investigations* for subsurface exploration logs.

Section 10

Traffic

Section 10: Traffic

A formal traffic memorandum is not required for public safety use. Based on a discussion with Chief Libby, we include a breakdown of the anticipated staffing schedule for the Fire Department, which includes crews who work 24-hour shifts. There are four shifts, with only one shift being on duty at a time. Shift change generally occurs between 6:30 am and 7 am when four people are going off duty and four new people are coming on duty.

The Police Department and Sheriff's Office have shift changes at 6:30- 7 am, 4:30 – 5 pm, and again at 9 pm. Each of those groups would be in and out and not leave vehicles in the lot.

Section 11

Stormwater Management

Section 11: Stormwater Management

The enclosed May 2026 comprehensive *Stormwater Management Report* is compiled in conformance with MDEP Chapter 500, Chapter 502, and local standards. The plan consists of a narrative, calculations, pre- and post-development drainage plans, inspection, maintenance, and housekeeping provisions. The appended site plan set shows erosion and sedimentation control measures, notes, and details.

SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

STORMWATER MANAGEMENT REPORT

For

NORTH WINDHAM PUBLIC SAFETY BUILDING
WINDHAM, MAINE

Prepared for:

Great Falls Construction
20 Mechanic Street
Gorham, ME 04038

Prepared by:

Sebago Technics, Inc.
75 John Roberts Rd, Suite 4A
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May 2026

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STORMWATER MANAGEMENT REPORT
NORTH WINDHAM PUBLIC SAFETY BUILDING
WINDHAM, MAINE

1. Introduction

This Stormwater Management Report has been prepared to present analyses performed to address the potential impacts associated with the project due to proposed modification in stormwater runoff characteristics and land cover changes. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and to comply with applicable regulatory requirements.

2. Existing Conditions

The project site consists of a developed parcel and an easement located on Franklin Drive off of Roosevelt Trail (Route 302) in Windham, Maine. The majority of the project site exists on a parcel identified as Lot 14 on the Town of Windham Tax Map 70. The easement consists of approximately 0.7± acres on the northeast area of the parcel identified as Lot 14A on the Town of Windham Tax Map 70. The combined area of the parcel and easement is approximately 5.2± acres. The site is bounded by commercial developments to the northwest and southwest, Veterans Memorial Drive to the southeast, and undeveloped woodlands to the northeast.

Slopes on the site range from 1% to 15%, with slopes generally increasing towards the existing infiltration basin on the eastern half of the site. The drainage of the site is split, with about two-thirds of the site draining into the infiltration basin. The rest of the site, the majority of which exists in the easement, drains to catch basins in the parking lot of the retail site to the southwest. These catch basins are part of an existing subsurface stormwater recharge system.

The site is tributary to Little Sebago Lake, which is listed in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations as a Lake Most at Risk from New Development but is not severely blooming. Phosphorous calculations have been included in Appendix 1.

The proposed development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map (FIRM) Numbers 23005C0479F, effective June 20, 2024.

3. Soils

Soil characteristics were obtained via the United States Department of Agriculture and Natural Resources Conservation Service's Web Soil Survey. The Hydrologic Groups (HSG) of the soils is classified by Technical Release TR-55 of the Soil Conservation Service as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
HgB	Hermon Sandy Loam	3-8	A
HlB	Hinckley Loamy Sand	3-8	A

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Class the Class D (Medium Intensity) NRCS Web Soil Survey is included as Appendix 4.

4. Proposed Site Improvements

The proposed development will consist of a two-story, 6,007 square foot building, and an attached 6,175 square foot apparatus bay. The building will provide office and bunking space for the fire and police departments. The apparatus bay will contain five bays for department vehicle storage and maintenance, with additional storage for equipment. An approximately 2,100 square foot addition is also proposed as the second phase of the project. The facility will include 40 parking spaces. The project will result in the creation of approximately 0.83 acres of new impervious area, and 1.62 acres of developed area. Additionally, the project will result in the elimination of 0.14 acres of impervious area.

5. Existing Conditions Model

The existing conditions watershed plan consists of two subcatchments labeled 1S and 2S in the HydroCAD model. Two locations were identified as Points of Analyses (POA) for comparing peak runoff rates.

POA-1 is located in the middle of the site within an existing infiltration basin where runoff leaves the site via infiltration. Watershed 1S contributes runoff to this study point with an overall runoff area of approximately 4.7 acres. POA-1 and the associated drainage area are tributary to Little Sebago Lake.

POA-2 is located in the southwest corner of the lot where runoff drains to a system of catch basins, which drain to a subsurface stormwater recharge area, where runoff leaves the site via infiltration. Watershed 2S contributes runoff to this study point with an overall runoff area of approximately 2.5 acres. POA-2 and the associated drainage area are also tributary to Little Sebago Lake.

6. Proposed Conditions Model

The proposed conditions watershed area consists of the same overall area as the existing conditions plan, however, the existing conditions subcatchments have been broken into smaller watersheds as a result of the proposed development.

POA-1: Subcatchment 1.0S contributes runoff to POA-1 with an area of approximately 3.7 acres, primarily consisting of undeveloped land which will remain unaffected by the project. Runoff from this area will continue to flow to the existing infiltration basin. Subcatchments 1.1S and 1.2S represent the proposed administration building roof, which are conveyed into two stone drip edges (DE-1 and DE-2) prior to being infiltrated and discharged into the ground. Subcatchments 1.3S through 1.6S represent the proposed parking and associated pedestrian facility areas which are conveyed to a closed drainage system prior to discharging to the subsurface chamber system (INF-1). Subcatchment 1.7S represents the roof of the apparatus bay and Phase 2 addition, which drain to roof drains where water is conveyed to the subsurface chamber system (INF-1). The overall runoff area associated with POA-1 will not change as a result of the proposed development.

POA-2: Subcatchment 2.0S represents the proposed driveway and paved access associated with the proposed apparatus bays. The majority of this area consists of existing impervious area which drain to a series of catch basins that are connected to the existing subsurface stormwater recharge area. Although the proposed access drive is causing about 6,500 square feet of new impervious area to drain to the existing stormwater system, the total area tributary to the system is not changing, and the impervious area is decreasing.

The three Best Management Practices (subsurface chamber system with infiltration and two drip edges) have been designed and sized in accordance with DEP BMP standards contained within Chapter 500 and the BMP Manual. Infiltration testing was conducted throughout the proposed stormwater areas, which indicated that the soil infiltration rate was greater than the maximum allowed rate of 2.41 inches/hour by the Maine DEP. In each BMP, stormwater runoff will be filtered through a layer of sand with the proper infiltration rate, prior to infiltrating into the ground. Infiltration rate test logs can be referenced in Appendix 4 and the sizing calculations in Appendix 1.

7. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

Since the project will disturb more than one (1) acre of land area, MDEP Basic Standards apply, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. We have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 3) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

Phosphorus Standards - Chapter 500, Section 4(D)

As the proposed development is tributary to Little Sebago Lake which is listed by the Maine Department of Environmental Protection as a lake most at risk within Chapter 502 and over

20,000 square feet of impervious area is proposed, the project will be required to meet the requirements of the Phosphorous Standard as listed in Section 4(D) of Chapter 500. One subsurface chamber system with infiltration and two drip edges have been designed to minimize phosphorous export from the development.

Phosphorous Allocation			
Watershed	**MDEP Project Phosphorous Budget (lbs P/year)**	**Existing Project Phosphorous Export (lbs P/year)**	**Proposed Project Phosphorous Export (lbs P/year)**
Little Sebago Lake	0.15	1.28	0.51

The table above shows that, overall, the project results in a net decrease of 0.71 lbs P/year. The proposed development exceeds the MDEP Project Phosphorous Budget by 0.24 lbs P/year. Since the phosphorus export has been reduced by 60.32%, which is greater than the required 60%, the project is eligible to pay a compensation fee, in lieu of additional treatment. The compensation fee was calculated to be $5,929. MDEP Phosphorous design worksheets can be found in Appendix 1.

Flooding Standard - Chapter 500, Section 4(F)

Since the planned project will require a Site Law Permit modification, MDEP Flooding Standards must be met. The Flooding Standard requires a project's stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. As such, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)." HydroCAD computer software was utilized to perform the calculations.

HydroCAD Stormwater Analysis

Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. The type of land cover was determined based on survey data, field reconnaissance and aerial photography. Times of concentration were determined from site topographic maps in accordance with SCS procedures.

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for York County are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Cumberland County	
2-year	3.1
10-year	4.6
25-year	5.8

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	0.0	0.0
	10-year	0.5	0.5
	25-year	2.0	1.8
POA-2	2-year	5.9	5.7
	10-year	8.8	8.6
	25-year	11.3	11.2

The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 2) along with the Stormwater Management Plans (Appendix 5). The model predicts that the peak runoff rates in the post-development condition at Points of Analysis 1 and 2 are at or below pre-development runoff rates for the 2, 10, and 25-year storm events with implementation of the proposed stormwater management practices.

8. Summary

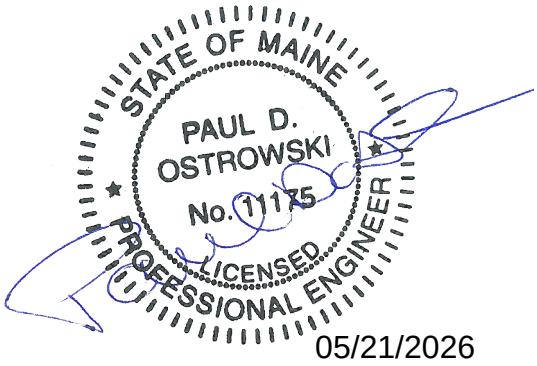
The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. Stormwater BMP's provide treatment for the phosphorus export resulting from the development in accordance with MDEP guidelines. Runoff discharging from the site will be at or below pre-development conditions for the 2, 10, and 25-year storm events at each study point. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

Prepared by:

SEBAGO TECHNICS, INC.

Madison Ala, EI
Civil Engineer

PDO/mra



05/21/2026

Appendix 1

Stormwater Quality Calculations

Worksheet 1 - PPB calculations

Project Name: North Windham Public Safety

Lake Watershed: Little Sebago Lake

Town: Windham, ME

Standard Calculations

Watershed per acre phosphorus budget (Appendix C)	**PAPB**	0.038	lbs P/acre/year
Total acreage of development parcel:	**TA**	3.9	acres
NWI wetland acreage:	**WA**	0.00	acres
Steep slope acreage:	**SA**	0.00	acres
Project acreage: A = TA - (WA+ SA)	**A**	3.90	acres
Project Phosphorus Budget: PPB = P x A	**PPB**	0.15	**lbs P/year**

Small Watershed Adjustment

If Project Acreage (A) is greater than the threshold acreage for the small watershed threshold (SWT, from pertinent lake and town info in the table in Appendix C), calculate an alternative PPB using the analysis below and use this value if it is less than the the Standard Calculation PPB.

Small Watershed Threshold (Appendix C):	**SWT**	45	acres
Project acreage:	**A**	3.900	acres
Allowable increase in town's share of annual phosphorus load to lake (Appendix C):	**FC**	0.047	lbs P/year
Area available for development (Appendix C):	**AAD**	7837	acres
Ratio of A to AAD (R=A/AAD)	**R**	N/A	

Project Phosphorus Budget

If R < 0.5, PPB = [(FC x R)/2] + [FC/4]	**PPB**	N/A	**lbs P/year**
If R> 0.5, PPB = FC x R	**PPB**	N/A	**lbs P/year**

Worksheet 2
Pre-PPE and Post-PPE Calculations

Calculate phosphorus export from development for before and after treatment
Use as many sheets as needed for each development type (commercial, roads, residential lots, etc.)

Project name: North Windham Public Safety - Windham **Development Type**: Municipal **Sheet #:** 2

Land Surface Type with description or Lot #(s)	Acres or # of lots	Export Coefficient from Table 3.1 Table 3.2	Pre-treatment Algal Av. P Export (lbs P/year)	Treatment Factor for BMP(s) from Chapter 6	Post- treatment Algal Av. P Export (lbs P/year)	Description of BMPs	CALCULATED TF	MIN TF
Roof	0.19	0.50	0.09	0.10	0.01	INF-1	0.10	0.1
Parking	0.36	1.75	0.62	0.10	0.06			
Landscaped Areas	0.21	0.20	0.04	0.10	0.00			
Sidewalk	0.04	0.5	0.02	0.10	0.00			
Roof	0.08	0.50	0.04	0.10	0.00	DE-1	0.10	0.1
Roof	0.07	0.50	0.03	0.10	0.00	DE-2	0.10	0.1
Roof	0.01	0.50	0.00	1.00	0.00	Untreated		
Parking	0.19	1.75	0.33	1.00	0.33			
Landscaped Areas	0.37	0.20	0.07	1.00	0.07			
Sidewalk	0.02	0.5	0.01	1.00	0.01			
		Total Pre-PPE (lbs P/year)	1.28	**Total PostPPE (lbs P/year)**	0.51			

*MIN TREATMENT FACTOR (TF) USED WHEN CALCULATED TF WAS LESS THAN MIN TF, PER VOLUME II - PHOSPHORUS CONTROL MANUAL
*LOW EXPORT OPTION COEFFICIENTS FROM TABLE 3.1 USED DUE TO SURFACES BEING STABILIZED WITH PAVEMENT OR VEGETATION & PHOSPHORUS RESTRICTION ON SITE

Appendix D: Worksheet 3 - Mitigation credit

Project name: North Windham Public Safety - Windham **Development Type**: Muncipal **Sheet #:** 3

Mitigation credit when a pre-existing source is being eliminated

Mitigation Source Area Land Use	Acres	Export Coefficient (lbs P/acre/year)	Modifier	Pre-treatment Historical P Export (lbs P/year)	Treatment Factor for Historical BMP(s) (1.0 if no BMPs)	Historical P Export (lbs P/year)		Mitigation Credit (lbs P/year)	Comments
Eliminate Parking	0.1354	1.75	1	0.24	0.5	0.12		0.12	
				Total source elimination mitiagion credit (SEC)				**0.12**	**lbs P/year**

Mitigation credit when a pre-existing source is treated by a new BMP

Mitigation Source Area Land Use	Acres	Export Coefficient (lbs P/acre/year)	Modifier	Pre-treatment Historical P Export (lbs P/year)	Treatment Factor for Historical BMP(s) (1.0 if no BMPs)	Historical P Export (lbs P/year)	Treatment Factor for New BMP(s) Chapter 6	Mitigation Credit (lbs P/year)	Comments
				Total source treatment mitiagion credit (STC)				**0**	**lbs P/year**

TOTAL MITIGATION CREDIT (SEC + STC)	**0.1185147**	**lbs P/year**

WORKSHEET 4 - PROJECT PHOSPHORUS EXPORT SUMMARY

Summarizing the project's algal available phosphorus export (PPE)

Project Name: North Windham Public Safety - Windham

Project Phosphorus Budget - Worksheet 1	**PPB**	0.15	lbs P/year
Total Pre-Treatment Phosphorus Export - Worksheet 2	**Pre-PPE**	1.28	lbs P/year
Total Post-Treatment Phosphorus Export - Worksheet 2	**Post-PPE**	0.51	lbs P/year
Total Phosphorus Mitigation Credit - Worksheet 3	**TMC**	0.12	lbs P/year
Project Phosphorus Export (Post-PPE - TMC)	**PPE**	0.39	lbs P/year

Is the Project Phosphorus Export ≤ the Project Phosphorus Budget? (PPE≤PPB)

*If **YES**, PPE is less than or equal to PPB and the project meets its phosphorus budget .* *If **NO,** PPE is greater than PPB, more reduction in phosphorus export is required or the payment of a compensation fee may be an option*	NO
The amount of phosphorus that needs further treatment or compensation	0.24 lbs P/year

Has Project Phosphorus Export been sufficiently reduced?
Is (Pre-PPE - Post-PPE)/Pre-PPE greater than 0.60?

*If **YES**, in some watersheds the compensation fee is an available option.* *If **NO**, more treatment must be provided. PPE must be further reduced.*	YES
*The post-treatment phosphorus export must be less than 40% of the pre-treatment export (Post-PPE < 0.4*Pre-PPE)*	60.32 %

If the project is located in a watershed that is eligible for a compensation fee (or is a residential subdivision with buffers), a compensation fee may be appropriate as follows:

If Project Export has been reduced by greater than 60% and less than 75%, $25,000 per pound minus $833 per 1% Percent Export	**$5,929**
If Project Export has been reduced by greater than 75%, $12,500 per pound minus $500 per 1% Project Export	

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JOB
SHEET NO. 1 OF 1
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FILE NAME 240431-01 WQC.xlsx PRNT DATE 5/21/2026

UNDERDRAINED SUBSURFACE SAND FILTER

Task: Calculate water quality volume per MDEP chapter 500 regulations

References
1. Maine DEP Chapter 500, Section 4.C.(3)(b)
"must detain a runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the subcatchment's landscaped area"

2. Maine DEP Best Management Practices Stormwater Manual, Section 7.3.2
a. "detain runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the subcatchment's landscaped area"
b. "surface area of the sand filter bed and chamber system must be at least equal to 5% of the impervious area draining to it and 2% of the landscaped area."
c. "treatment flow rate for the Stormtech Isolator Row is the projected one year peak flow rate for the drainage area feeding the Isolator Row"

Flow rates:

SC-310	0.10	cfs/chamber
SC-740	0.20	cfs/chamber
DC-780	0.20	cfs/chamber
MC-3500	0.30	cfs/chamber

d. Inspection ports to the underdrain gravel layer should be provided with at least one port per 500 square-feet of subsurface filter area.

Tributary to Subsurface Sand Filter: SS-INF

Landscaped Area	9,200.00	SF	
Impervious Area	29,000.00	SF	

Treatment Volume

Required (0.4" X Landscaped + 1.0" X Impervious)

Landscaped Area	9,200.00	SF	Volume	306.7	
Impervious Area	29,000.00	SF	Volume	2,416.7	

Treatment Volume Required	2,723.3	CF	0.063	AF
Provided Treatment Volume	9,771.0	CF		

Sediment Pre-Treatment

Per Reference 2.c above

One year flow rate out put from Hydrocad:	1.40	cfs
ISO Row sizing for: **SC-800**	**0.2**	cfs
Total number of Isolator Row Chambers required:	7	

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Treatment Calculations for Proposed Roof Drip Edge (DE-1)									
WQV Calculation									
(WQV = Water Quality Volume)									
Total Impervious Area =			3,500	sf					
WQV (MDEP)= 1" x Impervious Area =				291.7	cf =	0.007	acre-ft		
Length of Trench=				110.0	ft.				
Width of Trench=				4.0	ft.				
Depth of Stone				48.0	in.	40% porosity			
Depth of Sand Media=					in.	20% porosity			
WQV Provided = Area of Trench * (Depth of stone*stone porosity + Depth of sand*sand porosity)									
WQV for first 1" =			704.0						
Additional WQV Provided =			0.0	cf					
Total WQV Provided =			**704.0**	**cf**					

The stone reservoir volume for the drip edge filter was designed to provide the storage required to convey the water quality storm (storm that generates 1" of runoff over the roof) through the filter media under the stone. Additonal water quality is provided in the porosity of the underdrain sand.

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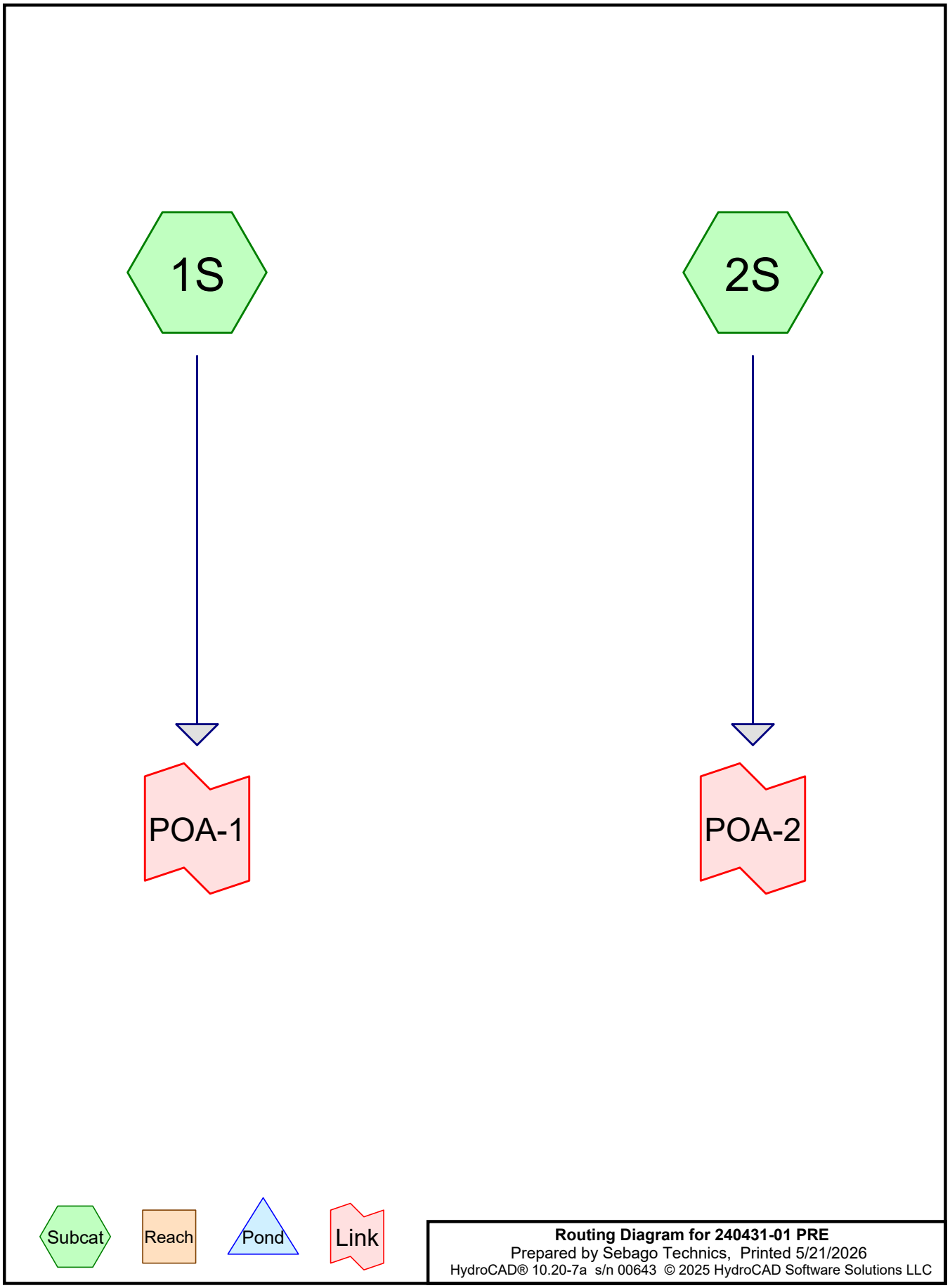
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FILE NAME		PRINT DATE	5/21/2026

Treatment Calculations for Proposed Roof Drip Edge (DE-2)									
WQV Calculation									
(WQV = Water Quality Volume)									
Total Impervious Area =			3000.0	sf					
WQV (MDEP)= 1" x Impervious Area =				250.0	cf =	0.006	acre-ft		
Length of Trench=				90.0	ft.				
Width of Trench=				4.0	ft.				
Depth of Stone				48.0	in.	40% porosity			
Depth of Sand Media=					in.	20% porosity			
WQV Provided = Area of Trench * (Depth of stone*stone porosity + Depth of sand*sand porosity)									
WQV for first 1" =			576.0						
Additional WQV Provided =			0.0	cf					
Total WQV Provided =			**576.0**	**cf**					

The stone reservoir volume for the drip edge filter was designed to provide the storage required to convey the water quality storm (storm that generates 1" of runoff over the roof) through the filter media under the stone. Additonal water quality is provided in the porosity of the underdrain sand.

Appendix 2A

Existing Conditions HydroCAD Summary



Routing Diagram for 240431-01 PRE
Prepared by Sebago Technics, Printed 5/21/2026
HydroCAD® 10.20-7a s/n 00643 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
48,500	49	50-75% Grass cover, Fair, HSG A (1S)
85,500	98	Paved roads w/curbs & sewers, HSG A (2S)
178,800	43	Woods/grass comb., Fair, HSG A (1S, 2S)
312,800	**59**	**TOTAL AREA**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=205,500 sf 0.00% Impervious Runoff Depth=0.03"
Flow Length=190' Tc=6.0 min CN=WQ Runoff=0.0 cfs 559 cf

Subcatchment2S: Runoff Area=107,300 sf 79.68% Impervious Runoff Depth=2.29"
Flow Length=280' Tc=6.0 min CN=WQ Runoff=5.9 cfs 20,460 cf

Link POA-1: Inflow=0.0 cfs 559 cf
Primary=0.0 cfs 559 cf

Link POA-2: Inflow=5.9 cfs 20,460 cf
Primary=5.9 cfs 20,460 cf

Total Runoff Area = 312,800 sf Runoff Volume = 21,019 cf Average Runoff Depth = 0.81"
72.67% Pervious = 227,300 sf 27.33% Impervious = 85,500 sf

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=205,500 sf 0.00% Impervious Runoff Depth=0.31"
Flow Length=190' Tc=6.0 min CN=WQ Runoff=0.5 cfs 5,251 cf

Subcatchment2S: Runoff Area=107,300 sf 79.68% Impervious Runoff Depth=3.53"
Flow Length=280' Tc=6.0 min CN=WQ Runoff=8.8 cfs 31,546 cf

Link POA-1: Inflow=0.5 cfs 5,251 cf
Primary=0.5 cfs 5,251 cf

Link POA-2: Inflow=8.8 cfs 31,546 cf
Primary=8.8 cfs 31,546 cf

Total Runoff Area = 312,800 sf Runoff Volume = 36,797 cf Average Runoff Depth = 1.41"
72.67% Pervious = 227,300 sf 27.33% Impervious = 85,500 sf

Summary for Subcatchment 1S:

Runoff = 2.0 cfs @ 12.13 hrs, Volume= 11,863 cf, Depth= 0.69"
Routed to Link POA-1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
157,000	43	Woods/grass comb., Fair, HSG A
48,500	49	50-75% Grass cover, Fair, HSG A
205,500		Weighted Average
205,500		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.5	20	0.0750	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.10"
0.4	30	0.0330	1.27		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.5	40	0.0625	1.25		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
0.8	70	0.0430	1.45		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.2	30	0.2000	3.13		**Shallow Concentrated Flow, E-F** Short Grass Pasture Kv= 7.0 fps
0.6					**Direct Entry, DIRECT ENTRY**
6.0	190	Total			

Summary for Subcatchment 2S:

Runoff = 11.3 cfs @ 12.08 hrs, Volume= 40,728 cf, Depth= 4.55"
Routed to Link POA-2 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
85,500	98	Paved roads w/curbs & sewers, HSG A
21,800	43	Woods/grass comb., Fair, HSG A
107,300		Weighted Average
21,800		20.32% Pervious Area
85,500		79.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	50	0.1000	0.28		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 3.10"
1.7	230	0.0130	2.31		**Shallow Concentrated Flow, B-C** Paved Kv= 20.3 fps
1.3					**Direct Entry, DIRECT ENTRY**
6.0	280	Total			

Summary for Link POA-1:

Inflow Area = 205,500 sf, 0.00% Impervious, Inflow Depth = 0.69" for 25 YR event
Inflow = 2.0 cfs @ 12.13 hrs, Volume= 11,863 cf
Primary = 2.0 cfs @ 12.13 hrs, Volume= 11,863 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

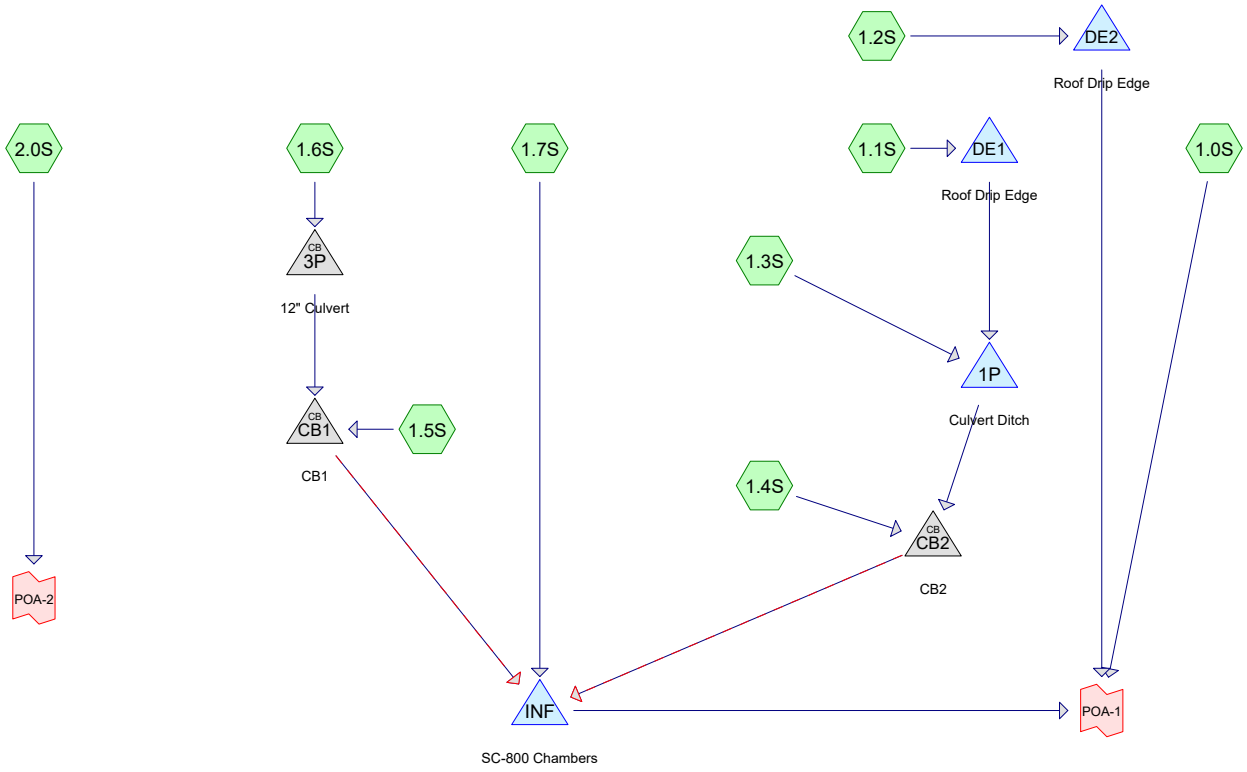
Summary for Link POA-2:

Inflow Area = 107,300 sf, 79.68% Impervious, Inflow Depth = 4.55" for 25 YR event
Inflow = 11.3 cfs @ 12.08 hrs, Volume= 40,728 cf
Primary = 11.3 cfs @ 12.08 hrs, Volume= 40,728 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Appendix 2B

Proposed Conditions
HydroCAD Summary



Subcat Reach Pond Link

Routing Diagram for 240431-01 POST
Prepared by Sebago Technics, Printed 5/21/2026
HydroCAD® 10.20-7a s/n 00643 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
75,100	49	50-75% Grass cover, Fair, HSG A (1.0S, 1.3S, 1.6S, 2.0S)
100,100	98	Paved parking, HSG A (1.0S, 1.4S, 1.5S, 1.6S, 2.0S)
3,500	98	Roofs (1.1S)
11,100	98	Roofs, HSG A (1.2S, 1.7S)
800	98	Sidewalks, HSG A (1.3S)
122,200	43	Woods/grass comb., Fair, HSG A (1.0S, 2.0S)
312,800	**65**	**TOTAL AREA**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1.0S: Runoff Area=166,700 sf 0.24% Impervious Runoff Depth=0.04"
Flow Length=190' Tc=6.0 min CN=WQ Runoff=0.0 cfs 623 cf

Subcatchment1.1S: Runoff Area=3,500 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.2 cfs 836 cf

Subcatchment1.2S: Runoff Area=3,000 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.2 cfs 717 cf

Subcatchment1.3S: Runoff Area=4,900 sf 16.33% Impervious Runoff Depth=0.54"
Tc=6.0 min CN=WQ Runoff=0.1 cfs 222 cf

Subcatchment1.4S: Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.2 cfs 860 cf

Subcatchment1.5S: Runoff Area=3,200 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.2 cfs 765 cf

Subcatchment1.6S: Runoff Area=14,800 sf 65.54% Impervious Runoff Depth=1.91"
Flow Length=200' Tc=6.0 min CN=WQ Runoff=0.7 cfs 2,357 cf

Subcatchment1.7S: Runoff Area=8,100 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=0.6 cfs 1,936 cf

Subcatchment2.0S: Runoff Area=105,000 sf 79.24% Impervious Runoff Depth=2.29"
Flow Length=410' Tc=6.0 min CN=WQ Runoff=5.7 cfs 20,004 cf

Pond 1P: Culvert Ditch Peak Elev=306.70' Storage=39 cf Inflow=0.1 cfs 222 cf
12.0" Round Culvert n=0.013 L=40.0' S=0.0125 '/' Outflow=0.0 cfs 222 cf

Pond 3P: 12" Culvert Peak Elev=306.97' Inflow=0.7 cfs 2,357 cf
12.0" Round Culvert n=0.013 L=39.0' S=0.0103 '/' Outflow=0.7 cfs 2,357 cf

Pond CB1: CB1 Peak Elev=306.69' Inflow=0.9 cfs 3,122 cf
Primary=0.9 cfs 3,122 cf Secondary=0.0 cfs 0 cf Outflow=0.9 cfs 3,122 cf

Pond CB2: CB2 Peak Elev=306.40' Inflow=0.3 cfs 1,083 cf
Primary=0.3 cfs 1,083 cf Secondary=0.0 cfs 0 cf Outflow=0.3 cfs 1,083 cf

Pond DE1: Roof Drip Edge Peak Elev=305.60' Storage=281 cf Inflow=0.2 cfs 836 cf
Discarded=0.0 cfs 836 cf Primary=0.0 cfs 0 cf Outflow=0.0 cfs 836 cf

Pond DE2: Roof Drip Edge Peak Elev=305.71' Storage=246 cf Inflow=0.2 cfs 717 cf
Discarded=0.0 cfs 717 cf Primary=0.0 cfs 0 cf Outflow=0.0 cfs 717 cf

Pond INF: SC-800 Chambers Peak Elev=306.05' Storage=1,473 cf Inflow=1.7 cfs 6,140 cf
Discarded=0.3 cfs 6,140 cf Primary=0.0 cfs 0 cf Outflow=0.3 cfs 6,140 cf

Link POA-1: Inflow=0.0 cfs 623 cf
Primary=0.0 cfs 623 cf

Link POA-2: Inflow=5.7 cfs 20,004 cf
Primary=5.7 cfs 20,004 cf

Total Runoff Area = 312,800 sf Runoff Volume = 28,321 cf Average Runoff Depth = 1.09"
63.08% Pervious = 197,300 sf 36.92% Impervious = 115,500 sf

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1.0S: Runoff Area=166,700 sf 0.24% Impervious Runoff Depth=0.33"
Flow Length=190' Tc=6.0 min CN=WQ Runoff=0.5 cfs 4,633 cf

Subcatchment1.1S: Runoff Area=3,500 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.4 cfs 1,273 cf

Subcatchment1.2S: Runoff Area=3,000 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.3 cfs 1,091 cf

Subcatchment1.3S: Runoff Area=4,900 sf 16.33% Impervious Runoff Depth=1.12"
Tc=6.0 min CN=WQ Runoff=0.1 cfs 459 cf

Subcatchment1.4S: Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.4 cfs 1,309 cf

Subcatchment1.5S: Runoff Area=3,200 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.3 cfs 1,164 cf

Subcatchment1.6S: Runoff Area=14,800 sf 65.54% Impervious Runoff Depth=3.03"
Flow Length=200' Tc=6.0 min CN=WQ Runoff=1.0 cfs 3,736 cf

Subcatchment1.7S: Runoff Area=8,100 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.8 cfs 2,946 cf

Subcatchment2.0S: Runoff Area=105,000 sf 79.24% Impervious Runoff Depth=3.54"
Flow Length=410' Tc=6.0 min CN=WQ Runoff=8.6 cfs 31,007 cf

Pond 1P: Culvert Ditch Peak Elev=306.75' Storage=57 cf Inflow=0.1 cfs 459 cf
12.0" Round Culvert n=0.013 L=40.0' S=0.0125 '/' Outflow=0.1 cfs 459 cf

Pond 3P: 12" Culvert Peak Elev=307.10' Inflow=1.0 cfs 3,736 cf
12.0" Round Culvert n=0.013 L=39.0' S=0.0103 '/' Outflow=1.0 cfs 3,736 cf

Pond CB1: CB1 Peak Elev=306.86' Inflow=1.4 cfs 4,900 cf
Primary=1.4 cfs 4,900 cf Secondary=0.0 cfs 0 cf Outflow=1.4 cfs 4,900 cf

Pond CB2: CB2 Peak Elev=306.48' Inflow=0.4 cfs 1,768 cf
Primary=0.4 cfs 1,768 cf Secondary=0.0 cfs 0 cf Outflow=0.4 cfs 1,768 cf

Pond DE1: Roof Drip Edge Peak Elev=306.83' Storage=498 cf Inflow=0.4 cfs 1,273 cf
Discarded=0.0 cfs 1,273 cf Primary=0.0 cfs 0 cf Outflow=0.0 cfs 1,273 cf

Pond DE2: Roof Drip Edge Peak Elev=307.02' Storage=435 cf Inflow=0.3 cfs 1,091 cf
Discarded=0.0 cfs 1,091 cf Primary=0.0 cfs 0 cf Outflow=0.0 cfs 1,091 cf

Pond INF: SC-800 Chambers Peak Elev=306.31' Storage=2,820 cf Inflow=2.6 cfs 9,613 cf
Discarded=0.3 cfs 9,613 cf Primary=0.0 cfs 0 cf Outflow=0.3 cfs 9,613 cf

Link POA-1: Inflow=0.5 cfs 4,633 cf
Primary=0.5 cfs 4,633 cf

Link POA-2: Inflow=8.6 cfs 31,007 cf
Primary=8.6 cfs 31,007 cf

Total Runoff Area = 312,800 sf Runoff Volume = 47,616 cf Average Runoff Depth = 1.83"
63.08% Pervious = 197,300 sf 36.92% Impervious = 115,500 sf

Summary for Subcatchment 1.0S:

Runoff = 1.8 cfs @ 12.13 hrs, Volume= 10,156 cf, Depth= 0.73"
Routed to Link POA-1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
115,200	43	Woods/grass comb., Fair, HSG A
51,100	49	50-75% Grass cover, Fair, HSG A
400	98	Paved parking, HSG A
166,700		Weighted Average
166,300		99.76% Pervious Area
400		0.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.5	20	0.0750	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.10"
0.4	30	0.0330	1.27		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.5	40	0.0625	1.25		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
0.8	70	0.0430	1.45		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
0.2	30	0.2000	3.13		**Shallow Concentrated Flow, E-F** Short Grass Pasture Kv= 7.0 fps
0.6					**Direct Entry, DIRECT ENTRY**
6.0	190	Total			

Summary for Subcatchment 1.1S:

Runoff = 0.5 cfs @ 12.08 hrs, Volume= 1,622 cf, Depth= 5.56"
Routed to Pond DE1 : Roof Drip Edge

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

	Area (sf)	CN	Description
*	3,500	98	Roofs
	3,500		100.00% Impervious Area

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

Summary for Subcatchment 1.2S:

Runoff = 0.4 cfs @ 12.08 hrs, Volume= 1,391 cf, Depth= 5.56"
Routed to Pond DE2 : Roof Drip Edge

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
3,000	98	Roofs, HSG A
3,000		100.00% Impervious Area

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

Summary for Subcatchment 1.3S:

Runoff = 0.2 cfs @ 12.10 hrs, Volume= 705 cf, Depth= 1.73"
Routed to Pond 1P : Culvert Ditch

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

	Area (sf)	CN	Description
*	800	98	Sidewalks, HSG A
	4,100	49	50-75% Grass cover, Fair, HSG A
	4,900		Weighted Average
	4,100		83.67% Pervious Area
	800		16.33% Impervious Area

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

Summary for Subcatchment 1.4S:

Runoff = 0.5 cfs @ 12.08 hrs, Volume= 1,669 cf, Depth= 5.56"
Routed to Pond CB2 : CB2

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
3,600	98	Paved parking, HSG A
3,600		100.00% Impervious Area

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

Summary for Subcatchment 1.5S:

Runoff = 0.4 cfs @ 12.08 hrs, Volume= 1,483 cf, Depth= 5.56"
Routed to Pond CB1 : CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
3,200	98	Paved parking, HSG A
3,200		100.00% Impervious Area

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

Summary for Subcatchment 1.6S:

Runoff = 1.4 cfs @ 12.09 hrs, Volume= 4,912 cf, Depth= 3.98"
Routed to Pond 3P : 12" Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
9,700	98	Paved parking, HSG A
5,100	49	50-75% Grass cover, Fair, HSG A
14,800		Weighted Average
5,100		34.46% Pervious Area
9,700		65.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	40	0.0200	1.13		**Sheet Flow, A-B** Smooth surfaces n= 0.011 P2= 3.10"
1.1	130	0.0100	2.03		**Shallow Concentrated Flow, B-C** Paved Kv= 20.3 fps
0.7	30	0.0100	0.70		**Shallow Concentrated Flow, C-D** Short Grass Pasture Kv= 7.0 fps
3.6					**Direct Entry, DIRECT ENTRY**
6.0	200	Total			

Summary for Subcatchment 1.7S:

Runoff = 1.1 cfs @ 12.08 hrs, Volume= 3,754 cf, Depth= 5.56"
Routed to Pond INF : SC-800 Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
8,100	98	Roofs, HSG A
8,100		100.00% Impervious Area

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

Summary for Subcatchment 2.0S:

Runoff = 11.2 cfs @ 12.08 hrs, Volume= 40,123 cf, Depth= 4.59"
Routed to Link POA-2 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.80"

Area (sf)	CN	Description
83,200	98	Paved parking, HSG A
14,800	49	50-75% Grass cover, Fair, HSG A
7,000	43	Woods/grass comb., Fair, HSG A
105,000		Weighted Average
21,800		20.76% Pervious Area
83,200		79.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	40	0.2000	0.84		**Sheet Flow, A-B** Fallow n= 0.050 P2= 3.10"
0.2	40	0.0200	2.87		**Shallow Concentrated Flow, B-C** Paved Kv= 20.3 fps
1.6	150	0.0500	1.57		**Shallow Concentrated Flow, C-D** Short Grass Pasture Kv= 7.0 fps
0.6	70	0.0100	2.03		**Shallow Concentrated Flow, D-E** Paved Kv= 20.3 fps
0.2	10	0.0100	0.70		**Shallow Concentrated Flow, E-F** Short Grass Pasture Kv= 7.0 fps
0.8	100	0.0100	2.03		**Shallow Concentrated Flow, F-G** Paved Kv= 20.3 fps
1.8					**Direct Entry,**
6.0	410	Total			

Summary for Pond 1P: Culvert Ditch

Inflow Area = 8,400 sf, 51.19% Impervious, Inflow Depth = 1.01" for 25 YR event
Inflow = 0.2 cfs @ 12.10 hrs, Volume= 705 cf
Outflow = 0.1 cfs @ 12.17 hrs, Volume= 705 cf, Atten= 24%, Lag= 4.4 min
Primary = 0.1 cfs @ 12.17 hrs, Volume= 705 cf
Routed to Pond CB2 : CB2

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 306.80' @ 12.17 hrs Surf.Area= 395 sf Storage= 79 cf

Plug-Flow detention time= 31.3 min calculated for 705 cf (100% of inflow)
Center-of-Mass det. time= 31.2 min (851.0 - 819.8)

Volume	Invert	Avail.Storage	Storage Description
#1	306.60'	658 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
306.60	390	0	0
307.00	400	158	158
308.00	600	500	658

Device	Routing	Invert	Outlet Devices
#1	Primary	306.60'	**12.0" Round Culvert** L= 40.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 306.60' / 306.10' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.1 cfs @ 12.17 hrs HW=306.80' (Free Discharge)
1=Culvert (Inlet Controls 0.1 cfs @ 1.21 fps)

Summary for Pond 3P: 12" Culvert

Inflow Area = 14,800 sf, 65.54% Impervious, Inflow Depth = 3.98" for 25 YR event
Inflow = 1.4 cfs @ 12.09 hrs, Volume= 4,912 cf
Outflow = 1.4 cfs @ 12.09 hrs, Volume= 4,912 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.4 cfs @ 12.09 hrs, Volume= 4,912 cf
Routed to Pond CB1 : CB1

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 307.21' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	306.50'	**12.0" Round Culvert** L= 39.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 306.50' / 306.10' S= 0.0103 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.4 cfs @ 12.09 hrs HW=307.21' (Free Discharge)
1=Culvert (Inlet Controls 1.4 cfs @ 2.27 fps)

Summary for Pond CB1: CB1

Inflow Area = 18,000 sf, 71.67% Impervious, Inflow Depth = 4.26" for 25 YR event
Inflow = 1.8 cfs @ 12.09 hrs, Volume= 6,395 cf
Outflow = 1.8 cfs @ 12.09 hrs, Volume= 6,395 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.8 cfs @ 12.09 hrs, Volume= 6,395 cf
Routed to Pond INF : SC-800 Chambers
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond INF : SC-800 Chambers

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 307.01' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	306.10'	**12.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 306.10' / 306.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Secondary	310.00'	**2.0' long x 2.0' 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 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=1.8 cfs @ 12.09 hrs HW=307.00' (Free Discharge)
1=Culvert (Barrel Controls 1.8 cfs @ 3.12 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=306.10' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Summary for Pond CB2: CB2

Inflow Area = 12,000 sf, 65.83% Impervious, Inflow Depth = 2.37" for 25 YR event
Inflow = 0.6 cfs @ 12.09 hrs, Volume= 2,374 cf
Outflow = 0.6 cfs @ 12.09 hrs, Volume= 2,374 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.6 cfs @ 12.09 hrs, Volume= 2,374 cf
Routed to Pond INF : SC-800 Chambers
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond INF : SC-800 Chambers

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 306.55' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	306.10'	**12.0" Round Culvert** L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 306.10' / 306.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Secondary	310.00'	**2.0' long x 2.0' 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 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.6 cfs @ 12.09 hrs HW=306.55' (Free Discharge)
1=Culvert (Barrel Controls 0.6 cfs @ 2.42 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=306.10' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Summary for Pond DE1: Roof Drip Edge

Inflow Area = 3,500 sf,100.00% Impervious, Inflow Depth = 5.56" for 25 YR event
Inflow = 0.5 cfs @ 12.08 hrs, Volume= 1,622 cf
Outflow = 0.0 cfs @ 10.37 hrs, Volume= 1,622 cf, Atten= 95%, Lag= 0.0 min
Discarded = 0.0 cfs @ 10.37 hrs, Volume= 1,622 cf
Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond 1P : Culvert Ditch

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 307.98' @ 13.95 hrs Surf.Area= 440 sf Storage= 700 cf
Flood Elev= 308.00' Surf.Area= 440 sf Storage= 707 cf

Plug-Flow detention time= 228.2 min calculated for 1,622 cf (100% of inflow)
Center-of-Mass det. time= 228.2 min (973.8 - 745.7)

Volume	Invert	Avail.Storage	Storage Description
#1	304.00'	795 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
304.00	440	0.0	0	0
307.99	440	40.0	702	702
308.00	440	100.0	4	707
308.20	440	100.0	88	795

Device	Routing	Invert	Outlet Devices
#1	Primary	308.00'	**40.0' 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
#2	Discarded	304.00'	**2.410 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.0 cfs @ 10.37 hrs HW=304.04' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.0 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=304.00' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Summary for Pond DE2: Roof Drip Edge

Inflow Area = 3,000 sf,100.00% Impervious, Inflow Depth = 5.56" for 25 YR event
Inflow = 0.4 cfs @ 12.08 hrs, Volume= 1,391 cf
Outflow = 0.0 cfs @ 12.78 hrs, Volume= 1,391 cf, Atten= 90%, Lag= 41.8 min
Discarded = 0.0 cfs @ 10.26 hrs, Volume= 1,356 cf
Primary = 0.0 cfs @ 12.78 hrs, Volume= 34 cf
Routed to Link POA-1 :

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 308.00' @ 12.78 hrs Surf.Area= 360 sf Storage= 579 cf
Flood Elev= 308.00' Surf.Area= 360 sf Storage= 578 cf

Plug-Flow detention time= 227.2 min calculated for 1,390 cf (100% of inflow)
Center-of-Mass det. time= 227.2 min (972.8 - 745.7)

Volume	Invert	Avail.Storage	Storage Description
#1	304.00'	650 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
304.00	360	0.0	0	0
307.99	360	40.0	575	575
308.00	360	100.0	4	578
308.20	360	100.0	72	650

Device	Routing	Invert	Outlet Devices
#1	Primary	308.00'	**40.0' 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
#2	Discarded	304.00'	**2.410 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.0 cfs @ 10.26 hrs HW=304.04' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.0 cfs)

Primary OutFlow Max=0.0 cfs @ 12.78 hrs HW=308.00' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.0 cfs @ 0.09 fps)

Summary for Pond INF: SC-800 Chambers

Inflow Area = 38,100 sf, 75.85% Impervious, Inflow Depth = 3.94" for 25 YR event
Inflow = 3.4 cfs @ 12.09 hrs, Volume= 12,523 cf
Outflow = 0.3 cfs @ 11.49 hrs, Volume= 12,523 cf, Atten= 90%, Lag= 0.0 min
Discarded = 0.3 cfs @ 11.49 hrs, Volume= 12,523 cf
Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link POA-1 :

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 306.57' @ 12.93 hrs Surf.Area= 6,115 sf Storage= 4,101 cf
Flood Elev= 307.80' Surf.Area= 6,115 sf Storage= 9,782 cf

Plug-Flow detention time= 82.8 min calculated for 12,523 cf (100% of inflow)
Center-of-Mass det. time= 82.8 min (839.6 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	305.50'	5,190 cf	**53.75'W x 103.40'L x 3.75'H Field A** 20,842 cf Overall - 7,866 cf Embedded = 12,975 cf x 40.0% Voids
#2A	306.00'	7,866 cf	**ADS_StormTech SC-800 +Cap** x 154 Inside #1 Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap 154 Chambers in 11 Rows Cap Storage= 3.4 cf x 2 x 11 rows = 75.2 cf
#3B	305.50'	590 cf	**6.25'W x 89.17'L x 3.75'H Field B** 2,090 cf Overall - 614 cf Embedded = 1,476 cf x 40.0% Voids
#4B	306.00'	614 cf	**ADS_StormTech SC-800 +Cap** x 12 Inside #3 Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap Cap Storage= 3.4 cf x 2 x 1 rows = 6.8 cf
		14,261 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	305.90'	**12.0" Round Culvert** L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 305.90' / 305.50' S= 0.0080 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	307.74'	**6.0' 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	Discarded	305.50'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.3 cfs @ 11.49 hrs HW=305.54' (Free Discharge)
└**3=Exfiltration** (Exfiltration Controls 0.3 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=305.50' (Free Discharge)
└**1=Culvert** (Controls 0.0 cfs)
└**2=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Pond INF: SC-800 Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTechSC-800 +Cap (ADS StormTech®SC-800 with cap volume)
Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf
Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap
Cap Storage= 3.4 cf x 2 x 11 rows = 75.2 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

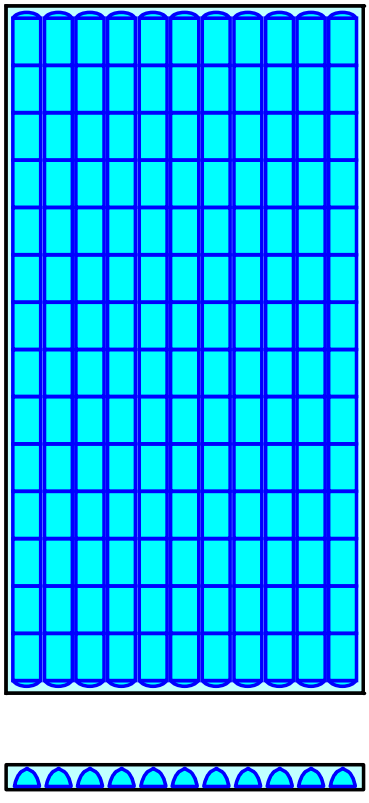
14 Chambers/Row x 7.12' Long +0.88' Cap Length x 2 = 101.40' Row Length +12.0" End Stone x 2 = 103.40' Base Length
11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width
6.0" Stone Base + 33.0" Chamber Height + 6.0" Stone Cover = 3.75' Field Height

154 Chambers x 50.6 cf + 3.4 cf Cap Volume x 2 x 11 Rows = 7,866.5 cf Chamber Storage

20,841.6 cf Field - 7,866.5 cf Chambers = 12,975.1 cf Stone x 40.0% Voids = 5,190.0 cf Stone Storage

Chamber Storage + Stone Storage = 13,056.5 cf = 0.300 af
Overall Storage Efficiency = 62.6%
Overall System Size = 103.40' x 53.75' x 3.75'

154 Chambers
771.9 cy Field
480.6 cy Stone



Pond INF: SC-800 Chambers - Chamber Wizard Field B

Chamber Model = ADS_StormTechSC-800 +Cap (ADS StormTech®SC-800 with cap volume)
Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf
Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap
Cap Storage= 3.4 cf x 2 x 1 rows = 6.8 cf

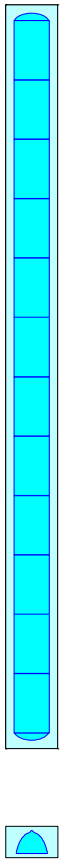
12 Chambers/Row x 7.12' Long +0.88' Cap Length x 2 = 87.17' Row Length +12.0" End Stone x 2 = 89.17' Base Length
1 Rows x 51.0" Wide + 12.0" Side Stone x 2 = 6.25' Base Width
6.0" Stone Base + 33.0" Chamber Height + 6.0" Stone Cover = 3.75' Field Height

12 Chambers x 50.6 cf + 3.4 cf Cap Volume x 2 x 1 Rows = 613.9 cf Chamber Storage

2,089.8 cf Field - 613.9 cf Chambers = 1,475.9 cf Stone x 40.0% Voids = 590.4 cf Stone Storage

Chamber Storage + Stone Storage = 1,204.3 cf = 0.028 af
Overall Storage Efficiency = 57.6%
Overall System Size = 89.17' x 6.25' x 3.75'

12 Chambers
77.4 cy Field
54.7 cy Stone



Summary for Link POA-1:

Inflow Area = 207,800 sf, 15.54% Impervious, Inflow Depth = 0.59" for 25 YR event
Inflow = 1.8 cfs @ 12.13 hrs, Volume= 10,190 cf
Primary = 1.8 cfs @ 12.13 hrs, Volume= 10,190 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Summary for Link POA-2:

Inflow Area = 105,000 sf, 79.24% Impervious, Inflow Depth = 4.59" for 25 YR event
Inflow = 11.2 cfs @ 12.08 hrs, Volume= 40,123 cf
Primary = 11.2 cfs @ 12.08 hrs, Volume= 40,123 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Appendix 3

Inspection, Maintenance and Housekeeping Plan

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

For:
North Windham Public Safety
Windham, ME

By:
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures as well as stormwater management facilities for the project. This plan also outlines several housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed

to operate as designed or proved inadequate for a particular location, and locations 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. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains

into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

A. Spill prevention: Controls must 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.

B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. 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.

C. Fugitive sediment and dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area

that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

Post-Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.

   A. Vegetated Areas:

   - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains (>0.5") to identify active or potential erosion problems.
   - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

   B. Ditches, Swales and Other Open Channels:

   - Inspect ditches, swales, level spreaders and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
   - Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
   - Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
   - If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.

C. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains (>0.5") to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Roof Drip Edges:

- These structures may not be paved over or altered in anyway. No gutter may be installed on the roof line.
- Debris and sediment buildup shall be removed as needed. Any bare area or erosion rills shall be repaired with new stone.
- See inspection log within Attachment 1 of this document for the inspection requirements of this BMP.

F. Subsurface Sand Filter Chamber System:

- Inspect the site monthly for the first few months after construction. Then, inspections can occur on an annual basis, preferably after rain events when clogging will be obvious.
- Make any repairs necessary to ensure the measure is operating properly.
- Regular maintenance is necessary to remove surface sediment, trash, debris, and leaf litter.
- Outlets and chambers need to be cleaned/repaired when drawdown times in the filter exceeds 36 hours.
- In certain cases, layers of sand may need to be replaced every 3 to 5 years.
- Inspect the underdrain outlet orifice within the outlet control structure for any sediment that may clog the orifice. Remove any sediment to prevent clogging.

3. Documentation:

A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.

B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations 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. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

4. Duration of Maintenance: Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

ATTACHMENT 1 – STORMWATER INSPECTION AND MAINTENANCE LOG

North Windham Public Safety
Franklin Drive
Windham, ME

This log is intended to accompany the Inspection, Maintenance, and Housekeeping Plan for the North Windham Public Safety building in Windham, Maine. The following items shall be checked, cleaned, and maintained on a regular basis as specified in the Maintenance Plan and as described in the sections below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the [Municipality] and the Maine DEP. Qualified personnel familiar with the drainage systems and soils shall perform all inspections. A copy of the construction and post-construction maintenance logs are provided.

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	
Site Element	**Suggested Maintenance (recm'd frequency)**	**Observations**	**Inspection Notes/Recommended Action**
Vegetated Areas	Inspect Slopes/Embankments for erosion (annually)		
	Replant bare areas or areas of sparse growth (annually)		
Ditches/Swales	Remove obstructions/debris/sediment (monthly)		
	Inspect for erosion/repair as needed (annually)		
	Remove woody vegetation (annually)		
	Mow vegetated ditches (annually)		
Catch Basins	Remove sediment/debris from sump (annually)		
	Remove accumulated debris from inlet grate		
Culverts	Remove sediment/debris from inlet/outlet aprons (annually)		
	Inspect inlet/outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		
Pipe Outlets	Remove sediment/debris from outlet aprons (annually)		
	Inspect outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		
Additional Notes/Observations:			

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

BMP Element	Suggested Maintenance	Observations	Inspection Notes/Recommended Action
Pretreatment			
	Sediment Depth/Removal (Annually)		
Outlet Control Structure			
	Sediment Depth (Annually)		
	Floatables/Debris (Annually)		
Discharge Pipe			
	Ground Stabilized (>1" rain, Annually)		
Subsurface Chambers			
	Sediment Depth/Removal (Annually)		

Additional Notes/Observations:

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

BMP Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Pretreatment	Sediment/Debris Removal (Annually)		
	Inspect for bare areas or rill erosion (Annually)		
Downstream Structure	Sediment Depth (Annually)		
	Floatables/Debris (Annually)		
Discharge Pipe	Ground Stabilized (>1" rain, Annually)		
Embankments	Review for signs of erosion (Twice Annually)		
Stone	Trim overgrown vegetation with string trimmer (annually)		
	Review trench for evidence of vehicular traffic or storage of snow within footprint (annually)		
	Confirm no excessive ponding of water (annually)		

Additional Notes/Observations:

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

BMP Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Pretreatment	Sediment/Debris Removal (Annually)		
	Inspect for bare areas or rill erosion (Annually)		
Downstream Structure	Sediment Depth (Annually)		
	Floatables/Debris (Annually)		
Discharge Pipe	Ground Stabilized (>1" rain, Annually)		
Embankments	Review for signs of erosion (Twice Annually)		
Stone	Trim overgrown vegetation with string trimmer (annually)		
	Review trench for evidence of vehicular traffic or storage of snow within footprint (annually)		
	Confirm no excessive ponding of water (annually)		

Additional Notes/Observations:

Appendix 4

Subsurface Investigations

REPORT

25-0363 S

January 21, 2026

Explorations and Geotechnical Engineering Services

Proposed Public Safety Facility
Franklin Drive
Windham, Maine

Prepared For:
Great Falls Construction, Inc.
Attention: Andrew Kosusko
20 Mechanic Street
Gorham, ME 04038

Prepared By:
S. W. Cole Engineering, Inc.
286 Portland Road
Gray, ME 04039
T: 207-657-2866

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25-0363 S

January 21, 2026

Great Falls Construction, Inc.
Attention: Andrew Kosusko
20 Mechanic Street
Gorham, ME 04038

Subject: Explorations and Geotechnical Engineering Services
Proposed Public Safety Facility
Franklin Drive
Windham, Maine

Dear Andy:

In accordance with our Proposal, dated September 23, 2025, Contract Addendum, dated October 17, 2025, and Contract Addendum No. 2, dated December 8, 2025, we have performed subsurface explorations for the subject project. This report summarizes our findings and geotechnical recommendations and its contents are subject to the limitations set forth in Appendix A.

1.0 INTRODUCTION

1.1 Scope and Purpose

The purpose of our services was to obtain subsurface information at the site in order to develop geotechnical recommendations relative to foundations and earthwork associated with the proposed construction. Our scope of services included subsurface explorations and testing, soils laboratory testing, a geotechnical analysis of the subsurface findings, and preparation of this report.

1.2 Site and Proposed Construction

The site consists of an undeveloped, cleared parcel located on the southeasterly side of Franklin Drive, north of the existing Hannaford shopping center, in Windham, Maine. Existing grades are relatively flat and level in the southern and central portions of the site, ranging from about elevation 308 to 310 feet (project datum), but slope down into

an existing pond area in the northeasterly portion of the site, and slope up towards Franklin Drive to the northwest. A large portion of the site is currently occupied by underground septic systems which, we understand, actively services the adjacent Hannaford shopping center, as well as the Home Depot store across Franklin Drive.

We understand development plans include a new public safety facility, including a new building, paved parking and access drive areas with underlying stormwater management systems, and landscape areas. We understand the building will include a combination of multi-story office and operations space and a high bay area for fire and emergency apparatus. We understand the building will have a ground level finish floor elevation of 308.5 fee, and a second level at elevation 320.5 feet.

Proposed and existing site features are shown on the "Exploration Location Plan" attached in Appendix B.

2.0 EXPLORATION AND TESTING

2.1 Explorations

Subsurface explorations at the site were limited by the existing active septic systems which occupy a large portion of the proposed development area.

Three test pits (TP-1 through TP-3) were made at the site on December 17, 2025. The test pit locations were requested by Sebago Technics, Inc. (project civil engineer) and established in the field by S. W. Cole Engineering, Inc. (S.W.COLE) using GPS methods, adjusted to avoid the septic systems. These test pits were also logged by a soil scientist from Sebago Technics, Inc.; we understand their logs are provided under separate cover.

Six test borings (B-101 through B-106) were made at the site on January 15, 2026. The boring locations were selected and established in the field by S.W.COLE using GPS methods.

The test pits and test borings were made by Seaboard Drilling, LLC working under subcontract to S.W.COLE. The approximate exploration locations are shown on the "Exploration Location Plan" attached in Appendix B. Logs of the explorations and a key

to the notes and symbols used on the logs are attached in Appendix C. The elevations shown on the logs were estimated based on topographic information shown on the "Exploration Location Plan".

2.2 Field Testing

The test pits were made using a small, tracked excavator. As requested by Sebago Technics, field infiltration testing was performed in the test pits using a Guelph Permeameter. Field infiltration testing results are shown on the test pit logs.

The test borings were drilled using hollow-stem auger methods. The soils were sampled at 2 to 5 foot intervals using a split spoon sampler and Standard Penetration Testing (SPT) methods. SPT blow counts are shown on the boring logs.

2.3 Laboratory Testing

Soil samples obtained from the explorations were returned to our laboratory for further classification and testing. Moisture content test results are noted on the logs. The results of three grain size analyses are attached in Appendix D.

3.0 SUBSURFACE CONDITIONS

3.1 Soil and Bedrock

Underlying a surficial layer of topsoil and organics, the explorations encountered native glacial outwash deposits of loose to medium dense, brown and gray-brown, sand with varying portions of silt and gravel. The test pits were terminated in the sands at depths ranging from 6.3 to 7 feet below existing ground surface (bgs). The borings were terminated in the sands at depths ranging from about 12 to 32 feet bgs. Bedrock was not encountered within the depths explored.

As discussed, a large portion of the proposed building pad is currently occupied by active septic systems. Consequently, we anticipate areas of fill, backfill, and disturbed soils are present across the site.

3.2 Groundwater

Saturated soils were encountered in several of the test borings at depths of about 15 feet bgs. It should be anticipated that groundwater levels will fluctuate, particularly in response to periods of snowmelt and precipitation, as well as changes in site use.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General Findings

Based on the subsurface findings, the proposed construction appears feasible from a geotechnical standpoint. The principle geotechnical considerations include:

- As discussed, a large portion of the proposed building pad is currently occupied by active septic systems. We recommend the septic systems, including chambers, structures, leach fields, piping, fill, backfill, and residual organics be removed from beneath the proposed building and paved areas until undisturbed, non-organic, native soils are encountered. Following removal of the septic systems, excavations should be backfilled, and site grades raised, with compacted Granular Borrow.

- Spread footing foundations and slab-on-grade floors bearing on properly prepared subgrades appear suitable for the proposed building. Footings should bear on at least 3-inches of compacted Crushed Stone overlying densified native, non-organic soils. On-grade floor slabs in proposed office and operations areas should bear on at least 12-inches of properly compacted Structural Fill overlying properly prepared, densified subgrades. On-grade floor slabs in the apparatus bays and equipment areas should be underlain by at least 12-inches of compacted MaineDOT 703.06 Aggregate for Base Type A overlying properly prepared, densified subgrades.

- After removal of surficial organics and the existing septic systems, subgrades across the site will consist of native sands. Earthwork and grading activities should occur during drier, non-freezing weather of Spring, Summer and Fall. Excavation of bearing surfaces should be completed with a smooth-edged bucket to lessen subgrade disturbance.

- We recommend additional test pits be made in previously unexplored portions of proposed building pad after the existing septic systems have been decommissioned.

4.2 Site and Subgrade Preparation

We recommend that site preparation begin with the construction of an erosion control system to protect adjacent drainage ways and areas outside the construction limits. Surficial organics, roots, and topsoil should be completely removed from areas of proposed fill and construction. As much vegetation as possible should remain outside the construction areas to lessen the potential for erosion and site disturbance.

Building Pad and Foundations: We recommend the septic systems, including chambers, structures, leach fields, piping, fill, backfill, and residual organics be removed from beneath the proposed building, paved, and landscape areas until undisturbed, non-organic, native soils are encountered. Following removal of the septic systems, excavations should be backfilled with compacted Granular Borrow.

Following removal of the septic systems and backfilling with compacted Granular Borrow, we recommend the proposed building area be proof-rolled and densified with 3 to 5 passes of a 10-ton vibratory roller compactor. Areas that become soft or continue to yield after densification should be removed and replaced with compacted Structural Fill.

We recommend that footings be excavated using a smooth-edged bucket and footing subgrades be densified with 3 to 5 passes of a vibratory plate compactor weighing at least 700 pounds. Footings should be underlain by at least 3 inches of compacted Crushed Stone overlying the densified subgrade soils.

Paved Areas: Pavement subgrades should be proof-rolled and densified with at least 3 to 5 passes of a 10-ton vibratory roller compactor. Areas that become soft or continue to yield after densification should be removed and replaced with compacted Granular Borrow.

4.3 Excavation and Dewatering

Excavation work will generally encounter existing septic systems (including chambers, structures, piping, fill, backfill, and potentially residual organics) and native sandy soils.

Care must be exercised during construction to limit disturbance of the bearing soils. Earthwork and grading activities should occur during drier, non-freezing weather of Spring, Summer and Fall. Final cuts to subgrade should be performed with a smooth-edged bucket to help reduce strength loss from soil disturbance.

Vibrations from construction should be controlled below threshold limits of 0.5 in/sec for structures, water supply wells and infrastructure within 500 feet of the project site. More restrictive vibration limits may be warranted in specific cases with sensitive equipment, historic structures or artifacts on-site or within close proximity.

Sumping and pumping dewatering techniques should be adequate to control groundwater in shallow excavations above the groundwater table. Deeper excavations extending below the groundwater table will likely require well point dewatering ahead of excavating. Controlling the water levels to at least one foot below planned excavation depths will help stabilize subgrades during construction.

Excavations must be properly shored or sloped in accordance with OSHA Regulations to prevent sloughing and caving of the sidewalls during construction. Care must be taken to preclude undermining adjacent structures, utilities, and roadways.

The design and planning of excavations, excavation support systems, and dewatering is the responsibility of the contractor.

Handling and disposal of the site soils, including the existing septic systems, must follow applicable environmental regulations.

4.4 Foundations

We recommend the proposed building be supported on spread footings founded on at least 3-inches of compacted Crushed Stone overlying densified native sands. For foundations bearing on properly prepared subgrades, we recommend the following geotechnical parameters for design consideration:

Geotechnical Parameters for Spread Footings and Foundation Walls	
Design Frost Depth (100 year AFI)	4.5 feet
Net Allowable Soil Bearing Pressure	2.0 ksf
Base Friction Factor	0.35
Total Unit Weight of Backfill	125 pcf
At-Rest Lateral Earth Pressure Coefficient	0.5
Internal Friction Angle of Backfill	30°
Seismic Soil Site Class	D (IBC 2021)
Estimated Total Settlement	1-inch
Differential Settlement	½-inch

Surface grades should be sloped away from the building for positive surface water drainage.

4.5 Slab-On-Grade

On-grade floor slabs in heated areas may be designed using a subgrade reaction modulus of 100 pci (pounds per cubic inch) provided:

- The slab is underlain by at least 12-inches of compacted Structural Fill overlying properly prepared, densified subgrades in lightly loaded office and operations areas of the building, and;

- The slab is underlain by at least 12 inches of compacted MaineDOT 703.06 Aggregate for Base Type A overlying properly prepared, densified subgrades in more heavily loaded apparatus bays and equipment areas.

The structural engineer or concrete consultant must design steel reinforcing and joint spacing appropriate to slab thickness and function, as well as cracking and curling.

We recommend a sub-slab vapor retarder particularly in areas of the building where the concrete slab will be covered with an impermeable surface treatment or floor covering that may be sensitive to moisture vapors. The vapor retarder must have a permeance that is less than the floor cover or surface treatment that is applied to the slab. The vapor retarder must have sufficient durability to withstand direct contact with the sub-slab base material and construction activity. The vapor retarder material should be placed according to the manufacturer's recommended method, including the taping and lapping of all joints and wall connections. The architect and/or flooring consultant

should select the vapor retarder products compatible with flooring and adhesive materials.

The floor slab should be appropriately cured using moisture retention methods after casting. Typical floor slab curing methods should be used for at least 7 days. The architect or flooring consultant should assign curing methods consistent with current applicable American Concrete Institute (ACI) procedures with consideration of curing method compatibility to proposed surface treatments, flooring and adhesive materials.

4.6 Entrance Slabs and Sidewalks

Entrance slabs and sidewalks adjacent to the building must be designed to reduce the effects of differential frost action between adjacent pavement, doorways, and entrances. We recommend that non-frost susceptible Structural Fill be provided to a depth of at least 4.5 feet below the top of entrance slabs. This thickness of Structural Fill should extend the full footprint of the entrance slab, thereafter transitioning up to the bottom of the adjacent sidewalk or pavement gravels at a 3H:1V or flatter slope. General details of this frost transition zone are shown on the "Foundation Detail Sketch" attached in Appendix B.

4.7 Fill, Backfill and Compaction

We recommend the following fill and backfill materials: recycled products must also be tested in accordance with applicable environmental regulations and approved by a qualified environmental consultant.

Common Borrow: Fill to raise grades in landscape areas should be non-organic compactable earth meeting the requirements of 2020 MaineDOT Standard Specification 703.18 Common Borrow.

Granular Borrow: Backfill for overexcavations and to repair soft areas, as well as fill to raise grades in building and paved areas, should be sand meeting the requirements of 2020 MaineDOT Standard Specification 703.19 Granular Borrow.

Structural Fill: Backfill for foundations, slab base material (in lightly loaded office and operations areas) and material below exterior entrances slabs should be clean, non-frost susceptible sand and gravel meeting the gradation requirements for Structural Fill as given below:

Structural Fill	
Sieve Size	**Percent Finer by Weight**
4 inch	100
3 inch	90 to 100
¼ inch	25 to 90
No. 40	0 to 30
No. 200	0 to 6

Crushed Stone: Crushed Stone, used beneath foundations and for underdrain aggregate should be washed ¾-inch crushed stone meeting the requirements of 2020 MaineDOT Standard Specification 703.13 Crushed Stone ¾-Inch.

Reuse of Site Soils: Portions of the native sands, free from organics and deleterious materials, appear suitable for reuse as Granular Borrow provided they are at a compactable moisture content at the time of reuse.

Placement and Compaction: Fill should be placed in horizontal lifts and compacted such that the desired density is achieved throughout the lift thickness with 3 to 5 passes of the compaction equipment. Loose lift thicknesses for grading, fill, and backfill activities should not exceed 12 inches. We recommend that fill and backfill in building and paved areas be compacted to at least 95 percent of its maximum dry density as determined by ASTM D-1557. Crushed Stone should be compacted with 3 to 5 passes of a vibratory plate compactor having a static weight of at least 500 pounds.

4.8 Weather Considerations

Construction activity should be limited during wet and freezing weather and the site soils may require drying or thawing before construction activities may continue. The contractor should anticipate the need for water to temper fills in order to facilitate compaction during dry weather. If construction takes place during cold weather, subgrades, foundations and floor slabs must be protected during freezing conditions. Concrete and fill must not be placed on frozen soil; and once placed, the concrete and soil beneath the structure must be protected from freezing.

4.9 Design Review and Construction Testing

S.W.COLE should be retained to review the construction documents prior to bidding to determine that our earthwork and foundation recommendations have been properly interpreted and implemented.

A construction materials testing and quality assurance program should be implemented during construction to observe compliance with the design concepts, plans, and specifications. S.W.COLE is available to observe earthwork activities and the preparation of foundation bearing surfaces, as well as to provide testing and IBC Special Inspection services for soils, concrete, steel, spray-applied fireproofing, fire-stopping, structural masonry, and asphalt construction materials.

4.10 Recommendations for Additional Study

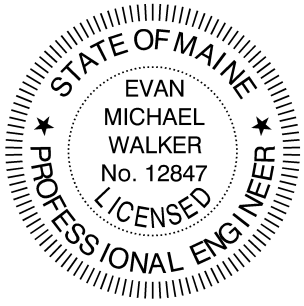
As discussed, a large portion of the proposed building pad is currently occupied by active septic systems. We recommend additional test pits be made in previously unexplored portions of proposed building pad after the existing septic systems have been decommissioned.

5.0 CLOSURE

It has been a pleasure to be of assistance to you with this phase of your project. We look forward to working with you during the construction phase of the project.

Sincerely,

S. W. Cole Engineering, Inc.



Evan M. Walker, P.E.
Senior Geotechnical Engineer

EMW:tjb

APPENDIX A

Limitations

This report has been prepared for the exclusive use of Great Falls Construction, Inc. for specific application to the proposed Public Works Facility on Franklin Drive in Windham, Maine. S. W. Cole Engineering, Inc. (S.W.COLE) has endeavored to conduct our services in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

S.W.COLE's scope of services has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S.W.COLE should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S.W.COLE.

APPENDIX B

Figures

FRANKLIN DRIVE

VETERANS MEMORIAL DRIVE

1 1/2" IRON PIPE FOUND
26" ABOVE GRADE
LEANING, LOCATED AT BASE

5/8" REBAR FOUND
6" ABOVE GRADE
"A.L. & H. 492"

5/8" IRON ROD FOUND
7" ABOVE GRADE
LEANING, LOCATED AT BASE

50' RIGHT OF WAY
SEE NOTE: 6D

SMH-129 (BY OTHERS)
RIM EL. = 315.13
8" INV.OUT = 309.17

DMH 8182
RIM=315.83
30" HDPE INV.IN=304.81 @8
24" HDPE INV.IN=304.58 @11
36" HDPE INV.OUT=304.52 @4

INV.=305.45
36" HDPE

INSTALL 12"X6" TEE, 6" GATE VALVE, AND 6" D.I. PIPE TO HYDRANT ASSEMBLY #1. INSTALL PIPE RESTRAINTS BETWEEN HYDRANT ASSEMBLY CONNECTION AND SERVICE

6" D.I. FIRE SERVICE

INSTALL HYDRANT ASSEMBLY #1

BM-1

SMH 1057
RIM=314.96

DMH 5312
RIM=314.64
12" HDPE INV. IN=309.00 @7
18" HDPE INV. IN=305.28 @8
12" HDPE INV. IN=309.01 @10
18" HDPE INV. OUT=305.18 @2
SUMP=304.75

CB 5310
RIM=314.36
12" HDPE CASCO TRAP OUT @1
WATER LEVEL=309.45
SUMP=306.35

CB 5308
RIM=314.39
12" HDPE CASCO TRAP OUT @4
WATER LEVEL=309.46
SUMP=306.37

6" FIRE SERVICE, COORDINATE CONNECTION WITH RELEVANT M.E.P. DRAWINGS

4" DOMESTIC WATER SERVICE, COORDINATE CONNECTION WITH RELEVANT M.E.P. DRAWINGS

6" SAN. SEWER SERVICE, COORDINATE CONNECTION WITH RELEVANT M.E.P. DRAWINGS

SMH-127 (BY OTHERS)
RIM EL. = 313.00
8" INV. IN = 307.24
6" INV. IN = 307.14
8" INV.OUT = 306.92

SMH-126 (BY OTHERS)
RIM EL. = 312.06
8" INV. IN = 306.26
12" INV.OUT = 306.16

SMH-125 (BY OTHERS)
RIM EL. = 312.94
8" INV. IN = 305.71
12" INV.OUT = 305.61

INSTALL 12"X6" TEE, 6" GATE VALVE, AND 6" D.I. PIPE TO HYDRANT ASSEMBLY #2. INSTALL PIPE RESTRAINTS BETWEEN HYDRANT ASSEMBLY CONNECTION AND SERVICE

6" D.I. FIRE SERVICE

INSTALL HYDRANT ASSEMBLY #2

PUMP STATION, SEE DETAIL

SMH-128 (BY OTHERS)
RIM EL. = 314.38
8" INV. IN = 308.52
8" INV.OUT = 307.77

TP-2
TP-3
TP-1
B-101
B-102
B-103
B-104
B-105
B-106

CB-2
RIM: 310.00

12" SD
INV=306.60

BFE 308.50
FFE 320.50

BFE 308.5

CB-16
RIM: 310.50

12" SD
INV=306.70

SD-2

INSTALL ROOF DRAIN CONNECTION TO SUBSURFACE CHAMBER SYSTEM, INV. = 306.00±

TC: 311.46
BC: 310.96

TC: 311.82
BC: 311.32

TC: 311.24
BC: 310.74

TC: 311.15
BC: 310.55

SD-4

18" SD
INV=305.50

OCS-1
RIM: 310.50
INV. OUT: 305.90 (SD-4)

SUBSURFACE DETENTION AND INFILTRATION SYSTEM, ADS SC-800 OR APPROVED EQUAL
12 ROWS X 14 CHAMBERS PER ROW
168 CHAMBERS TOTAL

INSTALL FILTER BARRIER DOWNGRADIENT OF PROPOSED DEVELOPMENT, TYP.

CB-1
RIM: 310.00
INV. IN: 306.10 (SD-1)

INSTALL INLET PROTECTION, TYP.

12" SD
INV=306.50

LEGEND:

APPROXIMATE BORING LOCATION

APPROXIMATE TEST PIT LOCATION

NOTES:

1. EXPLORATION LOCATION PLAN WAS PREPARED FROM A 1"= 30' SCALE PLAN OF THE SITE TITLED "GRADING AND UTILIY PLAN," PREPARED BY SEBAGO TECHNICS, INC., RECEIVED 12/16/2025.
2. THE EXPLORATIONS WERE LOCATED IN THE FIELD BY S. W. COLE ENGINEERING, INC. USING A MAPPING GRADE GPS RECEIVER.
3. THIS PLAN SHOULD BE USED IN CONJUNCTION WITH THE ASSOCIATED S. W. COLE ENGINEERING, INC. GEOTECHNICAL REPORT.
4. THE PURPOSE OF THIS PLAN IS ONLY TO DEPICT THE LOCATION OF THE EXPLORATIONS IN RELATION TO THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION AND IS NOT TO BE USED FOR CONSTRUCTION.

0 30 60 Feet

S.W.COLE ENGINEERING, INC.

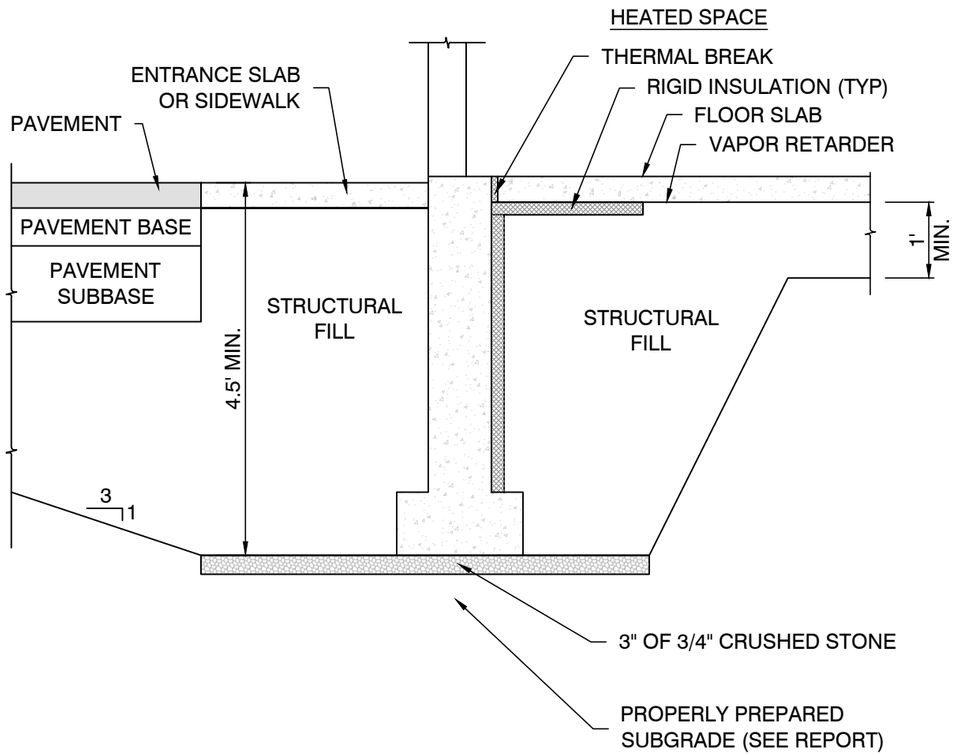
GREAT FALLS CONSTRUCTION, INC.

EXPLORATION LOCATION PLAN

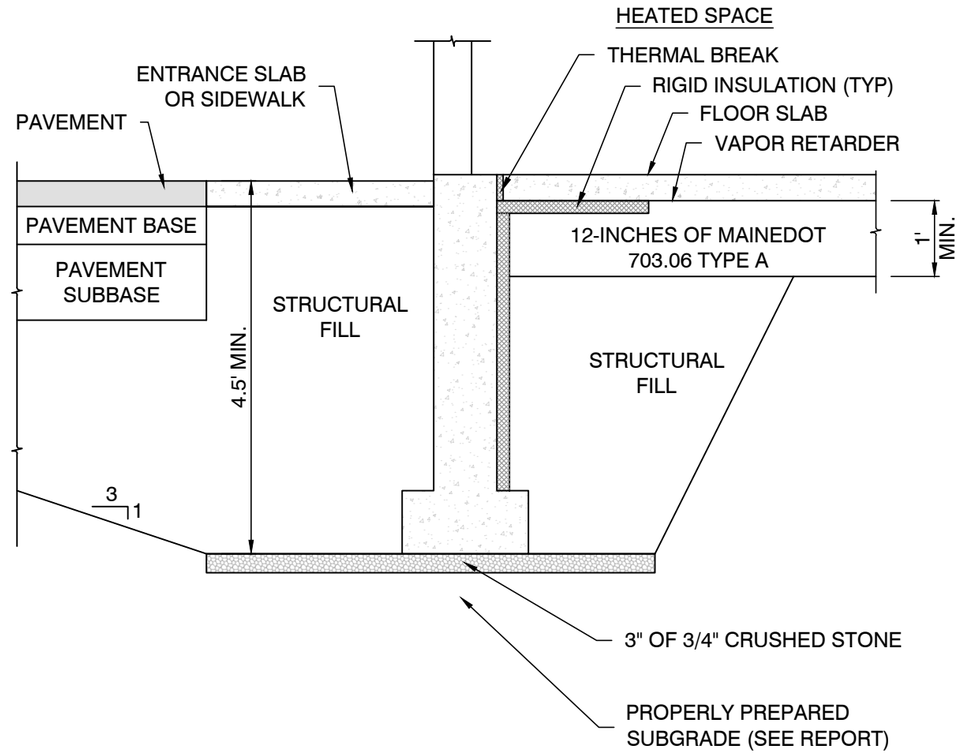
PROPOSED PUBLIC SAFETY FACILITY
FRANKLIN DRIVE
WINDHAM, MAINE

Job No.:	25-0363	Scale:	1" = 30'
Date :	01/19/2026	Sheet:	1

K:\2025\25-0363\CADD\Drawings\25-0363-B-P.dwg, 1/19/2026 2:39:34 PM, CEM, S. W. Cole Engineering, Inc.



OFFICE AREAS



APPARATUS BAYS AND EQUIPMENT AREAS

NOTE:

1. UNDERDRAIN INSTALLATION AND MATERIAL GRADATION RECOMMENDATIONS ARE CONTAINED WITHIN THIS REPORT.
2. DETAIL IS PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY, NOT FOR CONSTRUCTION.

S.W.COLE ENGINEERING, INC.

GREAT FALLS CONSTRUCTION, INC.

FOUNDATION DETAIL SKETCH

PROPOSED PUBLIC SAFETY FACILITY
FRANKLIN DRIVE
WINDHAM, MAINE

Job No.:	25-0363	Scale:	Not to Scale
Date :	01/21/2026	Sheet:	2

APPENDIX C

Exploration Logs and Key

BORING LOG

BORING NO.: B-101
SHEET: 1 of 1
PROJECT NO. 25-0363
DATE START: 1/15/2026
DATE FINISH: 1/15/2026

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

Drilling Information

LOCATION: See Exploration Location Plan **ELEVATION (FT):** 308' +/- **TOTAL DEPTH (FT):** 22.0 **LOGGED BY:** Kyle Kaserman
DRILLING CO.: Seaboard Drilling **DRILLER:** Jeremy Adams **DRILLING METHOD:** Hollow Stem Augers
RIG TYPE: Track Mounted Diedrich D-50 **AUGER ID/OD:** 4 1/4 in / 7 5/8 in **SAMPLER:** Standard Split-Spoon
HAMMER TYPE: Automatic **HAMMER WEIGHT (lbs):** 140 **CASING ID/OD:** N/A /N/A **CORE BARREL:** N/A
HAMMER CORRECTION FACTOR: **HAMMER DROP (inch):** 30
WATER LEVEL DEPTHS (ft): ▽ 15 ft Soils Saturated below 15' +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_20 Depth	Remarks
			1D		0-2	24/10	2-3-8-10			0.3 Topsoil (FILL)		
			2D		2-4	24/18	10-10-9-8			Medium dense to loose, light brown, coarse SAND, some gravel, trace silt		
305												
	5		3D		5-7	24/12	4-4-3-4			5.2 Loose, light brown, medium SAND, trace silt		
300												
	10		4D		10-12	24/18	5-7-9-10			10.5 Medium dense, gray-brown SILT AND SAND		
										11.4 Medium dense, gray-brown, silty fine SAND		
295												
	15		5D		15-17	24/16	4-5-5-6			15.0 Loose, light brown, fine SAND, trace silt, with occasional silty sand layers	▽	
290												
	20		6D		20-22	24/24	3-3-4-4					

Bottom of Exploration at 22.0 feet

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-101

BORING / WELL 10-12-2022 25-0363.GPJ SWCE TEMPLATE.GDT 1/19/26

BORING LOG

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

BORING NO.: B-102
SHEET: 1 of 1
PROJECT NO. 25-0363
DATE START: 1/15/2026
DATE FINISH: 1/15/2026

Drilling Information

LOCATION: See Exploration Location Plan | **ELEVATION (FT):** 307' +/- | **TOTAL DEPTH (FT):** 22.0 | **LOGGED BY:** Kyle Kaserman
DRILLING CO.: Seaboard Drilling | **DRILLER:** Jeremy Adams | **DRILLING METHOD:** Hollow Stem Augers
RIG TYPE: Track Mounted Diedrich D-50 | **AUGER ID/OD:** 4 1/4 in / 7 5/8 in | **SAMPLER:** Standard Split-Spoon
HAMMER TYPE: Automatic | **HAMMER WEIGHT (lbs):** 140 | **CASING ID/OD:** N/A /N/A | **CORE BARREL:** N/A
HAMMER CORRECTION FACTOR: | **HAMMER DROP (inch):** 30
WATER LEVEL DEPTHS (ft): ▽ 15 ft Soils Saturated below 15' +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_20 Depth	Remarks
			1D		0-2	24/10	2-4-5-7			0.5 Topsoil (FILL)		
305			2D		2-4	24/16	8-8-9-8			Loose to medium dense, brown, coarse to medium SAND, some gravel, trace silt		
	5		3D		5-7	24/14	4-4-5-6			5.0 Loose, light brown/gray, fine to medium SAND, trace silt		
300												
	10		4D		10-12	24/16	6-6-6-7			10.0 Medium dense, brown, silty fine SAND 10.3 Medium dense, light brown, fine to medium SAND, some silt		
295												
	15		5D		15-17	24/20	4-5-4-4			15.0 Loose, orange-brown, medium SAND, trace silt, with occasional silty sand layers	▽	
290												
	20		6D		20-22	24/24	4-4-5-6			20.0 Loose, light brown, fine SAND, trace silt		
285										Bottom of Exploration at 22.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-102

BORING / WELL 10-12-2022 25-0363.GPJ SWCE TEMPLATE.GDT 1/19/26

BORING LOG

BORING NO.: B-103
SHEET: 1 of 1
PROJECT NO. 25-0363
DATE START: 1/15/2026
DATE FINISH: 1/15/2026

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

Drilling Information

LOCATION: See Exploration Location Plan | **ELEVATION (FT):** 307' +/- | **TOTAL DEPTH (FT):** 32.0 | **LOGGED BY:** Kyle Kaserman
DRILLING CO.: Seaboard Drilling | **DRILLER:** Jeremy Adams | **DRILLING METHOD:** Hollow Stem Augers
RIG TYPE: Track Mounted Diedrich D-50 | **AUGER ID/OD:** 4 1/4 in / 7 5/8 in | **SAMPLER:** Standard Split-Spoon
HAMMER TYPE: Automatic | **HAMMER WEIGHT (lbs):** 140 | **CASING ID/OD:** N/A /N/A | **CORE BARREL:** N/A
HAMMER CORRECTION FACTOR: | **HAMMER DROP (inch):** 30
WATER LEVEL DEPTHS (ft): ▽ 15 ft Soils Saturated Below 15' +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_20 Depth	Remarks
			1D		0-2	24/12	2-4-5-6			0.3 Topsoil (FILL)		
305			2D		2-4	24/16	7-8-7-8			Loose to medium dense, light brown, gravelly coarse SAND, trace silt		
										4.0 Medium dense, gray to light brown, fine SAND, trace silt		
	5		3D		5-7	24/12	5-5-6-5			5.0 Medium dense, light gray, silty fine SAND		
300												
	10		4D		10-12	24/18	4-6-5-5			10.0 Medium dense, light brown, fine to medium SAND, trace silt		
295												
	15		5D		15-17	24/24	3-4-3-4			15.0 Loose, orange-brown, coarse to medium SAND, trace silt, with occasional silty sand layers	▽	
290												
	20		6D		20-22	24/20	2-2-4-4			20.0 Loose, gray-brown, silty fine SAND		
285												
	25		7D		25-27	24/24	3-2-4-3					
280												
	30		8D		30-32	24/14	3-3-4-4					
275										Bottom of Exploration at 32.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-103

BORING / WELL 10-12-2022 25-0363.GPJ SWCE TEMPLATE.GDT 1/19/26

BORING LOG

BORING NO.: B-104
SHEET: 1 of 1
PROJECT NO. 25-0363
DATE START: 1/15/2026
DATE FINISH: 1/15/2026

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

Drilling Information

LOCATION: See Exploration Location Plan | **ELEVATION (FT):** 308' +/- | **TOTAL DEPTH (FT):** 22.0 | **LOGGED BY:** Kyle Kaserman
DRILLING CO.: Seaboard Drilling | **DRILLER:** Jeremy Adams | **DRILLING METHOD:** Hollow Stem Augers
RIG TYPE: Track Mounted Diedrich D-50 | **AUGER ID/OD:** 4 1/4 in / 7 5/8 in | **SAMPLER:** Standard Split-Spoon
HAMMER TYPE: Automatic | **HAMMER WEIGHT (lbs):** 140 | **CASING ID/OD:** N/A /N/A | **CORE BARREL:** N/A
HAMMER CORRECTION FACTOR: | **HAMMER DROP (inch):** 30
WATER LEVEL DEPTHS (ft): ▽ 15 ft Soils Saturated below 15' +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_20 Depth	Remarks
			1D		0-2	24/14	12-8-11-14			Topsoil (FILL)		
										0.8 Medium dense, light brown, coarse SAND, some gravel, trace silt		
305			2D		2-4	24/14	14-15-17-16					
	5		3D		5-7	24/12	6-5-5-5					
										5.8 Medium dense, gray/light brown, fine to medium SAND, trace silt		
300												
	10		4D		10-12	24/24	4-4-3-6			10.0 Loose, gray, silty fine to medium SAND		
										10.5 Loose, gray, SILT AND SAND		
295												
	15		5D		15-17	24/24	2-2-1-3			15.0 Very loose, brown, fine to medium SAND, trace silt	▽	
290												
	20		6D		20-22	24/24	4-5-3-4			20.0 Loose, light brown, fine to medium SAND, trace silt, with frequent silty fine sand layers		

Bottom of Exploration at 22.0 feet

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-104

BORING / WELL 10-12-2022 25-0363.GPJ SWCE TEMPLATE.GDT 1/19/26

BORING LOG

BORING NO.: B-105
SHEET: 1 of 1
PROJECT NO. 25-0363
DATE START: 1/15/2026
DATE FINISH: 1/15/2026

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

Drilling Information

LOCATION: See Exploration Location Plan **ELEVATION (FT):** 307' +/- **TOTAL DEPTH (FT):** 12.0 **LOGGED BY:** Kyle Kaserman
DRILLING CO.: Seaboard Drilling **DRILLER:** Jeremy Adams **DRILLING METHOD:** Hollow Stem Augers
RIG TYPE: Track Mounted Diedrich D-50 **AUGER ID/OD:** 4 1/4 in / 7 5/8 in **SAMPLER:** Standard Split-Spoon
HAMMER TYPE: Automatic **HAMMER WEIGHT (lbs):** 140 **CASING ID/OD:** N/A /N/A **CORE BARREL:** N/A
HAMMER CORRECTION FACTOR: **HAMMER DROP (inch):** 30
WATER LEVEL DEPTHS (ft): Soils Wet to Saturated from Surface
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level; ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling; D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear; Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot; WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector; S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_20 Depth	Remarks
			1D		0-2	24/10	2-3-7-11			Topsoil (FILL)		
										0.7 Medium dense, brown, coarse SAND, trace silt		
305			2D		2-4	24/0	13-9-10-7					No Recovery
	5		3D		5-7	24/1	8-10-10-10			5.0 Medium dense, gray, medium to fine SAND, trace silt		
300												
	10		4D		10-12	24/14	7-7-7-8			10.0 Medium dense, light brown, fine SAND, trace silt		
295										Bottom of Exploration at 12.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-105

BORING LOG

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

BORING NO.: B-106
SHEET: 1 of 1
PROJECT NO. 25-0363
DATE START: 1/15/2026
DATE FINISH: 1/15/2026

Drilling Information

LOCATION: See Exploration Location Plan | **ELEVATION (FT):** 307' +/- | **TOTAL DEPTH (FT):** 12.0 | **LOGGED BY:** Kyle Kaserman
DRILLING CO.: Seaboard Drilling | **DRILLER:** Jeremy Adams | **DRILLING METHOD:** Hollow Stem Augers
RIG TYPE: Track Mounted Diedrich D-50 | **AUGER ID/OD:** 4 1/4 in / 7 5/8 in | **SAMPLER:** Standard Split-Spoon
HAMMER TYPE: Automatic | **HAMMER WEIGHT (lbs):** 140 | **CASING ID/OD:** N/A /N/A | **CORE BARREL:** N/A
HAMMER CORRECTION FACTOR: | **HAMMER DROP (inch):** 30
WATER LEVEL DEPTHS (ft): Soils Damp to Wet from Surface
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_20 Depth	Remarks
			1D		0-2	24/10	6-4-3-5			0.4 Topsoil (FILL)		
305			2D		2-4	24/12	5-4-4-5			Loose, light brown, gravelly coarse SAND, trace silt 2.0 Loose, light brown, medium SAND, trace silt, trace gravel		
	5		3D		5-7	24/12	5-3-4-4			5.3 Loose to medium dense, light brown, fine to medium SAND, trace silt		
300												
	10		4D		10-12	24/16	4-5-6-6					
295										Bottom of Exploration at 12.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-106

TEST PIT LOGS

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

PROJECT NO.: 25-0363
LOGGED BY: Kyle Kaserman
CONTRACTOR: Seaboard Drilling
EQUIPMENT: Bobcat E-42

TEST PIT TP-1

DATE: 12/17/2025 **LOCATION:** See Exploration Location Plan **SURFACE ELEVATION (FT):** 307.5' +/- **COMPLETION DEPTH (FT):** 6.3
WATER LEVEL DEPTHS (FT): No Groundwater Observed **REMARKS:**

Depth (feet)	Graphic Log	Stratum Description	H_20 Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
		TOPSOIL (FILL)					
		1.0 Light brown, SAND, some gravel, trace silt, with occasional cobbles					Field Infiltration Test @ 2.75' Depth: 6.14 inches/hour
		4.5 Light brown, silty fine SAND					w =10.4 %
5							
		Bottom of Exploration at 6.3 feet					

TEST PIT TP-2

DATE: 12/17/2025 **LOCATION:** See Exploration Location Plan **SURFACE ELEVATION (FT):** 307.5' +/- **COMPLETION DEPTH (FT):** 6.5
WATER LEVEL DEPTHS (FT): No Groundwater Observed **REMARKS:**

Depth (feet)	Graphic Log	Stratum Description	H_20 Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
		TOPSOIL (FILL)					
		0.9 Light brown, medium to coarse SAND, trace gravel, trace silt					Field Infiltration Test @ 4' Depth = 60.9 inches/hour
5							w =4.1 %
		Bottom of Exploration at 6.5 feet					

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:

Water Level
▽ At time of Digging
▼ At Completion of Digging
▼ After Digging

q_p = Pocket Penetrometer Strength, kips/sq.ft.

TEST PIT 25-0363.GPJ SWCE TEMPLATE.GDT 1/21/26

TEST PIT LOGS

CLIENT: Great Falls Construction, Inc.
PROJECT: Proposed Public Safety Facility
LOCATION: Franklin Drive, Windham, Maine

PROJECT NO.: 25-0363
LOGGED BY: Kyle Kaserman
CONTRACTOR: Seaboard Drilling
EQUIPMENT: Bobcat E-42

TEST PIT TP-3

DATE: 12/17/2025 **LOCATION:** See Exploration Location Plan **SURFACE ELEVATION (FT):** 308' +/- **COMPLETION DEPTH (FT):** 7.0
WATER LEVEL DEPTHS (FT): No Groundwater Observed **REMARKS:**

Depth (feet)	Graphic Log	Stratum Description	H_20 Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
		TOPSOIL (FILL)					
		0.8 Light brown, SAND, some gravel, trace silt					
		3.3 Light brown, fine to medium SAND, some gravel, trace silt					Field Iniltration Test @ 4' Depth: 38.3 inches/hour
5		4.5 Light brown SAND, trace gravel, trace silt					w =3.9 %
		Bottom of Exploration at 7.0 feet					

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:

Water Level
▽ At time of Digging
▼ At Completion of Digging
▼ After Digging

q_p = Pocket Penetrometer Strength, kips/sq.ft.

TEST PIT 25-0363.GPJ SWCE TEMPLATE.GDT 1/21/26

KEY TO NOTES & SYMBOLS
Test Boring and Test Pit Explorations

Stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Key to Symbols Used:

w	-	water content, percent (dry weight basis)
q_u	-	unconfined compressive strength, kips/sq. ft. - laboratory test
S_v	-	field vane shear strength, kips/sq. ft.
L_v	-	lab vane shear strength, kips/sq. ft.
q_p	-	unconfined compressive strength, kips/sq. ft. – pocket penetrometer test
O	-	organic content, percent (dry weight basis)
W_L	-	liquid limit - Atterberg test
W_P	-	plastic limit - Atterberg test
WOH	-	advance by weight of hammer
WOM	-	advance by weight of man
WOR	-	advance by weight of rods
HYD	-	advance by force of hydraulic piston on drill
RQD	-	Rock Quality Designator - an index of the quality of a rock mass.
γ_T	-	total soil weight
γ_B	-	buoyant soil weight

Description of Proportions:

Trace:	0 to 5%
Some:	5 to 12%
"Y"	12 to 35%
And	35+%
With	Undifferentiated

Description of Stratified Soils

Parting:	0 to 1/16" thickness
Seam:	1/16" to 1/2" thickness
Layer:	½" to 12" thickness
Varved:	Alternating seams or layers
Occasional:	one or less per foot of thickness
Frequent:	more than one per foot of thickness

REFUSAL: **Test Boring Explorations** - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

REFUSAL: **Test Pit Explorations** - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.

APPENDIX D

Laboratory Test Results

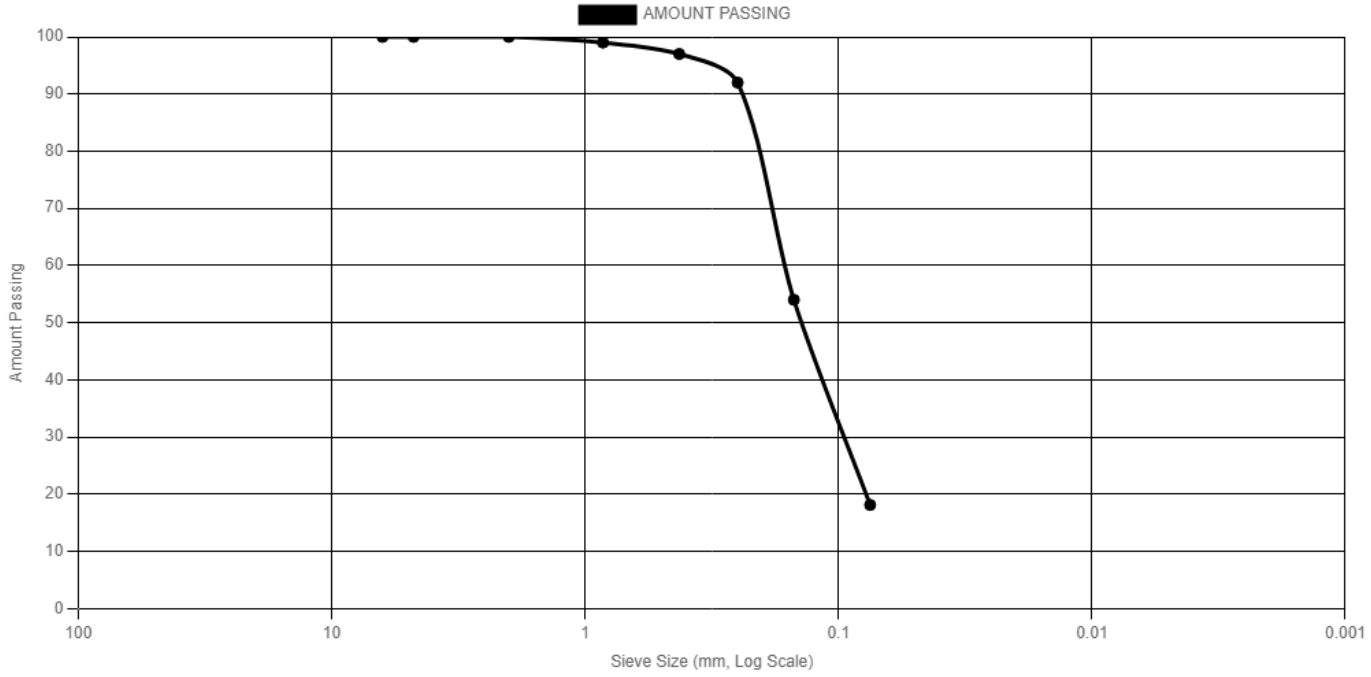
S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C136 & C117

Project Name:	Windham ME - Proposed Public Safety Building - Geotechnical Engineering Services	**Project #:**	25-0363
		Lab ID:	33889G
		Date Received:	12/19/2025
Client:	Great Falls Construction, Inc.	**Date Completed:**	12/26/2025
Sample Description:	Test Pit Sample	**Tested By:**	Naomi McMillen
Material Source:	TP-1, 4.5' to 5'		

Standard Designation (mm/µm)	Sieve Size	Amount Passing (%)	
6.3 mm	1/4"	100%	
4.75 mm	No. 4	100%	0% Gravel
2 mm	No. 10	100%	
850 µm	No. 20	99%	
425 µm	No. 40	97%	81.88% Sand
250 µm	No. 60	92%	
150 µm	No. 100	54%	
75 µm	No. 200	18.1%	18.1% Fines



Remarks:

Sarah Sylvia

Reviewed By

The S.W.COLE field representative is on-site at the request of our client to provide construction materials testing and to observe and document construction activities. The Contractor has sole responsibility for schedule, site safety, methods, completeness and quality control.

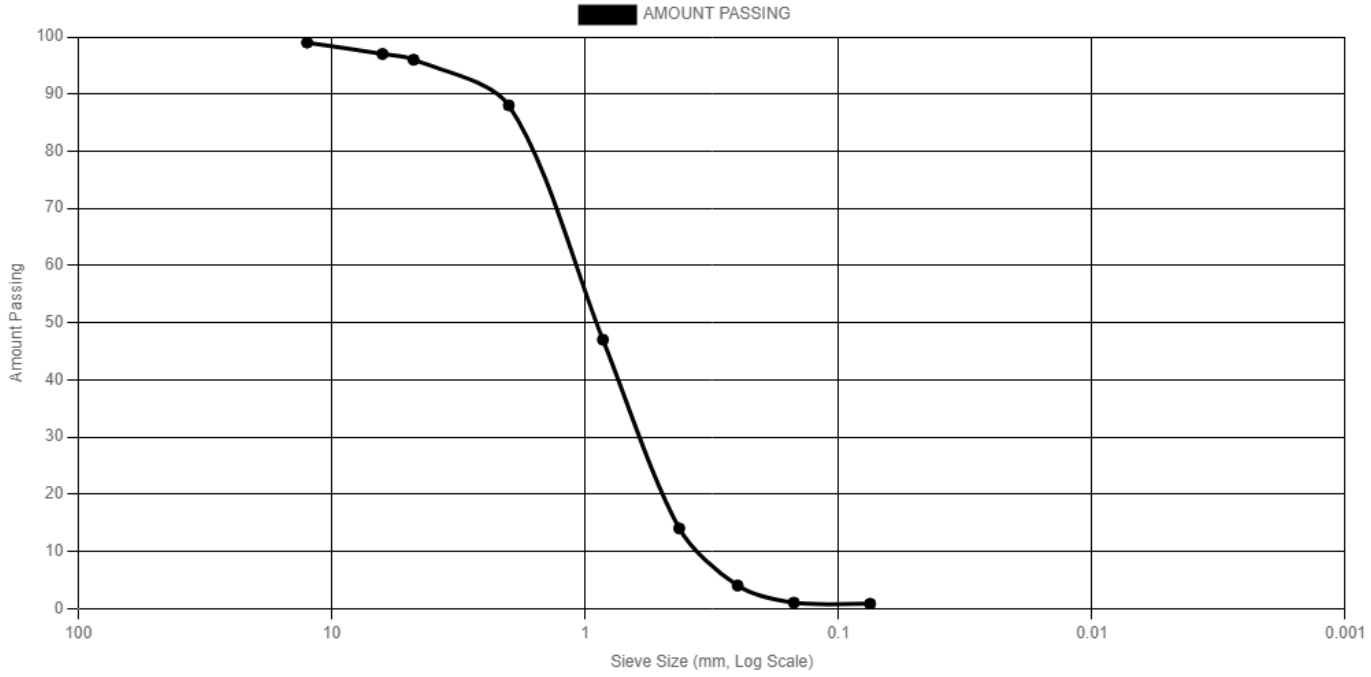
S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C136 & C117

Project Name:	Windham ME - Proposed Public Safety Building - Geotechnical Engineering Services	**Project #:**	25-0363
		Lab ID:	33890G
		Date Received:	12/19/2025
Client:	Great Falls Construction, Inc.	**Date Completed:**	1/9/2026
Sample Description:	Test Pit Sample	**Tested By:**	Naomi McMillen
Material Source:	TP-2, 6' to 6.5'		

Standard Designation (mm/µm)	Sieve Size	Amount Passing (%)	
12.5 mm	1/2"	99%	
6.3 mm	1/4"	97%	
4.75 mm	No. 4	96%	4% Gravel
2 mm	No. 10	88%	
850 µm	No. 20	47%	
425 µm	No. 40	14%	95.2% Sand
250 µm	No. 60	4%	
150 µm	No. 100	1%	
75 µm	No. 200	0.8%	0.8% Fines



Remarks:

Sarah Sylvia

Reviewed By

The S.W.COLE field representative is on-site at the request of our client to provide construction materials testing and to observe and document construction activities. The Contractor has sole responsibility for schedule, site safety, methods, completeness and quality control.

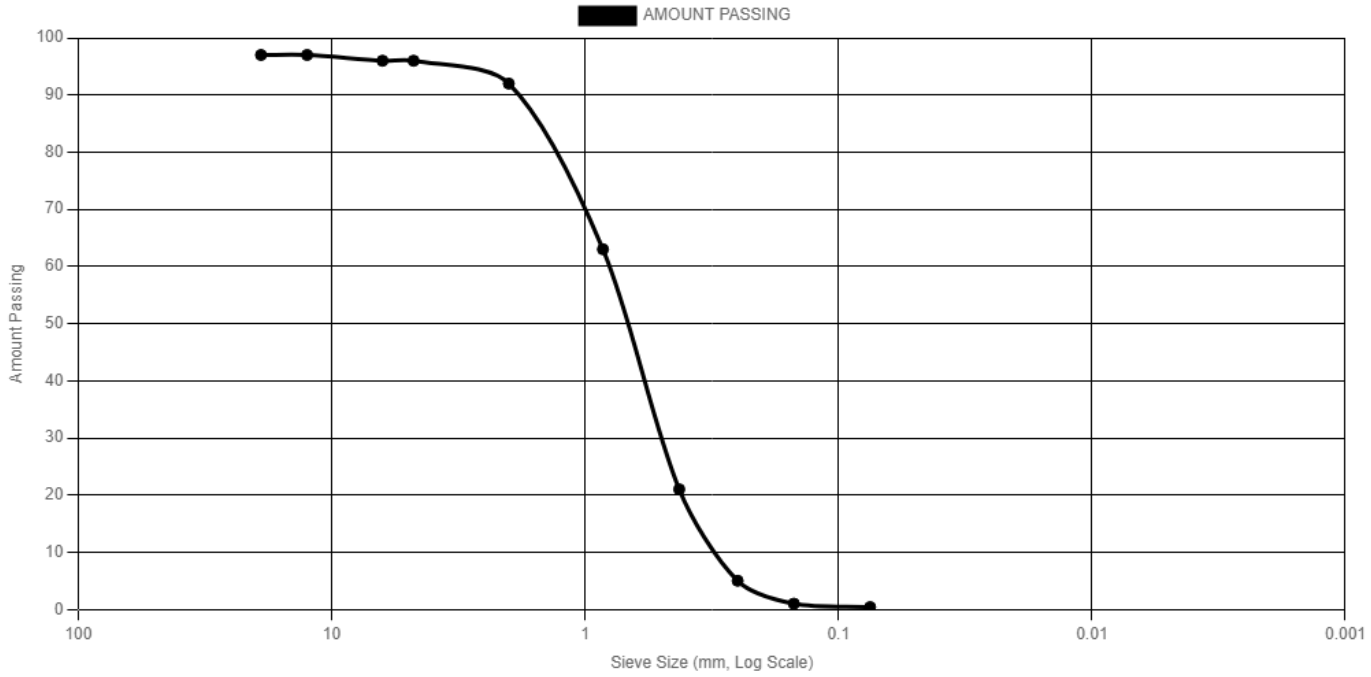
S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C136 & C117

Project Name:	Windham ME - Proposed Public Safety Building - Geotechnical Engineering Services	**Project #:**	25-0363
		Lab ID:	33891G
		Date Received:	12/19/2025
Client:	Great Falls Construction, Inc.	**Date Completed:**	12/26/2025
Sample Description:	Test Pit Sample	**Tested By:**	Naomi McMillen
Material Source:	TP-3, 6' to 6.5'		

Standard Designation (mm/µm)	Sieve Size	Amount Passing (%)	
19 mm	3/4"	97%	
12.5 mm	1/2"	97%	
6.3 mm	1/4"	96%	
4.75 mm	No. 4	96%	4% Gravel
2 mm	No. 10	92%	
850 µm	No. 20	63%	
425 µm	No. 40	21%	95.63% Sand
250 µm	No. 60	5%	
150 µm	No. 100	1%	
75 µm	No. 200	0.4%	0.4% Fines



Remarks:

Sarah Sylvia

Reviewed By

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cumberland County and Part of Oxford County, Maine



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:1,880 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

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

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 21, Aug 26, 2024

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

Date(s) aerial images were photographed: Jul 22, 2021—Oct 7, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND	MAP INFORMATION
	imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HgB	Hermon sandy loam, 3 to 8 percent slopes	0.3	4.2%
HlB	Hinckley loamy sand, 3 to 8 percent slopes	6.1	95.8%
Totals for Area of Interest		**6.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cumberland County and Part of Oxford County, Maine

HgB—Hermon sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w9r8
Elevation: 0 to 950 feet
Mean annual precipitation: 31 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hermon and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hermon

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly supraglacial meltout till derived from granite and gneiss

Typical profile

Ap - 0 to 9 inches: sandy loam
Bs1 - 9 to 16 inches: very gravelly sandy loam
Bs2 - 16 to 32 inches: extremely gravelly loamy sand
C - 32 to 65 inches: very gravelly coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

HIB—Hinckley loamy sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2svm8
Elevation: 0 to 1,430 feet
Mean annual precipitation: 36 to 53 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hinckley and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hinckley

Setting

Landform: Outwash plains, eskers, moraines, kame terraces, kames, outwash terraces, outwash deltas
Landform position (two-dimensional): Summit, shoulder, backslope, footslope
Landform position (three-dimensional): Nose slope, side slope, base slope, crest, riser, tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Parent material: Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 8 inches: loamy sand
Bw1 - 8 to 11 inches: gravelly loamy sand
Bw2 - 11 to 16 inches: gravelly loamy sand
BC - 16 to 19 inches: very gravelly loamy sand
C - 19 to 65 inches: very gravelly sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

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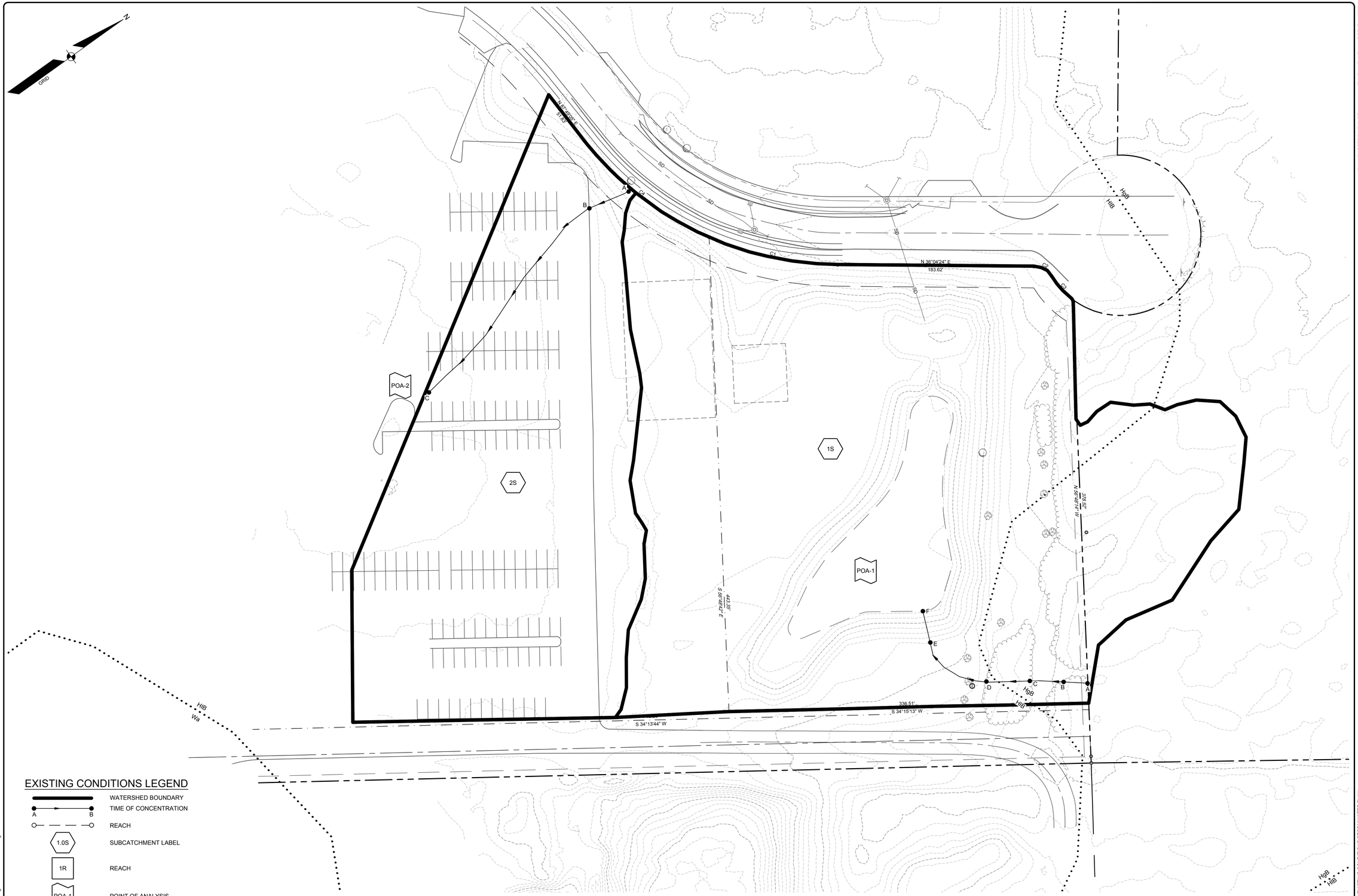
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Appendix 5

Stormwater Management Plans



EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A, B)
- REACH
- 1.0S — SUBCATCHMENT LABEL
- 1R — REACH
- POA-1 — POINT OF ANALYSIS
- 1P — STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # — SOILS BOUNDARY

SOILS TABLE

SYMBOL	TYPE OF SOIL	SLOPE	DRAINAGE
HgB	HERMON SANDY LOAM	3-8%	SOMEWHAT EXCESSIVELY DRAINED
HIB	HINCKLEY LOAMY SAND	3-8%	EXCESSIVELY DRAINED

NOTES:

1. ON-SITE SOIL INFORMATION IS BASED ON THE UNITED STATES DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES CONSERVATION SERVICE'S WEB SOIL SURVEY. SEE FULL STORMWATER REPORT FOR ADDITIONAL SOILS INFORMATION.
2. TC PATHS NOT SHOWN ARE ASSUMED TO HAVE A MINIMUM VALUE OF 6 MINUTES BASED ON TR-55 STANDARDS.

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 INCH = 40 FT.

F:\Projects\240000\240431\DWG\Design\240431 SWP PRE.dwg - 5/20/2026 6:56 PM - SAMUEL BIBEAU

PAUL D. OSTROWSKI, PE 11175 — THARYN S. NIEN-LARGE, RLA 5287

NOT FOR CONSTRUCTION

STATE OF MAINE — PAUL D. OSTROWSKI — No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 05/21/2026

REV.	BY	DATE	STATUS
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
B.	TFG	12/08/25	55% PROGRESS SET
A.	TFG	03/28/25	25% CMP SET

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED BY OTHERS SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 JOHN ROBERTS ROAD, SUITE 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick.

EXISTING CONDITIONS STORMWATER PLAN

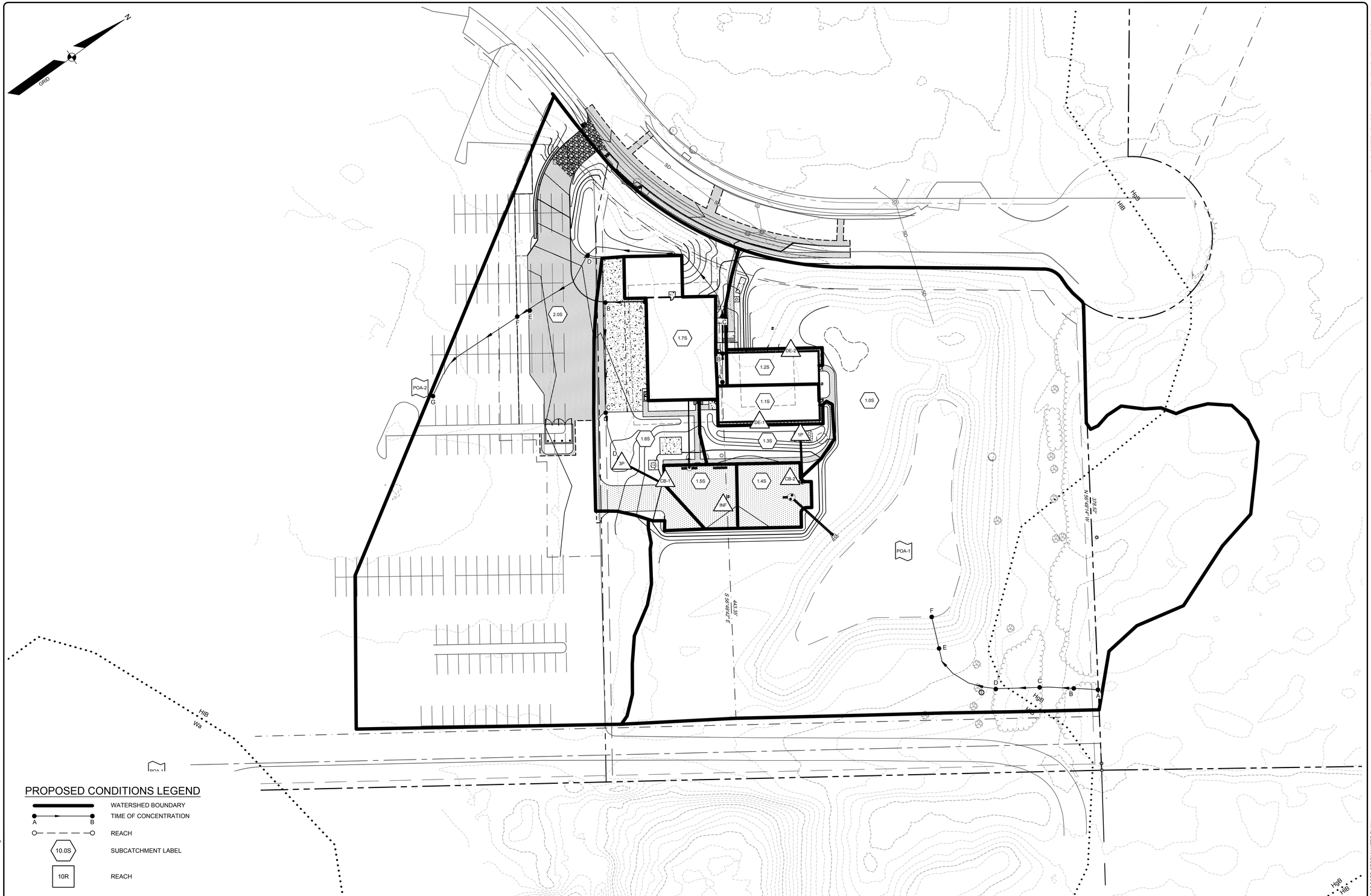
OF:
WINDHAM FIRE STATION
FRANKLIN DRIVE
WINDHAM, MAINE

FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	04/24/2026
SCALE	1" = 40'
PROJECT	240431-01

SHEET 1 OF 2

240431 SWP PRE.dwg, TAB-1 of 1 EXISTING CONDITIONS STORMWATER PLAN



PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A, B)
- REACH
- 10.0S — SUBCATCHMENT LABEL
- 10R — REACH
- POINT OF ANALYSIS
- 10P — STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # — SOILS BOUNDARY

SOILS TABLE

SYMBOL	TYPE OF SOIL	SLOPE	DRAINAGE
HgB	HERMON SANDY LOAM	3-8%	SOMEWHAT EXCESSIVELY DRAINED
HIB	HINCKLEY LOAMY SAN	3-8%	EXCESSIVELY DRAINED

NOTES:

1. ON-SITE SOIL INFORMATION IS BASED ON THE UNITED STATES DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES CONSERVATION SERVICE'S WEB SOIL SURVEY. SEE FULL STORMWATER REPORT FOR ADDITIONAL SOILS INFORMATION.
2. TC PATHS NOT SHOWN ARE ASSUMED TO HAVE A MINIMUM VALUE OF 6 MINUTES BASED ON TR-55 STANDARDS.

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 INCH = 40 FT.

F:\Projects\240000\240431\DWG\Design\240431 SWP POST.dwg - 5/21/2026 9:39 AM - SAMUEL BIBEAU

PAUL D. OSTROWSKI, PE 11175 — THARYN S. NIEN-LARGE, RLA 5287

NOT FOR CONSTRUCTION

STATE OF MAINE — PAUL D. OSTROWSKI No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 05/21/2026

REV.	BY	DATE	STATUS
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
C.	TFG	02/18/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
B.	TFG	12/08/25	55% PROGRESS SET
A.	TFG	03/28/25	25% CMP SET

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS MADE TO THIS PLAN WITHOUT THE AUTHORIZATION OF SEBAGO TECHNICS, INC. SHALL RELIEVE SEBAGO TECHNICS, INC. OF ALL RESPONSIBILITY AND LIABILITY AND WILL REQUIRE THE USER TO INDEMNIFY AND HOLD HARMLESS SEBAGO TECHNICS, INC. AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

PROPOSED STORMWATER PLAN
OF:
WINDHAM FIRE STATION
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

240431 SWP POST.dwg TAB1 of 1 PROPOSED STORMWATER PLAN

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	05/20/2026
SCALE	1" = 40'
PROJECT	240431-01

SHEET 2 OF 2

Section 12

Other Reviews

Section 12: Other Reviews

Maine Department of Environmental Protection

A Major Amendment to an existing Site Location of Development Approval (L-04289-23-A-X, dated May 24, 1978). We note that the initial approval has been revised, modified, and amended numerous times since the initial approval was received. SLODA reviews include a comprehensive review of stormwater management. A complete copy of the MDEP MELS submittal, reference HQK-NDMW-04M7F, was delivered to the Town on March 3, 2026, as required by MDEP. Reference is made to the enclosed letter of transmittal and submission acknowledgement received from the Maine DEP MELS system on February 26, 2026.

SEBAGO TECHNICS

LETTER OF TRANSMITTAL

Sebago Technics, Inc.
75 John Roberts Road-Suite 4A
South Portland, ME 04106-6963

Phone (207) 200-2100 **FAX** (207) 856-2206

TO Steve Puleo, Planning Director
Town of Windham
8 School Road
Windham, ME 04062

DATE: 3/3/2026	STI Project 240431-01
ATTENTION: Steve Puleo	
RE: N. Windham Public Safety Building	
MDEP SLODA Amendment Submittal	
Applicant: Town of Windham	
Delivered 3-3-26	

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☒ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Shop drawings ☒ SLODA Amendment Binder

COPIES	DATE	NO.	DESCRIPTION
1	February 2026	1	Site Plan Review Application, Bound
1	February 2026	2	Site Plan Set, 24x36 Bound and Folded
1			OneDrive link shared via email

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit_____copies for approval
☒ For your use ☐ Approved as noted ☐ Submit_____copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return_____corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS: Municipal Copy as required by MDEP

COPY TO: File

Signed: Stefanie Nichols for Tanner Goodine

If enclosures are not as noted, kindly notify us at once.

Submission Complete

Revision and Amendment Application

Submitted 02/26/2026 Site: L-004289 Submission HQK-NDMW-04M7F Revision 1
Form Version 1.8

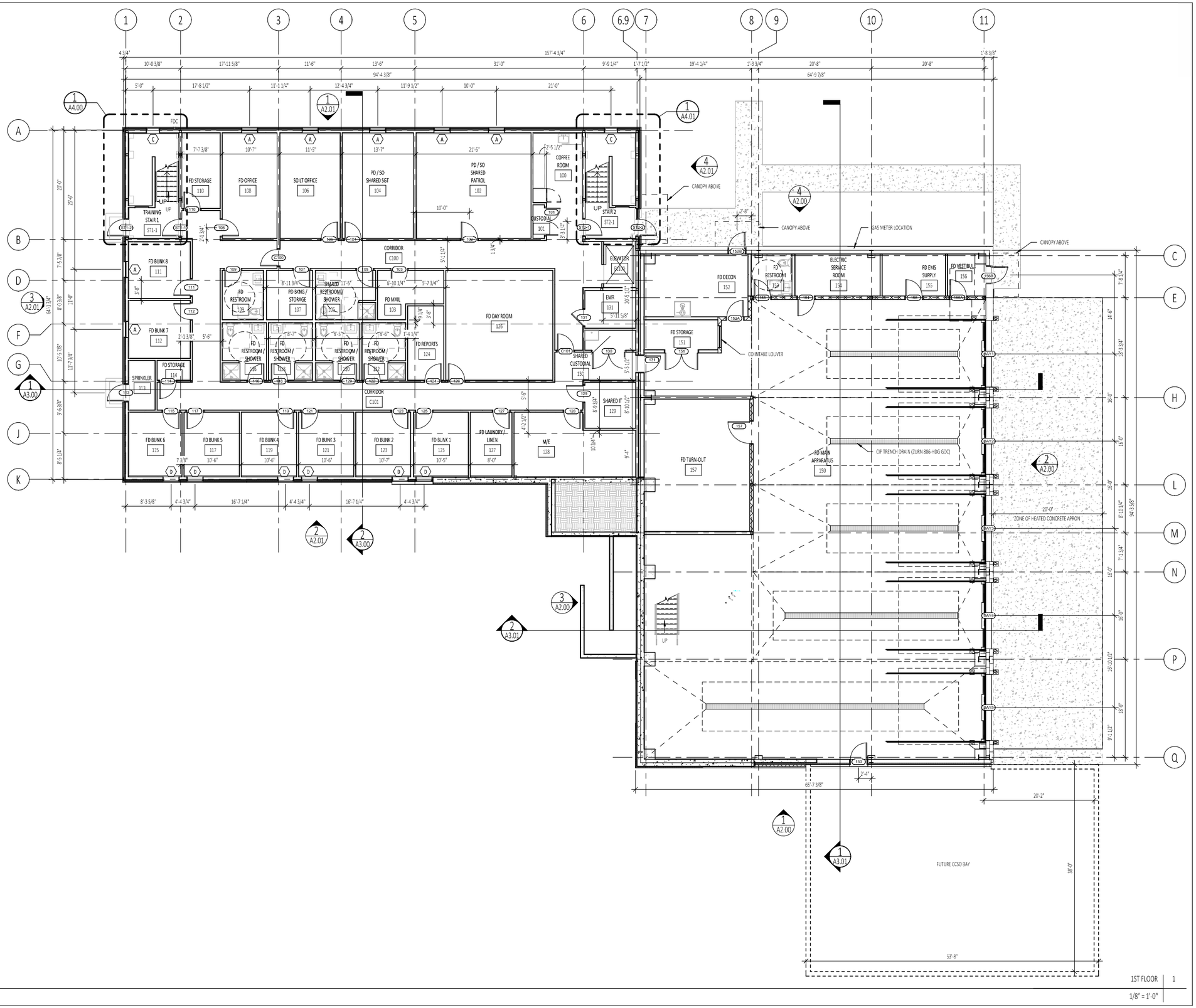
Section 13

Architectural Plans

11x17

Section 13: Architectural Plans

Reduced-size architectural floor plans and elevations by Invivid Architecture are enclosed in this section for Board review.



architecture invivid
631 Stevens Ave Ste #200
Portland, ME 04103
207 - 939 - 7602

Project:

NORTH WINDHAM PUBLIC SAFETY

FRANKLIN DRIVE, WINDHAM, ME 04062

Owner/Client:

TOWN OF WINDHAM

INPUT CLIENT ADDRESS

Stamp:

NOT FOR CONSTRUCTION

Consultant:

Issuance:

ISSUED TO TOWN OF WINDHAM FOR FINAL SITE AND SUBDIVISION APPROVAL

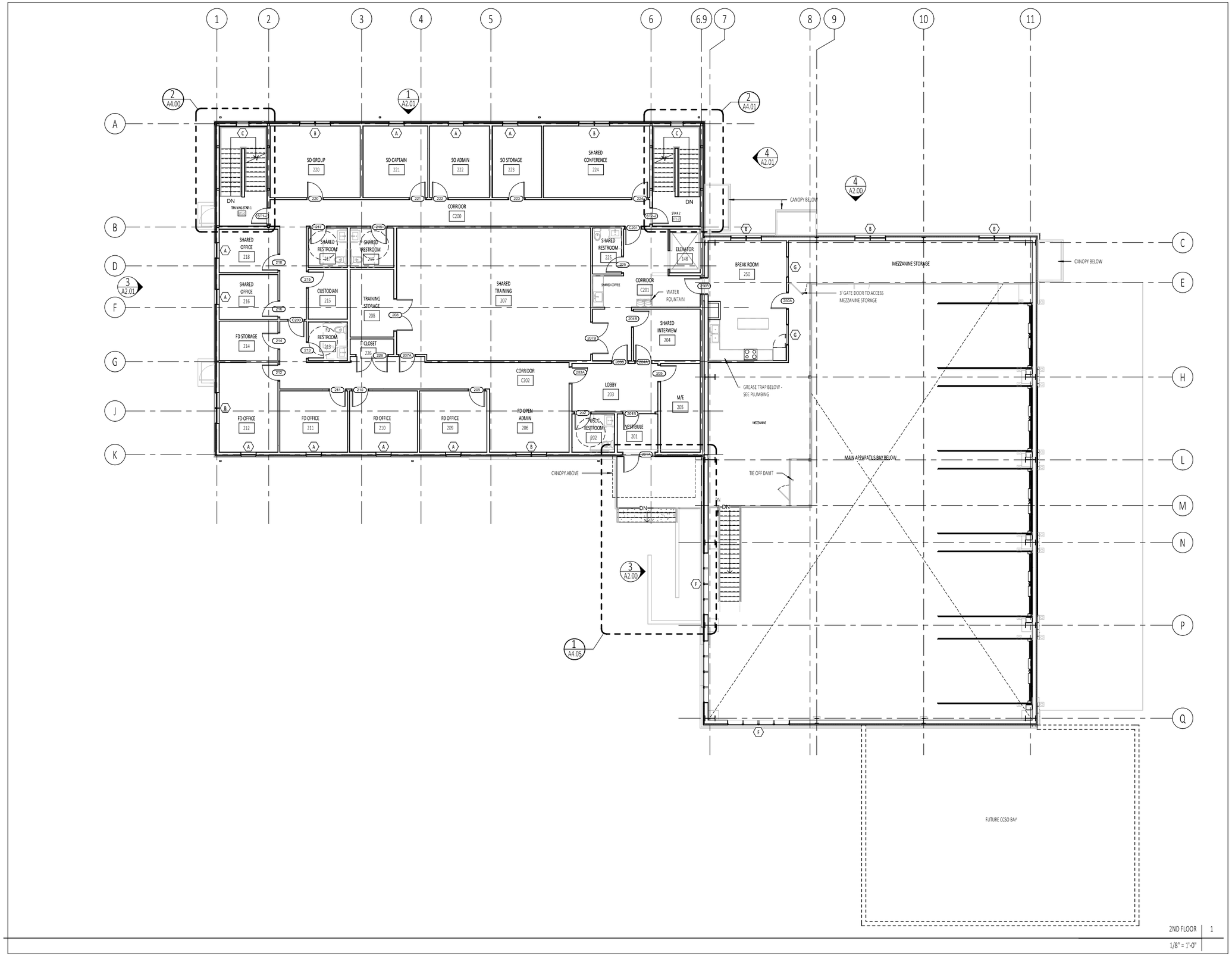
Revisions:

FIRST FLOOR PLAN

Scale:	1/8" = 1'-0"
Date:	06/12/2026

A1.01

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2ND FLOOR | 1

1/8" = 1'-0"

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207 - 939 - 7602

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Consultant:

Issuance:

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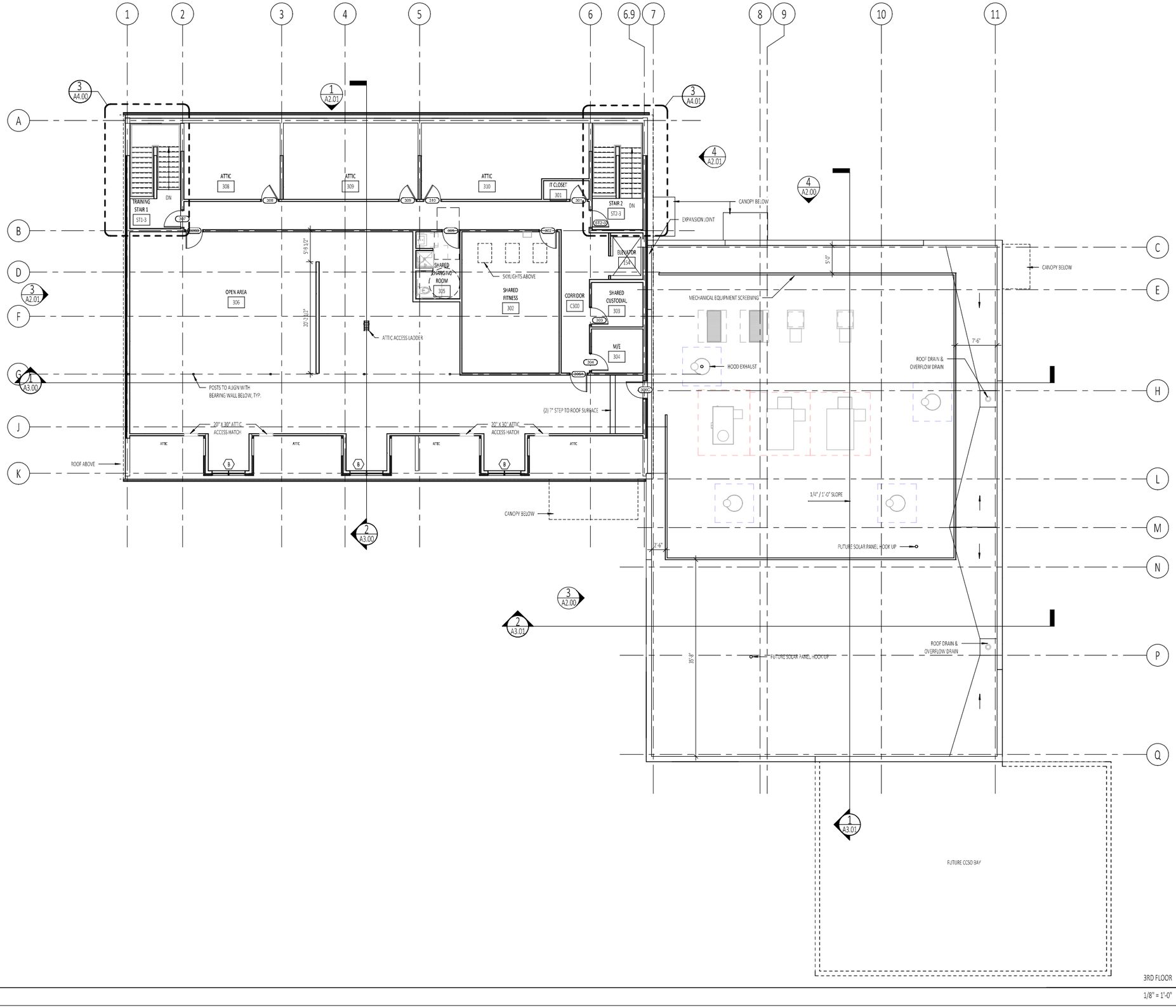
Revisions:

SECOND FLOOR PLAN

Scale: 1/8" = 1'-0"

Date: 06/12/2026

A1.02



architecture invivid
631 Stevens Ave Ste #200
Portland, ME 04103
207 - 939 - 7602

Project:

NORTH WINDHAM PUBLIC SAFETY

FRANKLIN DRIVE, WINDHAM, ME 04062

Owner/Client:

TOWN OF WINDHAM

INPUT CLIENT ADDRESS

Stamp:

NOT FOR CONSTRUCTION

Consultant:

Issuance:

ISSUED TO TOWN OF WINDHAM FOR FINAL SITE AND SUBDIVISION APPROVAL

Revisions:

THIRD FLOOR PLAN

Scale:	1/8" = 1'-0"
Date:	06/12/2026

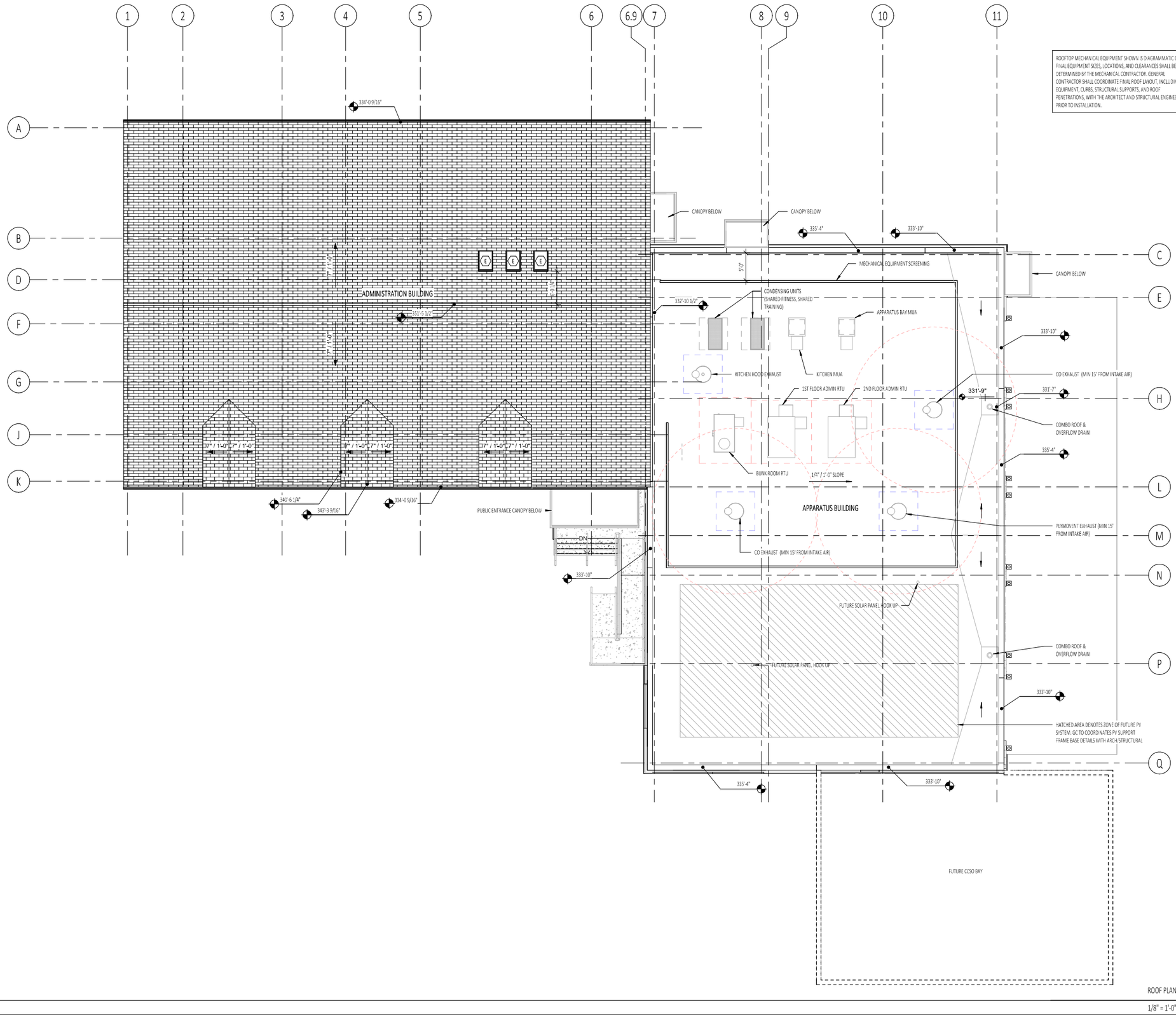
A1.03

228

3RD FLOOR 1

1/8" = 1'-0"

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ROOF PLAN 1

1/8" = 1'-0"

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631 Stevens Ave Ste #200
Portland, ME 04103
207 - 939 - 7602

Project:

NORTH WINDHAM PUBLIC SAFETY

FRANKLIN DRIVE, WINDHAM, ME 04062

Owner/Client:

TOWN OF WINDHAM

INPUT CLIENT ADDRESS

Stamp:

NOT FOR CONSTRUCTION

Consultant:

Issuance:

ISSUED TO TOWN OF WINDHAM FOR FINAL SITE AND SUBDIVISION APPROVAL

Revisions:

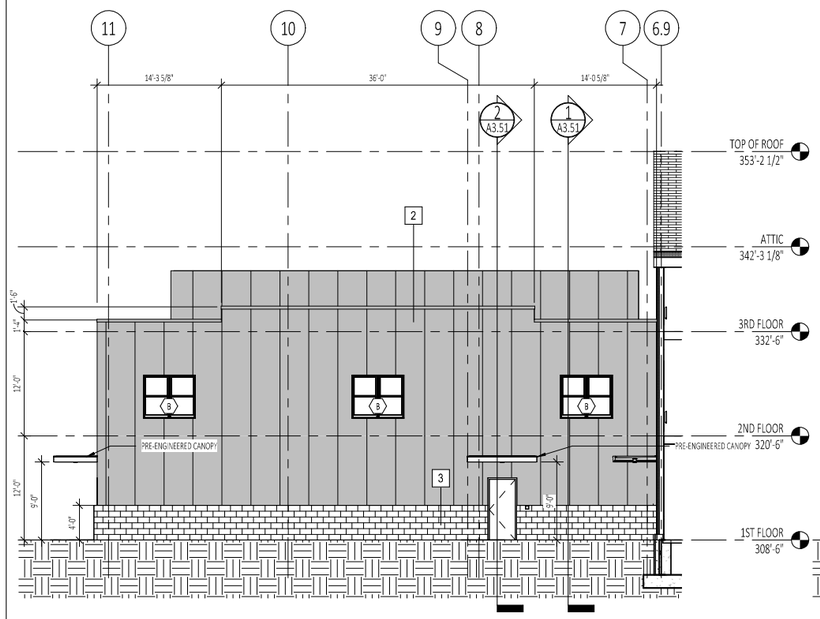
ROOF PLAN

Scale:	1/8" = 1'-0"
Date:	06/12/2026

A1.05

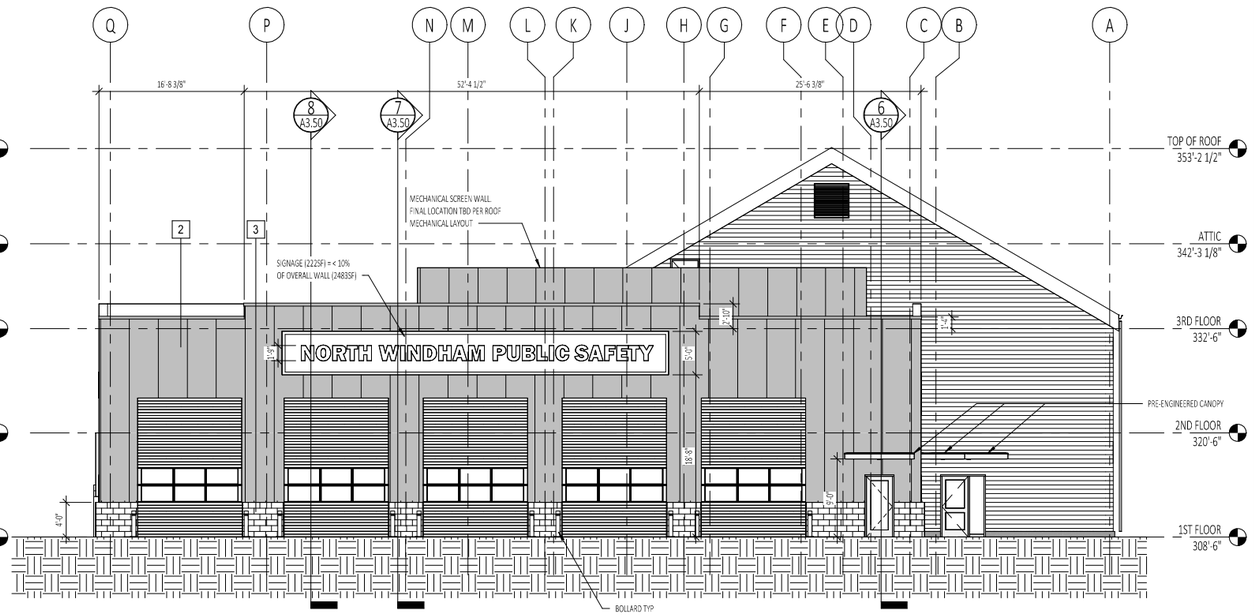
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MATERIAL SCHEDULE					
Key Name	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR	REMARKS
1	VINYL SIDING	CERTAINTEED	MONOGRAM VINYL SIDING	COLONIAL WHITE	
2	INSULATED METAL PANEL SYSTEM	TBD	TBD	PEARL GRAY	
3	SPLIT-FACE CMU	TBD	TBD	VARIABLE GRAY	
4	ASPHALT SHINGLES	TBD	TBD	BLACK	
5	PVC TRIM	TBD	TBD	WHITE	
6	PREFINISHED METAL COPING	TBD	TBD	PEARL GRAY	
7	HARDIE SHINGLE PANEL	HARDIE	SHINGLE SIDING	GRAY	
8	WALLGUARD CONCRETE FACED INSULATED PANEL	CLEAR CORPORATION	WALLGUARD	GRAY	



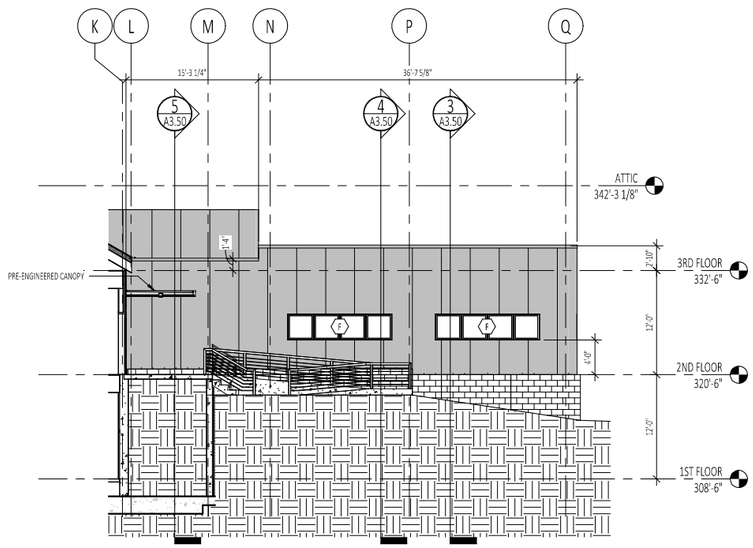
APPARATUS BUILDING EAST ELEVATION | 4

1/8" = 1'-0"



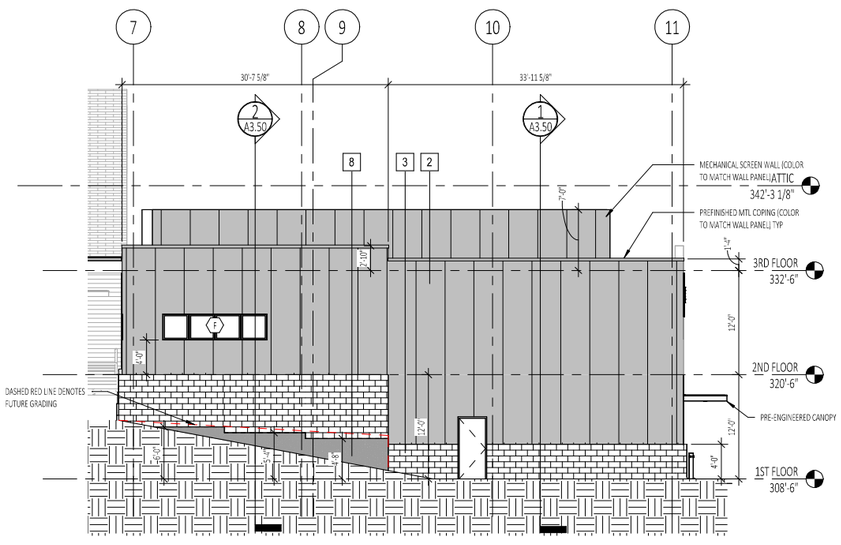
APPARATUS BUILDING SOUTH ELEVATION | 2

1/8" = 1'-0"



APPARATUS BUILDING NORTH ELEVATION | 3

1/8" = 1'-0"



APPARATUS BUILDING WEST ELEVATION | 1

1/8" = 1'-0"

architecture invivid
631 Stevens Ave Ste #200
Portland, ME 04103
207 - 939 - 7602

Project:

NORTH WINDHAM PUBLIC SAFETY

FRANKLIN DRIVE,
WINDHAM, ME 04062

Owner/Client:

TOWN OF WINDHAM

INPUT CLIENT ADDRESS

Stamp:

NOT FOR CONSTRUCTION

Consultant:

Issuance:

ISSUED TO TOWN OF WINDHAM FOR FINAL SITE AND SUBDIVISION APPROVAL

Revisions:

EXTERIOR ELEVATIONS

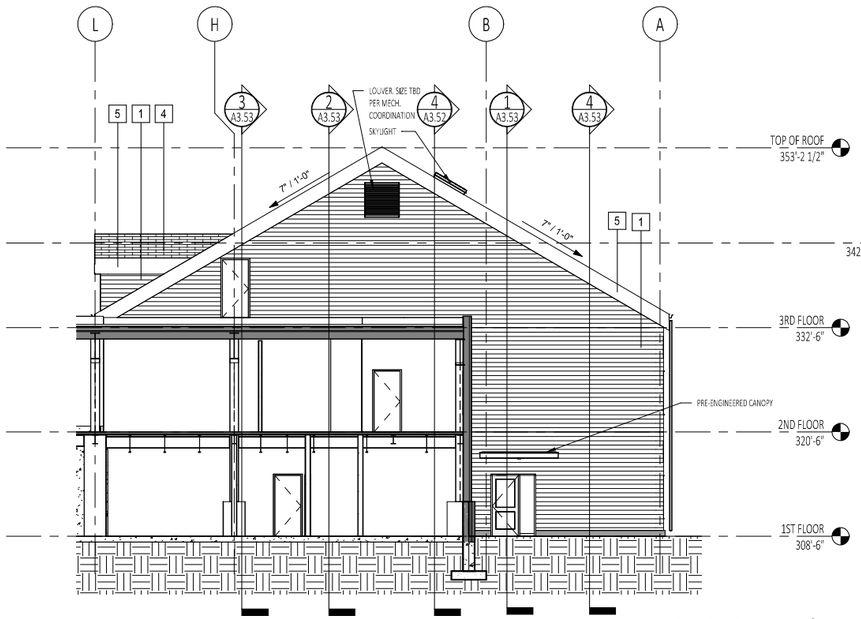
Scale: 1/8" = 1'-0"

Date: 06/12/2026

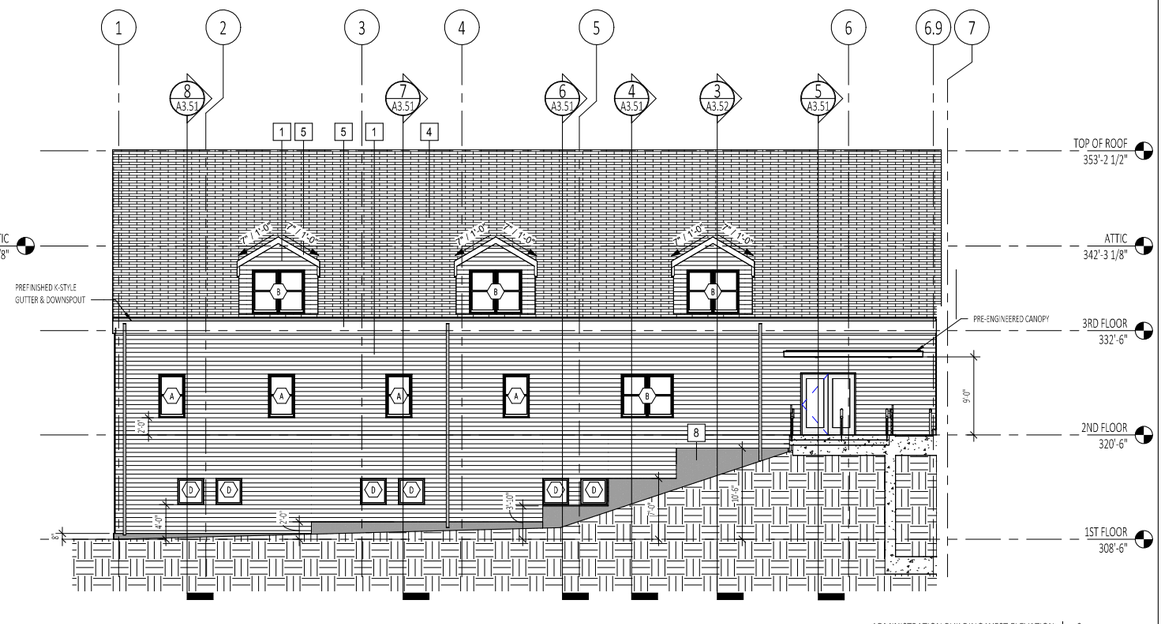
A2.00

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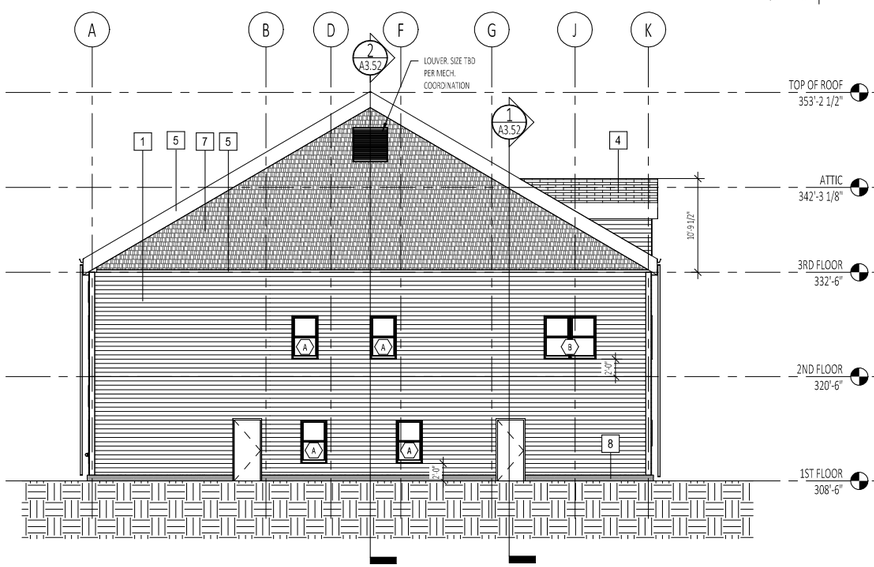
MATERIAL SCHEDULE					
Key Name	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR	REMARKS
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4	ASPHALT SHINGLES	TBD	TBD	BLACK	
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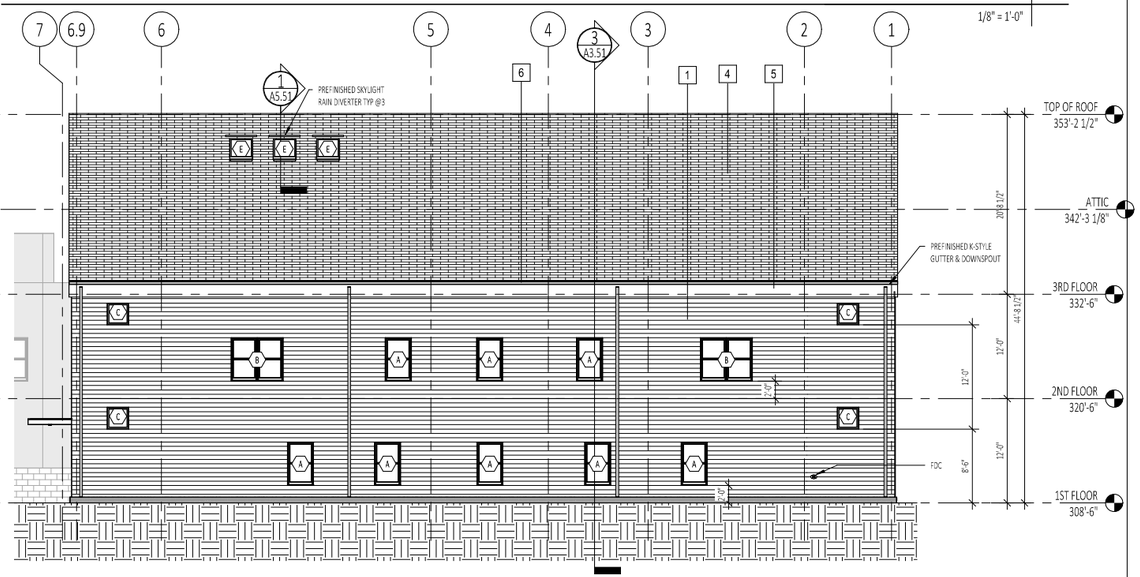
ADMINISTRATION BUILDING SOUTH ELEVATION 4
1/8" = 1'-0"



ADMINISTRATION BUILDING WEST ELEVATION 2
1/8" = 1'-0"



ADMINISTRATION BUILDING NORTH ELEVATION 3
1/8" = 1'-0"



ADMINISTRATION BUILDING EAST ELEVATION 1
1/8" = 1'-0"

architecture invivid
631 Stevens Ave Ste #200
Portland, ME 04103
207 - 939 - 7602

Project:

NORTH WINDHAM PUBLIC SAFETY

FRANKLIN DRIVE, WINDHAM, ME 04062

Owner/Client:

TOWN OF WINDHAM

INPUT CLIENT ADDRESS

Stamp:

NOT FOR CONSTRUCTION

Consultant:

Issuance:

ISSUED TO TOWN OF WINDHAM FOR FINAL SITE AND SUBDIVISION APPROVAL

Revisions:

EXTERIOR ELEVATIONS

Scale: 1/8" = 1'-0"

Date: 06/12/2026

A2.01

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NORTH WINDHAM PUBLIC SAFETY

FRANKLIN DRIVE
WINDHAM, MAINE

APPLICANT:

TOWN OF WINDHAM

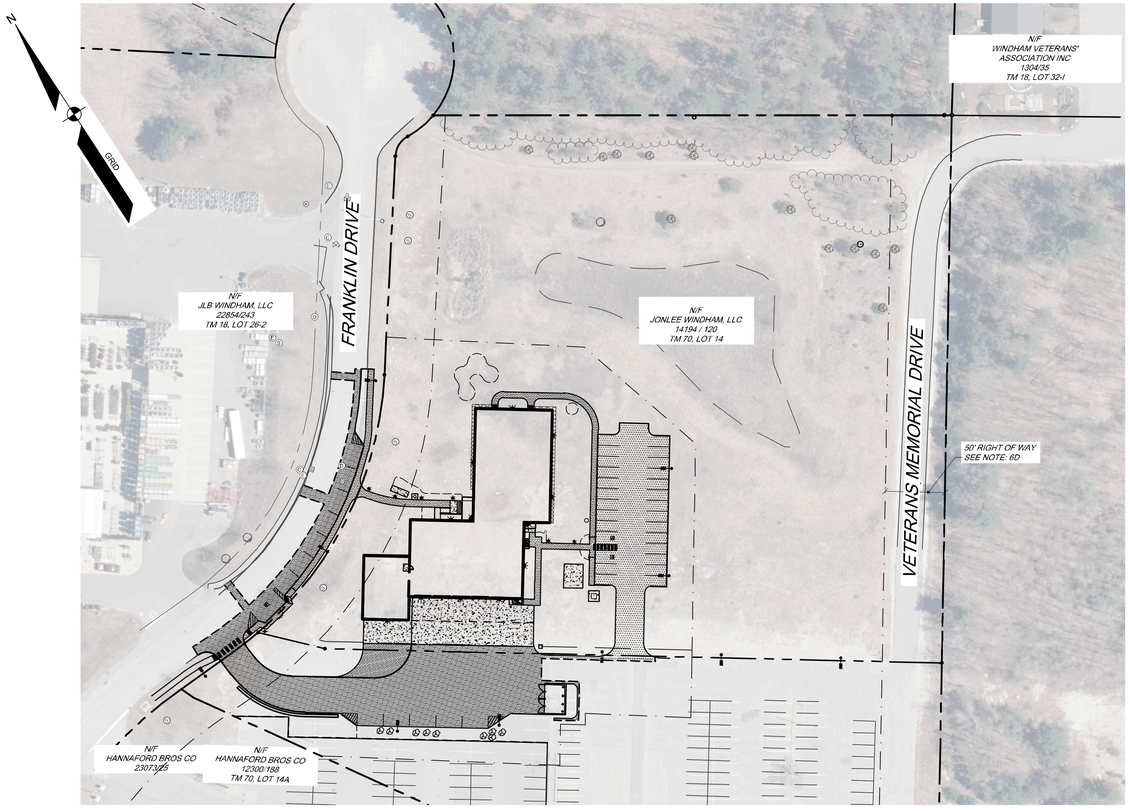
8 SCHOOL ROAD
WINDHAM, ME 04062

ENGINEER/SURVEYOR/ LANDSCAPE ARCHITECT:

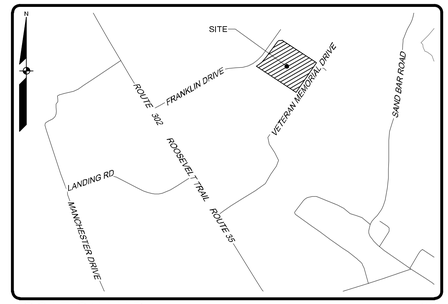
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

CONSTRUCTION MANAGER:

GREAT FALLS CONSTRUCTION INC.
20 MECHANIC ST
GORHAM, ME 04038



GRAPHIC SCALE
60 0 30 60 120
(IN FEET)
1 INCH = 60 FT.



LOCATION MAP NTS

SHEET INDEX

SHEET	TITLE
G-101	COVER SHEET
G-102	NOTES AND LEGEND
C-100	SUBDIVISION PLAN
C-101	DEMOLITION PLAN
C-102	SITE PLAN
C-103	GRADING PLAN
C-104	UTILITIES PLAN
C-201	LANDSCAPE PLAN
C-500	EROSION CONTROL NOTES
C-501	DETAILS
C-502	DETAILS
C-503	DETAILS
C-504	DETAILS
C-505	DETAILS
1 OF 1	EXISTING CONDITIONS

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

REV.	BY	DATE	STATUS
F.	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION
E.	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
B.	TFG	12/08/25	55% PROGRESS SET
A.	TFG	03/28/25	25% GMP SET

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SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Rd. Suite 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

COVER SHEET
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	1" = 60'
PROJECT	240431-01

SHEET G-101

240431 C.dwg TAB:G-101 COVER SHEET

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER LINE/R.O.W.	
	DEED LINE/R.O.W.	
	TIE LINE	
	SETBACK	
	EASEMENT	
	BUFFER	
	FLOODPLAIN	
	FLOODWAY	
	CENTERLINE	
⊡	MONUMENT	■
◎	IRON PIPE/ROD	●
◎	DRILL HOLE	◉
C1/L1	DEED CALL	
C1/L1	CURVE/LINE NO.	C1/L1
	SOILS	
	ZONE LINE	
	ZONE LINE ON PL	
BENCHMARK DESCRIPTION WITH ELEVATION	BENCHMARK	
△	SURVEY CONTROL	
TP-1	TEST PIT	
MW-1	MONITORING WELL	
B-1	BORING	
	BUILDING	
	DECK/STEPS/ OVERHANG	
	EDGE WETLAND	
	WETLANDS	
	UPLANDS	
	STREAM	
	LEDGE	
	EDGE PAVEMENT	
	PAVEMENT SAWCUT	
	EDGE CONCRETE	
	PAVEMENT PAINT	
	EDGE GRAVEL	
	CURB LINE	
	EDGE OF WATER	
	TREELINE	
120 118	CONTOURS	120
×120.00	SPOT GRADE	+120.00
O	CHAIN LINK FENCE	O
X	BARB WIRE FENCE	X
□	STOCKADE FENCE	□
	GUARD RAIL	
	STONE WALL	
	RETAINING WALL	
	DECIDUOUS TREE	+
	CONIFEROUS TREE	+
	MULCH LINE	
o	BOLLARD	●
	SIGN	
	RAILROAD	
G	GAS	G
GV	GAS GATE VALVE	GV
GM	GAS METER	
G	GAS MANHOLE	
W	WATER	W
WV	WATER GATE VALVE	WV
	WATER SHUT OFF	
	HYDRANT	
W	WATER MANHOLE	
W	WELL	W
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
S	SANITARY MANHOLE	●
SD	STORM DRAIN	SD
UD	UNDER DRAIN	UD
D	DRAINAGE MANHOLE	●
	CATCH BASIN	■
OHU	OVERHEAD UTILITY	OHU
UGU	UNDERGROUND UTILITY	UGU
T	TRANSFORMER PAD	T
E	ELECTRICAL MANHOLE	E
EM	ELECTRIC METER	
H	HVAC UNIT	
T	TELEPHONE MANHOLE	
	LIGHT POLE	
	UTILITY POLE	
	GUY WIRE	
	DRAINAGE DITCH	
	EROSION CONTROL BLANKET	
	FILTER BARRIER	FB
	RIPRAP	
	CHECK DAM	
	INLET PROTECTION	
	BOULDER	

GENERAL NOTES

1. THE RECORD OWNER OF THE PARCEL IS JONLEE WINDHAM LLC., BY DEED DATED OCTOBER 2, 1998 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 14194, PAGE 120.
2. THE PROPERTY IS SHOWN AS LOT 14 ON THE TOWN OF WINDHAM TAX MAP 70 AND IS LOCATED IN THE COMMERCIAL-1 DISTRICT(C-1).
3. SPACE AND BULK CRITERIA FOR THE COMMERCIAL DISTRICT ARE AS FOLLOWS:

   NET RESIDENTIAL DENSITY: NONE
   MINIMUM LOT SIZE: NONE
   MINIMUM STREET FRONTAGE: 100 FEET
   MINIMUM FRONT YARD: 10 FEET
   A. BUILDING PRINCIPAL.
      a. ON ROUTE 302: 10 FEET TO 20 FEET
      b. ALL OTHER STREETS: 0 FEET TO 20 FEET
   B. BUILDING ACCESSORY: PRINCIPAL BUILDING SETBACK, PLUS 20 FEET MINIMUM
   C. DWELLING: TWO-FAMILY MINIMUM SETBACK ON ROUTES 35, 115, AND 302: 300 FEET
   MINIMUM SIDE YARD: 6 FEET
   MINIMUM REAR YARD: 6 FEET
   MAXIMUM BUILDING HEIGHT: 75 FEET
   SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
4. TOTAL AREA OF PROPOSED PARCEL IS APPROXIMATELY 3.21 ACRES.
5. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. IN FEBRUARY OF 2025 WITH SNOW AND ICE CONDITIONS. CONTOURS SHOWN OUTSIDE PROPOSED LOT ARE SUPPLEMENTED WITH AERO-GEOMATIC©/ SUAS BASED PHOTOGRAMMETRY & LIDAR.
6. PLAN REFERENCES:
   A. "EXISTING CONDITIONS LAND OF JLB WINDHAM LLC" FOR JAY WISE BY BH2M DATE NOVEMBER, 2022, JOB NUMBER 22051.
   B. "EXISTING CONDITIONS PLAN OF FRANKLIN DRIVE" FOR NEW GEN HOSPITALITY MANAGEMENT, LLC., BY SEBAGO TECHNICS DATED OCTOBER 16, 2024, JOB NUMBER 230411.
   C. "PLAN SHOWING A STANDARD BOUNDARY SURVEY, WINDHAM MALL" FOR W.E.D.C BY MAIN-LAND DEVELOPMENT CONSULTANTS DATED JULY 27, 2023.
   D. "STANDARD BOUNDARY SURVEY OF A PORTION OF LAND LOCATED ON SAND BAR ROAD" FOR MARVIN MAYBERRY BY LEWIS & WASINA, INC., DATED FEBRUARY 12, 2001 AND RECORDED AT CCRD IN PLAN BOOK 201, PAGE 428.
   E. "AMENDED SUBDIVISION PLAN" PREPARED FOR JONLEE WINDHAM, LLC., BY LAND SERVICES INC., DATED FEBRUARY 8, 2002 AND RECORDED AT CCRD IN PLAN BOOK 202, PAGE 339.
   F. "AMENDED SUBDIVISION PLAN THE WINDHAM MALL ROOSEVELT TRAIL AND FRANKLIN DRIVE WINDHAM, MAINE FOR HOME DEPOT USA, INC., DATED APRIL 6, 2005 AND RECORDED AT CCRD IN PLAN BOOK 205, PAGE 254.
7. EASEMENT/ENCUMBRANCES:
   A. SUBJECT TO A SIGN EASEMENT LOCATED AT THE ENTRANCE OF FRANKLIN DRIVE AND DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 40488, PAGE 91.
   B. SUBJECT TO A CENTRAL MAINE POWER COMPANY AND CONSOLIDATED COMMUNICATIONS NNE AS DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 39713, PAGE 283.
   C. SUBJECT TO A CENTRAL MAINE POWER COMPANY AND CONSOLIDATED COMMUNICATIONS NNE AS DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 37440, PAGE 66.
   D. SUBJECT TO A 50 FOOT RIGHT ALONG THE EASTERN SIDE OF THE PROPERTY AND DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 10767, PAGE 17.
8. BASIS OF BEARING IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, GEOID18. IN INTERNATIONAL FEET. ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL FREQUENCY GNSS OBSERVATIONS.
9. BENCHMARK:
   BM-1 BOX CUT IN CONCRETE FOOTER NORTHERLY CORNER ELEVATION: 315.17(NAVD88)
10. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD C/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PRO-MARK MARKED THE UNDERGROUND UTILITIES SHOWN HEREON IN MARCH OF 2023 & 2025, AND THEY WERE FIELD LOCATED BY SEBAGO TECHNICS, INC.
11. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR WINDHAM, MAINE, CUMBERLAND COUNTY, MAP NUMBER 23005C0479F, HAVING AN EFFECTIVE DATE OF JUNE 20, 2024. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD.
12. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
13. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
14. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
15. PROVIDE ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
16. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
17. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
18. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
19. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
20. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (811) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
21. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
22. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
23. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
24. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
25. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
26. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
27. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
28. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
29. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGEMENT OF SEBAGO TECHNICS, INC.
30. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
31. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
32. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
33. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
34. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.
35. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW THROUGH THE EXISTING CLOSED STORM DRAINAGE SYSTEM DURING CONSTRUCTION AND SHALL SUBMIT A WORK PLAN FOR APPROVAL BY THE DESIGN ENGINEER.

DEMOLITION NOTES

1. PROTECT EXISTING BOUNDARY LINE MONUMENTATION. IF DISTURBED, EXISTING MONUMENTATION TO BE RESET BY A PROFESSIONAL LAND SURVEYOR.
2. DEMOLITION OF UTILITIES REQUIRING TREE REMOVAL SHALL BE COORDINATED WITH THE OWNER AND IN ACCORDANCE WITH PROJECT PLANS.
3. UTILITY DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION.
4. EXISTING SEWER AND STORM DRAINAGE INFRASTRUCTURE TO REMAIN ACTIVE DURING CONSTRUCTION AND UPON COMPLETION OF PROJECT. DEMOLITION/CONSTRUCTION ACTIVITIES SHALL NOT INTERFERE OR IMPEDE EXISTING FLOWS. CONTRACTOR SHALL PROVIDE BYPASS PUMPING AS REQUIRED DURING SEWER AND STORM DEMOLITION AND NEW CONSTRUCTION. DAMAGE TO EXISTING SEWER INFRASTRUCTURE SHALL BE REPAIRED BY CONTRACTOR AT THEIR EXPENSE.
5. DEMOLITION SHOWN IS FOR MAJOR SITE ELEMENTS TO BE DEMOLISHED. OTHER MINOR DEMOLITION MAY BE REQUIRED AS PART OF CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. COORDINATE ALL DEMOLITION WORK WITH SITE AND BUILDING DRAWINGS.
6. PRIOR TO ANY DEMOLITION, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF DEMOLITION PLANS TO THE OWNER. THIS PLAN SHALL DEPICT LOCATIONS OF PROPOSED TERMINATIONS AND ANY TEMPORARY SERVICES THAT WILL BE NEEDED.
7. CONTRACTOR REQUIRED TO CONFIRM/MAINTAIN BENCHMARKS. IF IMPACTED CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION/RELOCATION AND COORDINATION WITH PROJECT TEAM.

GRADING & EROSION NOTES

1. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THIS PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H: V) SHALL BE LINED WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS INDICATED.
2. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPS" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAIL.
4. SEE GRADING AND UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

CONSTRUCTION PLAN

1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. GRADING AND CLEARING LIMITS SHALL NOT ENCROACH ON ADJACENT PROPERTIES UNLESS NOTED OTHERWISE ON THE PLANS.
3. OPEN AREAS SHALL BE LIMITED TO AREAS BEING WORKED IN. THE AREA STRIPPED OF EXISTING VEGETATION AT ANY GIVEN TIME SHALL BE MINIMIZED AND BE PHASED WHERE PRACTICAL SO THAT AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. STABILIZE CONSTRUCTION AREAS BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED. SURFACES SHALL BE STABILIZED PRIOR TO DIRECTING STORMWATER RUNOFF TOWARD STORMWATER BMPS. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

UTILITY NOTES

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PROTECT EXISTING ONSITE SEWER PIPE AND ADJUST MANHOLE RIMS TO GRADE WHERE APPLICABLE.
2. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE OR NOT USE A GROUND LASER.
3. MAINTAIN MINIMUM 5'-6" OF COVER ABOVE TOP OF WATER SERVICE PIPE.
4. MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES. MAINTAIN MINIMUM 18 INCHES VERTICAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES.
5. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SEWERS SHALL BE PROVIDE 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND TOP OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
6. PIPE:
   - SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
   - FORCEMAIN PIPE SHALL BE DR-11 HDPE OR APPROVED EQUAL.
   - STORMDRAIN SHALL BE ADS N-12 DUAL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
   - WATER PIPE AND FITTINGS SHALL CONFORM TO PORTLAND WATER DISTRICT WATER PIPING SPECIFICATIONS. MAIN WATER SERVICE PIPE SHALL BE DUCTILE IRON, CLASS 52 PUSH-ON PIPE MEETING THE REQUIREMENTS OF AWWA/ANSI C-111/A21.11 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/ANSI C104/A21.4 WITH LINING TWICE THE THICKNESS SPECIFIED, AND COATED TWICE WITH A BITUMINOUS SEAL COATING. PROVIDE THRUST BLOCKS AT ALL WATER SERVICE BENDS.
7. COORDINATE FOUNDATION UNDERDRAIN LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. COORDINATE OIL WATER SEPARATOR INTERCEPTOR LOCATIONS WITH ARCHITECTURAL & PLUMBING DRAWINGS.
9. COORDINATE UTILITY INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
10. COORDINATE LOCATION OF SEWER, WATER, GAS, FOUNDATION DRAINS AND ROOF DRAIN INVERTS AT THE BUILDING WITH ARCHITECTURAL DRAWINGS.
11. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE PORTLAND WATER DISTRICT.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
13. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
14. WHERE SPECIFIED PROVIDE AN OIL BOOM IN EVERY CATCH BASIN WITHIN A PAVED AREA.
15. CONTRACTOR SHALL FURNISH AND INSTALL TRENCHING, MATERIALS AND BACKFILL FOR ALL UTILITIES. ELECTRICAL AND TELECOM/DATA PROVIDERS WILL PULL PRIMARY SERVICE TO TRANSFORMER AND PANEL. CONTRACTOR RESPONSIBLE FOR TIMING AND COORDINATION WITH UTILITIES AND DRAWINGS. COORDINATE WITH ELECTRICAL DRAWINGS FOR CONDUIT SCHEDULE, TYPE AND SIZES.
16. COORDINATE ALL WATER RELATED WORK WITH PORTLAND WATER DISTRICT.
17. UTILITY CONTACTS:
    ELECTRIC:
    CENTRAL MAINE POWER (CMP)
    CRAIG BATE, DISTRIBUTION CONSTRUCTION MANAGER
    (207) 578-2062
    WATER:
    PORTLAND WATER DISTRICT
    JOSEPH PARENT, UTILITY ASSET COORDINATOR
    (207) 523-5261

ABBREVIATIONS

AC	ACRE
AFG	ABOVE FINISH GRADE
APPROX.	APPROXIMATELY
BC	BOTTOM OF CURB
BCC	BITUMINOUS CONCRETE CURB
BIT	BITUMINOUS
BLDG	BUILDING
BW	BOTTOM OF WALL
CB	CATCH BASIN
CONC	CONCRETE
CONT	CONTINUOUS
DI	DUCTILE IRON
DIA	DIAMETER
DMH	DRAIN MANHOLE
E.W.	EACH WAY
EL	ELEVATION
ELEV	ELEVATION
FFE	FINISH FLOOR ELEVATION
FIN. GR.	FINISH GRADE
FTG	FOOTING
HDPE	HIGH DENSITY POLYETHYLENE
HGT	HEIGHT
HMA	HOT MIX ASPHALT
INV	INVERT
LF	LINEAR FEET
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND WATER DISTRICT
R	RADIUS
R.O.W.	RIGHT OF WAY
S.F.	SQUARE FEET
SCH	SCHEDULE
SCSC	SLIPFORM CONCRETE SLOPED CURB
SCVC	SLIPFORM CONCRETE VERTICAL CURB
SD	STORM DRAIN
SGC	SLOPED GRANITE CURB
SMH	SEWER MANHOLE
SPECS	SPECIFICATIONS
SS	SANITARY SEWER
SSGC	SALVAGED SLOPED GRANITE CURB
SVGC	SALVAGED VERTICAL GRANITE CURB
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
VGC	VERTICAL GRANITE CURB
VIF	VERIFY IN FIELD

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

REV.	BY	DATE	STATUS
A.	TFG	03/28/25	25% SMP SET
B.	TFG	12/08/25	55% PROGRESS SET
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
E.	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
F.	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED BY OTHERS SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

SEBAGO TECHNICS

SEBAGOTECHNICS.COM
75 John Roberts Road, Suite 4A
South Portland, ME 04106
207-200-2100

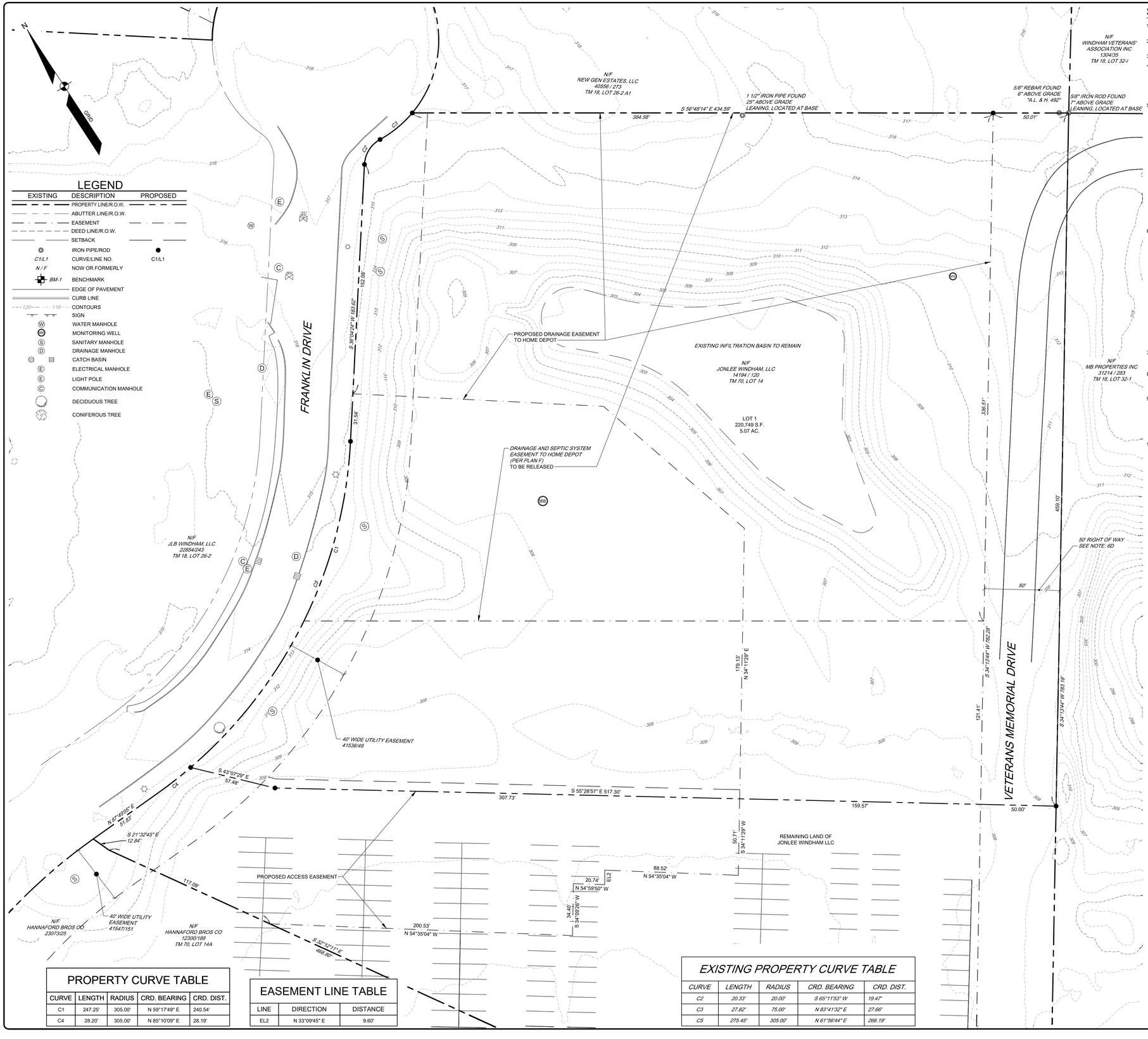
South Portland, Bridgton, Sanford and Brunswick

NOTES AND LEGEND
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	04/22/2026
SCALE	NTS
PROJECT	240431-01

SHEET G-102

240431 NL dwg T:\AB\G-102 NOTES AND LEGEND



LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER LINE/R.O.W.	
	EASEMENT	
	DEED LINE/R.O.W.	
	SETBACK	
	IRON PIPE/ROD	
C1/L1	CURVE/LINE NO.	C1/L1
N / F	NOW OR FORMERLY	
BM-1	BENCHMARK	
	EDGE OF PAVEMENT	
	CURB LINE	
120 118	CONTOURS	
	SIGN	
W	WATER MANHOLE	
MW	MONITORING WELL	
S	SANITARY MANHOLE	
D	DRAINAGE MANHOLE	
	CATCH BASIN	
E	ELECTRICAL MANHOLE	
E	LIGHT POLE	
C	COMMUNICATION MANHOLE	
	DECIDUOUS TREE	
	CONIFEROUS TREE	

SURVEY NOTES:

1. THE RECORD OWNER OF THE PARCEL IS JONLEE WINDHAM LLC., BY DEED DATED OCTOBER 2, 1998 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 14194, PAGE 120.
2. THE PROPERTY IS SHOWN AS LOT 14 ON THE TOWN OF WINDHAM TAX MAP 70 AND IS LOCATED IN THE COMMERCIAL-1 DISTRICT(C-1).
3. TOTAL AREA OF PROPOSED PARCEL IS APPROXIMATELY 5.07 ACRES.
4. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. IN FEBRUARY OF 2025 WITH SNOW AND ICE CONDITIONS. CONTOURS SHOWN OUTSIDE PROPOSED LOT ARE SUPPLEMENTED WITH AERO-GEOMATICS SUAS BASED PHOTOGRAMMETRY & LIDAR. LOCATION OF THE SEWER MANHOLES ALONG FRANKLIN DRIVE, WERE PROVIDED BY THE PORTLAND WATER DISTRICT AS THEY WERE INSTALLED AFTER OUR SURVEY FIELD WORK.
5. PLAN REFERENCES:
   - A. "EXISTING CONDITIONS LAND OF JLB WINDHAM LLC" FOR JAY WISE BY BH2M DATE NOVEMBER, 2022, JOB NUMBER 22051.
   - B. "EXISTING CONDITIONS PLAN OF FRANKLIN DRIVE" FOR NEW GEN HOSPITALITY MANAGEMENT, LLC., BY SEBAGO TECHNICS DATED OCTOBER 16, 2024; JOB NUMBER 230411.
   - C. "PLAN SHOWING A STANDARD BOUNDARY SURVEY, WINDHAM MALL" FOR W.E.D.C BY MAIN-LAND DEVELOPMENT CONSULTANTS DATED JULY 27, 2023.
   - D. "STANDARD BOUNDARY SURVEY OF A PORTION OF LAND LOCATED ON SAND BAR ROAD" FOR MARVIN MAYBERRY BY LEWIS & WASINA, INC., DATED FEBRUARY 12, 2001 AND RECORDED AT CCRD IN PLAN BOOK 201, PAGE 428.
   - E. "AMENDED SUBDIVISION PLAN" PREPARED FOR JONLEE WINDHAM, LLC., BY LAND SERVICES INC., DATED FEBRUARY 8, 2002 AND RECORDED AT CCRD IN PLAN BOOK 202, PAGE 339.
   - F. "AMENDED SUBDIVISION PLAN THE WINDHAM MALL ROOSEVELT TRAIL AND FRANKLIN DRIVE WINDHAM, MAINE FOR HOME DEPOT USA, INC., DATED APRIL 6, 2005 AND RECORDED AT CCRD IN PLAN BOOK 205, PAGE 254.
6. EASEMENT/ENCUMBRANCES:
   - A. SUBJECT TO A SIGN EASEMENT LOCATED AT THE ENTRANCE OF FRANKLIN DRIVE AND DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 40488, PAGE 91.
   - B. SUBJECT TO A CENTRAL MAINE POWER COMPANY AND CONSOLIDATED COMMUNICATIONS NNE AS DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 39713, PAGE 283.
   - C. SUBJECT TO A CENTRAL MAINE POWER COMPANY AND CONSOLIDATED COMMUNICATIONS NNE AS DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 37440, PAGE 66.
   - D. SUBJECT TO A 50-FOOT RIGHT ALONG THE EASTERN SIDE OF THE PROPERTY AND DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 10767, PAGE 17.
   - E. DRAINAGE AND SEPTIC EASEMENT TO HOME DEPOT PER PLAN REFERENCE F. TO BE RELEASED. A NEW DRAINAGE EASEMENT IN A RELOCATED AREA IS PROPOSED.
   - F. 40' WIDE UTILITY EASEMENT TO THE PORTLAND WATER DISTRICT AS DESCRIBED IN DEED BOOK 41536 PAGE 49.
   - G. PROPOSED ACCESS/UTILITY EASEMENT ON LAND OF HANNAFORD.
7. BASIS OF BEARING IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, GEOID18 IN INTERNATIONAL FEET, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL FREQUENCY GNSS OBSERVATIONS.
8. BENCHMARK:
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   ELEVATION: 315.71(NAVD88)
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10. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR WINDHAM, MAINE, CUMBERLAND COUNTY, MAP NUMBER 23005C0479F, HAVING AN EFFECTIVE DATE OF JUNE 20, 2024. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD.

AMENDMENT NOTE:

THIS PLAN AMENDS ALL PREVIOUSLY APPROVED AND RECORDED SUBDIVISION PLANS INCLUDING REFERENCED IN NOTES 5E & 5F. SUMMARY OF THE REVISIONS INCLUDE: DIVIDING THE JONLEE WINDHAM PROPERTY TO CREATE A NEW LOT FOR THE TOWN OF WINDHAM; REVISE THE EASEMENT FOR HOME DEPOT; CREATE AN ACCESS EASEMENT FOR THE NEW LOT; AND SHOW RECENT EASEMENTS ALONG FRANKLIN DRIVE.

APPROVAL-
TOWN OF WINDHAM
PLANNING BOARD

_____ DATE

_____ CHAIRPERSON

_____

_____

_____

_____

_____

_____

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

STATE OF MAINE, CUMBERLAND COUNTY SS, REGISTRY OF DEEDS

RECEIVED _____, 20____

AT _____H _____M _____M AND

RECORDED IN

PLAN BOOK _____ PAGE _____

ATTEST: _____ REGISTER

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C1	247.25'	305.00'	N 59°17'49" E	240.54'
C4	28.20'	305.00'	N 85°10'09" E	28.19'

EASEMENT LINE TABLE

LINE	DIRECTION	DISTANCE
EL2	N 33°09'45" E	9.60'

EXISTING PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C2	20.33'	20.00'	S 65°11'53" W	19.47'
C3	27.82'	75.00'	N 83°41'32" E	27.66'
C5	275.45'	305.00'	N 61°56'44" E	266.19'

MATTHEW W. ERICKSON PLS 2117

STATE OF MAINE · MATTHEW W. ERICKSON · 2117 · PROFESSIONAL LAND SURVEYOR

REV.	BY	DATE	STATUS
F.	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION
E.	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
C.	TFG	02/18/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
B.	TFG	12/08/25	55% PROGRESS SET
A.	TFG	03/28/25	25% CMP SET

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

THIRD AMENDED SUBDIVISION PLAN
OF: THE WINDHAM MALL
FRANKLIN DRIVE
WINDHAM, MAINE

FOR: TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

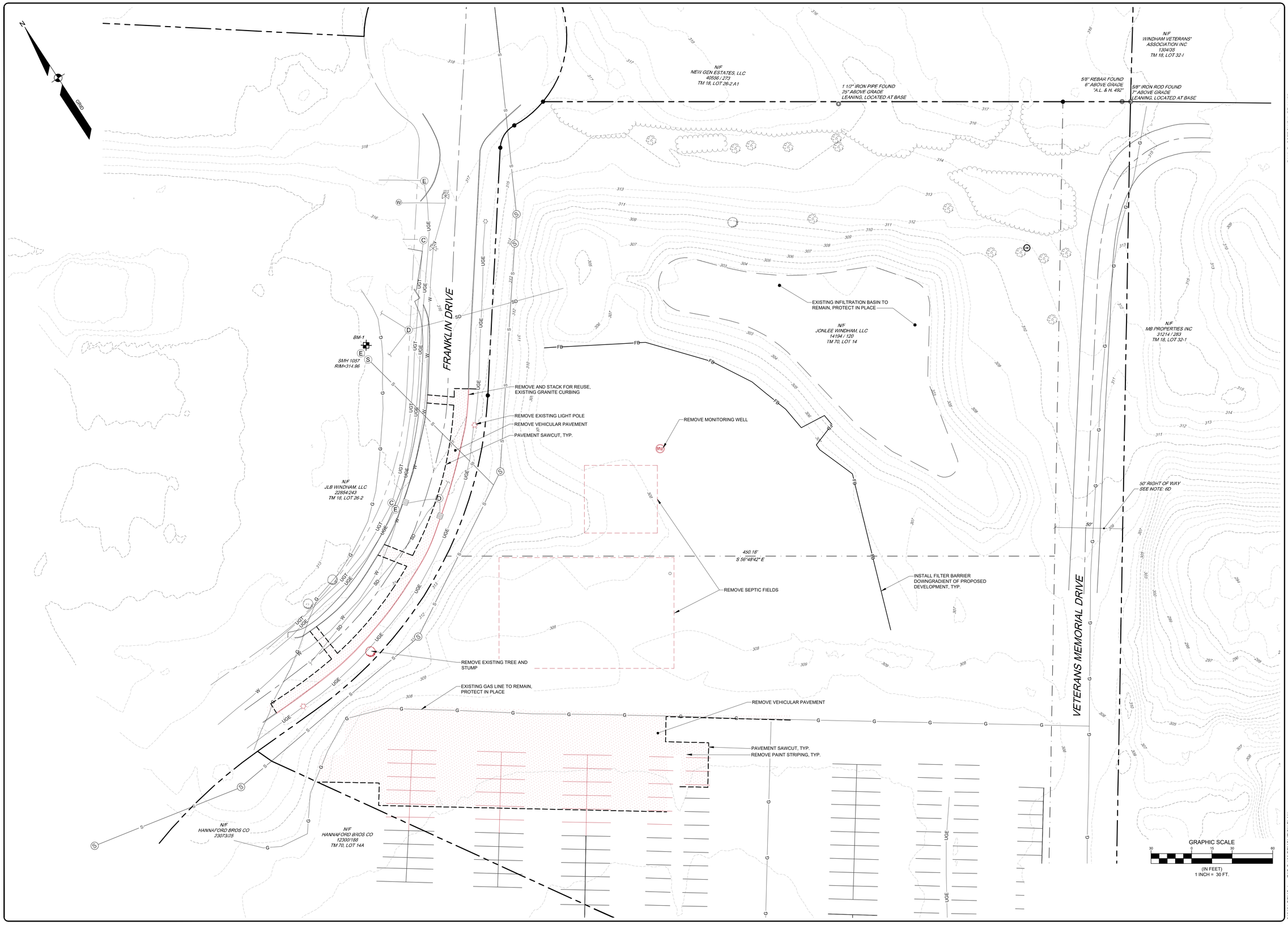
RECORD OWNER:
JONLEE WINDHAM LLC
5050 BELMONT AVENUE
YOUNGSTOWN, OHIO 44505

SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/10/2026
SCALE	1" = 30'
PROJECT	240431-01

240431 SBD dwg, TAB C-101 SITE PLAN

SHEET C-100



NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI — No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

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SEBAGO TECHNICS
TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

DEMOLITION PLAN
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

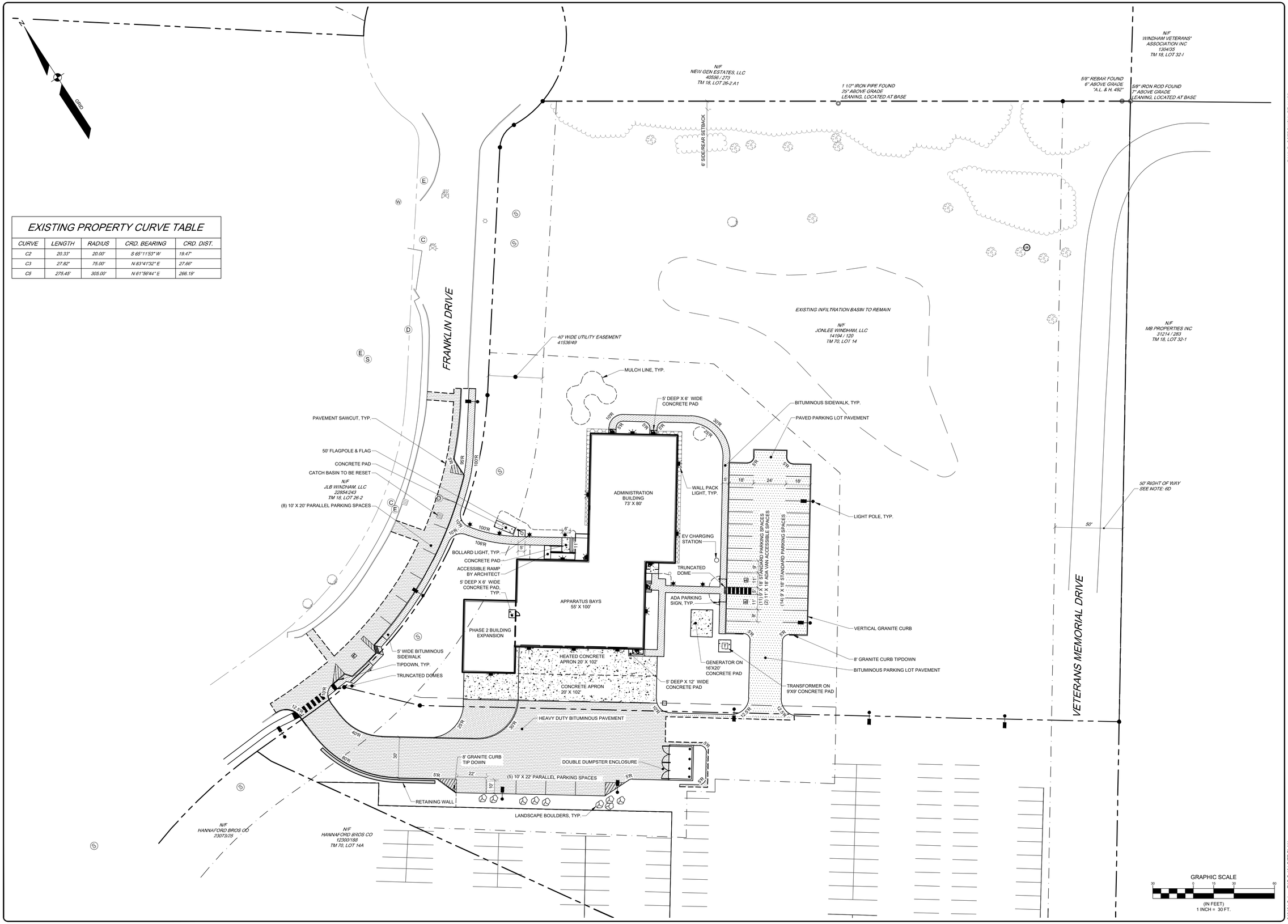
DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	1" = 30'
PROJECT	240431-01

SHEET C-101

240431 DEMO.dwg T:\AB\C-100 DEMOLITION PLAN

EXISTING PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C2	20.33'	20.00'	S 65°11'53" W	19.47'
C3	27.82'	75.00'	N 83°41'32" E	27.66'
C5	275.45'	305.00'	N 61°56'44" E	266.19'



NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI — No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

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SITE PLAN
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	1" = 30'
PROJECT	240431-01

SHEET C-102

240431 S.dwg, TAB:C-101 SITE PLAN

N

GRID

FRANKLIN DRIVE

BM-1

1 1/2" IRON PIPE FOUND
25" ABOVE GRADE
LEANING, LOCATED AT BASE

5/8" REBAR FOUND
6" ABOVE GRADE
"A.L. & H. 492"

5/8" IRON ROD FOUND
7" ABOVE GRADE
LEANING, LOCATED AT BASE

N/F
MB PROPERTIES INC
31214 / 283
TM 18, LOT 32-1

INSTALL INLET
PROTECTION, TYP.

CB-2
RIM: 310.00

12" SD
INV=305.50

DRIP EDGE - 2

DRIP EDGE - 1

BFE 308.50
FFE 320.50

OCS-1
RIM: 310.50

TC: 310.88
BC: 310.38

TC: 311.24
BC: 310.74

TC: 311.46
BC: 310.96

TC: 311.82
BC: 311.32

DMH-1
RIM: 310.50

CB-1
RIM: 310.00

TC: 310.74
BC: 310.24

TC: 311.05
BC: 310.55

5'X15' CONCRETE PAD FOR SIGN

BS 318.00

INSTALL FILTER BARRIER
DOWNGRADIENT OF PROPOSED
DEVELOPMENT, TYP.

50' RIGHT OF WAY
SEE NOTE: 6D

50'

VETERANS MEMORIAL DRIVE

INSTALL STABILIZED
CONSTRUCTION ENTRANCE

HOLD CONCRETE
PAD 3" ABOVE
FINISHED GRADE

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE
PAUL D. OSTROWSKI
No. 11175
REGISTERED
PROFESSIONAL ENGINEER
06/11/2026

REV.	BY	DATE	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION
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SEBAGO TECHNICS

SEBAGOTECHNICS.COM
75 John Roberts Road, Suite A
South Portland, ME 04106
207-200-2100

South Portland, Bridgton, Sanford and Brunswick

GRADING PLAN
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	1" = 30'
PROJECT	240431-01

SHEET C-103

240431 G dwg, TAB C-102 GRADING PLAN

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-1	310.00	306.10 (SD-1)	306.00 (SD-2)	48"
CB-2	310.00	306.10 (SD-6)	306.00 (SD-7)	48"
DMH-1	310.50	306.00 (RD-1)	306.00 (SD-4) 306.00 (SD-3)	48"
OCS-1	310.50	305.90 (SD-8)	305.90 (SD-9)	72"

STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
RD-1	4"	61'	0.49%
SD-1	12"	39'	1.02%
SD-2	12"	6'	0.00%
SD-3	12"	5'	0.00%
SD-4	12"	5'	0.00%
SD-6	12"	37'	1.35%
SD-7	12"	16'	0.00%
SD-8	12"	5'	2.20%
SD-9	12"	49'	0.81%

N

GRID

FRANKLIN DRIVE

VETERANS MEMORIAL DRIVE

1.1/2" IRON PIPE FOUND
25" ABOVE GRADE
LEANING, LOCATED AT BASE

5/8" REBAR FOUND
6" ABOVE GRADE
"A.L. & H. 492"

5/8" IRON ROD FOUND
7" ABOVE GRADE
LEANING, LOCATED AT BASE

N/F
MB PROPERTIES INC
31214 / 283
TM 18, LOT 32-1

SMH-128 (BY OTHERS)
RIM EL. = 315.13
8" INV.OUT = 309.17

DMH 8182
RIM=315.83
30" HDPE INV.IN=304.81 @6
24" HDPE INV.IN=304.58 @11
36" HDPE INV.OUT=304.52 @4

APPROX. LOCATION OF EX. PRIVATE 4" SEWER SERVICE FORCEMAIN (HOME DEPOT) 10FT HORIZONTAL SEPARATION REQUIRED BETWEEN SEWER CROSSING AND TAPS ON WATER MAIN

DMH 5312
RIM=314.64
12" HDPE INV. IN=309.00 @7
18" HDPE INV. IN=305.28 @8
12" HDPE INV. IN=309.01 @10
18" HDPE INV. OUT=305.18 @2
SUMP=304.75

BM-1

SMH 1057
RIM=314.96

INV.=305.45
36" HDPE

6" DI FIRE SERVICE
12"X6" TAPPING SLEEVE & GATE VALVE

MIN. 1-FT VERTICAL SEPARATION REQUIRED BETWEEN PROPOSED WATER SERVICES AND EXISTING SEWER MAIN.
INSTALL TWO LAYERS OF 2" RIGID FOAM INSULATION AT SERVICE CROSSINGS UNDER EX. SEWER MAIN, TYP.

12" SD
INV=306.60

12" SD
INV=305.50

CB 5310
RIM=314.38
12" HDPE CASCO TRAP OUT @1
WATER LEVEL =309.45
SUMP=306.35

CB 5309
RIM=314.39
12" HDPE CASCO TRAP OUT @4
WATER LEVEL =309.46
SUMP=306.37

SMH-128 (BY OTHERS)
RIM EL. = 314.38
8" INV. IN = 308.52
8" INV.OUT = 307.77

TP-2

CB-2

SD-6

SD-7

SD-9

OCS-1

SD-8

DRIP EDGE - 2

TP-3

DRIP EDGE - 1

INSTALL SUBSURFACE DETENTION AND INFILTRATION SYSTEM, NO SAND FILTER BUILDUP TOTAL OF 166 CHAMBERS ADS STORMTECH SC-800 OR APPROVED EQUAL CHAMBER BASE ELEV. = 306

INSTALL CURBSTOP IN PUBLIC R.O.W. 6" OFF PROPERTY LINE CURBSTOP TO BE INSTALLED IN VALVE BOX TOP SECTION

2" COPPER DOMESTIC WATER SERVICE,12" X 2" SERVICE SADDLE

SMH-127 (BY OTHERS)
RIM EL. = 313.00
8" INV. IN = 307.24
6" INV. IN = 307.14
8" INV.OUT = 306.92

INSTALL 12"X6" TEE, 6" GATE VALVE, AND 6" D.I. PIPE TO HYDRANT ASSEMBLY #2. INSTALL PIPE RESTRAINTS BETWEEN HYDRANT ASSEMBLY CONNECTION AND SERVICE

INSTALL HYDRANT ASSEMBLY #1

EXISTING 12" DI WATER MAIN

INSTALL ROOF DRAIN CONNECTION TO SUBSURFACE CHAMBER SYSTEM, INV. = 306.00±

RD-1

DMH-1

SD-4

SD-3

SD-2

CB-1

SD-1

6" SAN. SEWER SERVICE, INV. O = 300.00± COORDINATE CONNECTION WITH RELEVANT M.E.P. DRAWINGS

SMH-126 (BY OTHERS)
RIM EL. = 312.06
8" INV. IN = 306.26
12" INV.OUT = 306.16

6" TRENCH DRAIN
ECO DRAIN S200K TRENCH
DRAIN NON SLOPED - 143.0 LF
RIM: 308.30
INV: 307.80

TRENCH DRAIN
CONNECT TO 3'X3' UTILITY BOX
RIM: 307.50
INV: 307.00

PUMP STATION, SEE DETAIL

INSTALL 6" WYE FITTING, INV. = 299.90±

OIL/WATER SEPARATOR
RIM = 308.00±
INV. I = 300.16
INV. O = 300.00

GAS SERVICE, COORDINATE CONNECTION WITH GAS COMPANY HAVING JURISDICTION

3'X3' UTILITY BOX WITH (2) 4" VALTERRA GATE VALVES (V6401) OR APPROVED EQUAL ON SOUTH AND EAST TEE. TOP OF BOX TO BE SET 1' ABOVE GRAVE. TEE VALVE INV. = 306.90

DEFLECT 4" SEWER VERTICALLY USING (2) 45° BENDS TO PROVIDE 4.5' OF COVER OVER TOP OF SEWER. PROVIDE 1' MIN. VERTICAL SEPARATION BETWEEN GAS AND SEWER

INSTALL (1) 45° BEND AND (1) 45° WYE FITTING, INSTALL SEWER CLEANOUT TO SURFACE

SMH-125 (BY OTHERS)
RIM EL. = 312.94
8" INV. IN = 305.71
12" INV.OUT = 305.61

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE
PAUL D. OSTROWSKI
No. 11175
REGISTERED PROFESSIONAL ENGINEER
06/11/2026

REV.	BY	DATE	STATUS
A.	TFG	03/28/25	25% SMP SET
B.	TFG	12/08/25	55% PROGRESS SET
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
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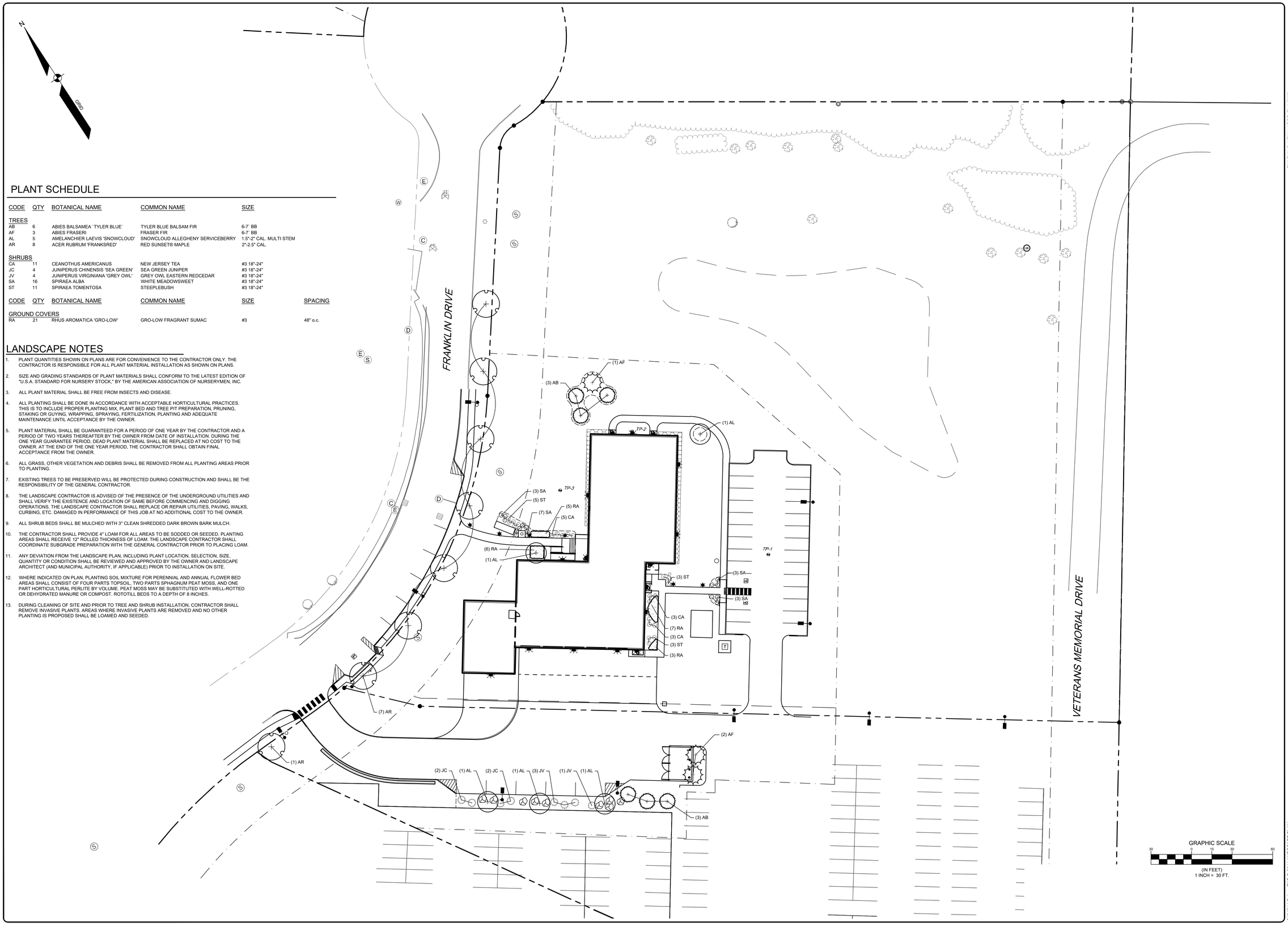
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PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
TREES					
AB	6	ABIES BALSAMEA `TYLER BLUE`	TYLER BLUE BALSAM FIR	6-7` BB	
AF	3	ABIES FRASERI	FRASER FIR	6-7` BB	
AL	5	AMELANCHIER LAEVIS 'SNOWCLOUD'	SNOWCLOUD ALLEGHENY SERVICEBERRY	1.5"-2" CAL. MULTI STEM	
AR	8	ACER RUBRUM 'FRANKSRED'	RED SUNSET® MAPLE	2"-2.5" CAL.	
SHRUBS					
CA	11	CEANOTHUS AMERICANUS	NEW JERSEY TEA	#3 18"-24"	
JC	4	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	#3 18"-24"	
JV	4	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL EASTERN REDCEDAR	#3 18"-24"	
SA	16	SPIRAEA ALBA	WHITE MEADOWSWEET	#3 18"-24"	
ST	11	SPIRAEA TOMENTOSA	STEEPLEBUSH	#3 18"-24"	
GROUND COVERS					
RA	21	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	#3	48" o.c.

LANDSCAPE NOTES

1. PLANT QUANTITIES SHOWN ON PLANS ARE FOR CONVENIENCE TO THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL INSTALLATION AS SHOWN ON PLANS.
2. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF "U.S.A. STANDARD FOR NURSERY STOCK," BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
4. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING, STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER.
5. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BY THE CONTRACTOR AND A PERIOD OF TWO YEARS THEREAFTER BY THE OWNER FROM DATE OF INSTALLATION. DURING THE ONE YEAR GUARANTEE PERIOD, DEAD PLANT MATERIAL SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
6. ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
7. EXISTING TREES TO BE PRESERVED WILL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF THE UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER.
9. ALL SHRUB BEDS SHALL BE MULCHED WITH 3" CLEAN SHREDDED DARK BROWN BARK MULCH.
10. THE CONTRACTOR SHALL PROVIDE 4" LOAM FOR ALL AREAS TO BE SODDED OR SEEDED. PLANTING AREAS SHALL RECEIVE 12" ROLLED THICKNESS OF LOAM. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
11. ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.
12. WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR PERENNIAL AND ANNUAL FLOWER BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.
13. DURING CLEANING OF SITE AND PRIOR TO TREE AND SHRUB INSTALLATION, CONTRACTOR SHALL REMOVE INVASIVE PLANTS. AREAS WHERE INVASIVE PLANTS ARE REMOVED AND NO OTHER PLANTING IS PROPOSED SHALL BE LOAMED AND SEEDED.



NOT FOR CONSTRUCTION

THARYN S. NEIN-LARGE, RLA 5287

LICENSED LANDSCAPE ARCHITECT
THARYN S. NEIN-LARGE
No. 5287
STATE OF MAINE

REV.	BY	DATE	STATUS
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TECHNICS
SEBAGOTECHNICS.COM
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LANDSCAPE PLAN
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	1" = 30'
PROJECT	240431-01

SHEET C-201

240431 LS.dwg, TAB-C-201 LANDSCAPE PLAN

EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDAIENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD, SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING OR CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES
THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).
TYPES OF MULCH:

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETERIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE BOTTOM OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEPT TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RECOVERY OF TRACKED SEDIMENT WITH A STREET SWEEPER, NOT BRUSHING THE MATERIAL INTO SWALES OR STRUCTURES WITH A MECHANICAL BROOM. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFFSITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDBED PREPARATION:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

APPLICATION OF SEED:

A. SEEDING: SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (CONSERVATION MIX)

SEED TYPE	APPLICATION RATE
FESCUE, FAWN	0.34 LBS/1,000 S.F. (15 LBS/ACRE)
BIRDS FOOT TREFOIL, VARIETY NOT STATED	0.28 LBS/1,000 S.F. (12 LBS/ACRE)
ANNUAL RYEGRASS	0.18 LBS/1,000 S.F. (8 LBS/ACRE)
TIMOTHY, CLIMAX	0.18 LBS/1,000 S.F. (8 LBS/ACRE)
ALSIKE CLOVER	0.11 LBS/1,000 S.F. (5 LBS/ACRE)
REDTOP	0.05 LBS/1,000 S.F. (2 LBS/ACRE)
TOTAL	1.14 LBS/1,000 S.F. (50 LBS/ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:
FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (6.67H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C.) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D.) OF THIS STANDARD.
B. STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
C. STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE CONTRACTOR WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
D. STABILIZE THE SLOPE WITH STONE RIPRAP -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C.) OF THIS STANDARD.
B. STABILIZE THE SOIL WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
C. STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY, TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.

2. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

HOUSEKEEPING:

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

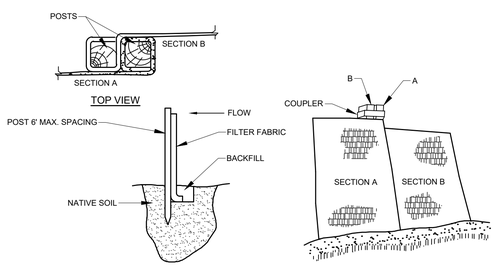
2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. 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. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

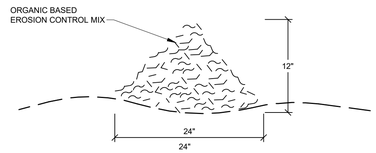
6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
A. DISCHARGES FROM FIREFIGHTING ACTIVITY;
B. FIRE HYDRANT FLUSHINGS;
C. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICL



INSTALLATION:

1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
5. JOIN SECTION AS SHOWN ABOVE.
6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

FILTER BARRIER
NOT TO SCALE



COMPOSITION:

EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

INSTALLATION:

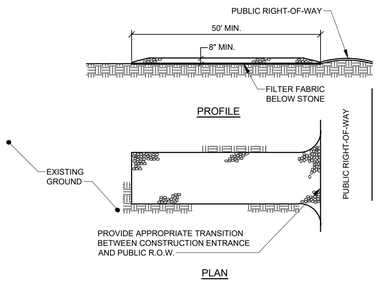
1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.

2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER

3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.

4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

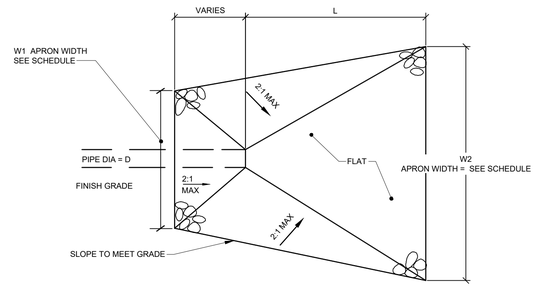
EROSION CONTROL MIX BERM
NOT TO SCALE



NOTES:

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



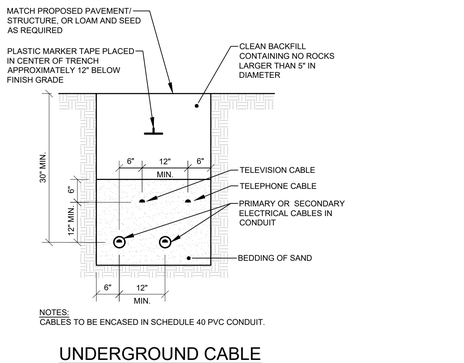
TYPICAL RIPRAP APRON SCHEDULE

CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH -W1 (FT)	WIDTH -W2 (FT)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18
36	29	9	32	11	25
42	33	11	37	12	27
48	39	12	43	16	36

NOTES:

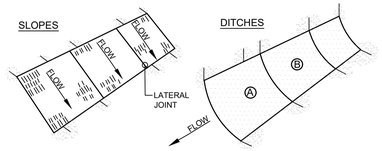
1. RIPRAP TO BE PROCESSED ANGULAR ROCK.
2. RIPRAP GRADIATION SHALL BE A WELL GRADED MIX FROM ABOUT 1.5 TIMES D SIZE TO 25 PERCENT OF THE D SIZE.
3. THE RIPRAP STONES SHALL BE CAREFULLY PLACED FROM THE TOE OF THE SLOPE UPWARD.
4. STONES SHALL BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12" ONTO THE GEOTEXTILE.
5. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH, UNIFORMLY SLOPED SURFACE.

RIPRAP APRON
NOT TO SCALE



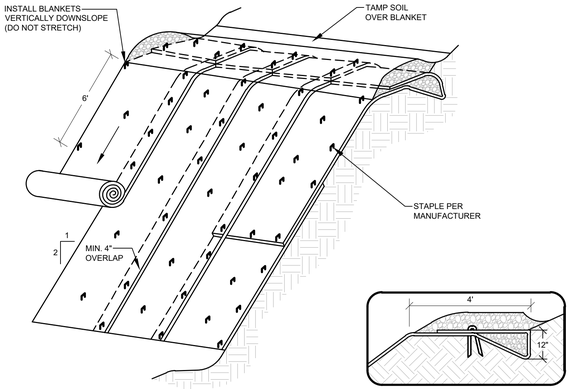
NOTES:
CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT.

UNDERGROUND CABLE INSTALLATION
NOT TO SCALE



NOTES:

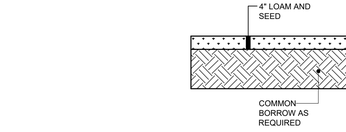
1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.
3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
4. STAPLE OUTSIDE LATERAL EDGE 2" ON CENTER.
5. WIRE STAPLES TO BE MIN OF #11 WIRE 6" LONG AND 1-1/2" WIDE.
6. USE NORTH AMERICAN GREEN DS 150 OR APPROVED EQUAL.



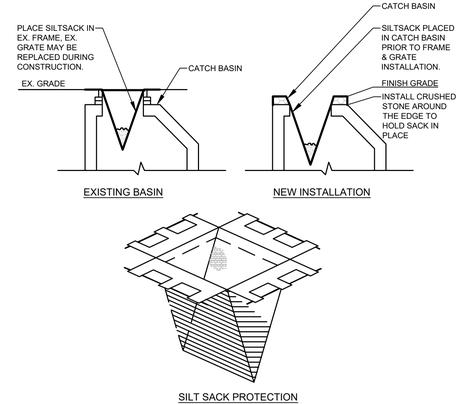
EROSION CONTROL BLANKET
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. THE SOIL SURFACE SHOULD BE FINELY GRADED AND SMOOTH FOR THE BLANKET TO HAVE DIRECT CONTACT WITH THE SOIL AND TO PREVENT UNDERMINING. EROSION CONTROL BLANKETS PERFORM BEST ON LOAMY SOILS AND SHOULD NOT BE USED ON ROCKY SITES OR SHALLOW SOILS.
2. SEED SHOULD BE SOWN BEFORE INSTALLING THE EROSION CONTROL BLANKET.
3. ALWAYS UNROLL THE BLANKET DOWNHILL WITHOUT STRETCHING AND ANCHOR THE UPSLOPE EDGE IN A 12 INCH DEEP TRENCH THAT IS BACKFILLED AND TAMPED.
4. OVERLAP SHINGLE STYLE A MINIMUM OF 12 INCHES AT THE TOP OF EACH ROW AND 4 INCHES AT THE EDGES OF PARALLEL ROWS. ANCHOR ALONG THE OVERLAP WITH A MAXIMUM SPACING OF 3 FEET OR AS REQUIRED BY THE MANUFACTURER.

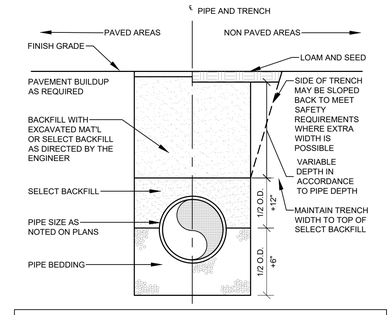


LOAM & SEED SECTION
NOT TO SCALE



NOTES:
PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG II) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURES INSTRUCTIONS. HAY BALES SHOULD BE REMOVED ONCE INSERTS ARE INSTALLED.

CATCH BASIN PROTECTION DETAIL
NOT TO SCALE



TRENCH BACKFILL SCHEDULE

PIPE TYPE	PIPE BEDDING MATERIAL	SELECT BACKFILL
CORRUGATED METAL DUCTILE IRON REINFORCED CONCRETE	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.13 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL, OR MDOT 703.13 3/4" CRUSHED STONE
PERFORATED PVC-SDR 35 HDPE	MDOT 703.13 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL, OR MDOT 703.13 3/4" CRUSHED STONE

NOTE:
ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.

TRENCH SECTION
NOT TO SCALE

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER PAUL D. OSTROWSKI No. 11175 06/11/2026

REV	BY	DATE	STATUS
A	TFG	03/28/25	25% SMP SET
B	TFG	12/08/25	55% PROGRESS SET
C	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
D	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
E	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
F	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AS PROPOSED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

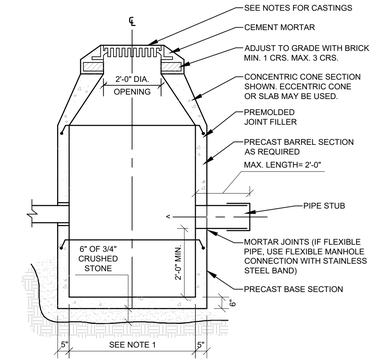
SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

DETAILS
OF:
NORTH WINDHAM PUBLIC SAFETY
FACILITY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	NTS
PROJECT	240431-01

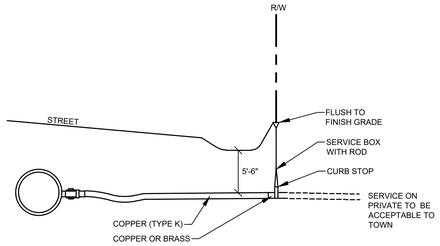
SHEET C-501

240431 D.dwg, TAB:C-501 DETAILS

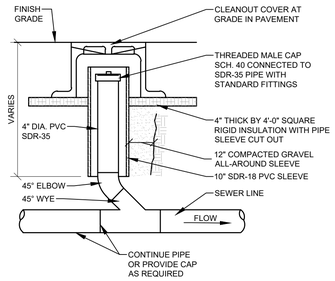


NOTES:
1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO BE EJ 5520M5, OR APPROVED EQUAL.

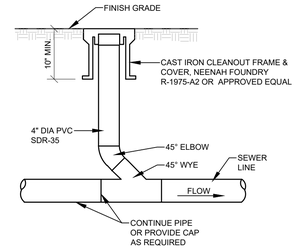
CATCH BASIN
NOT TO SCALE



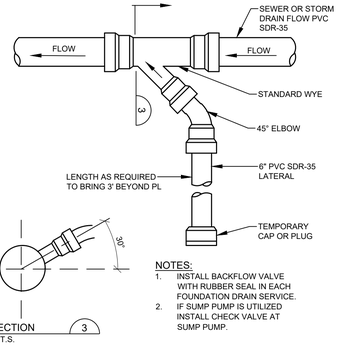
WATER SERVICE CONNECTION
NOT TO SCALE



SEWER CLEANOUT IN PAVEMENT AREAS
NOT TO SCALE

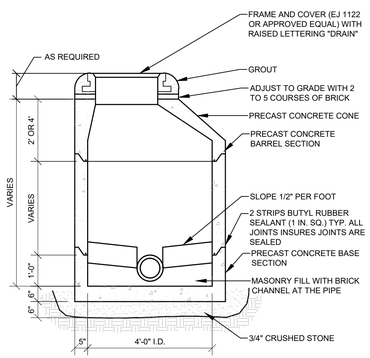


SEWER CLEANOUT IN GRASS/LANDSCAPE AREAS
NOT TO SCALE



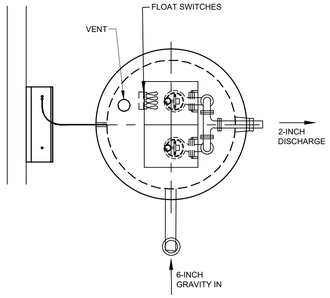
NOTES:
1. INSTALL BACKFLOW VALVE WITH RUBBER SEAL IN EACH FOUNDATION DRAIN SERVICE.
2. IF SUMP PUMP IS UTILIZED INSTALL CHECK VALVE AT SUMP PUMP.

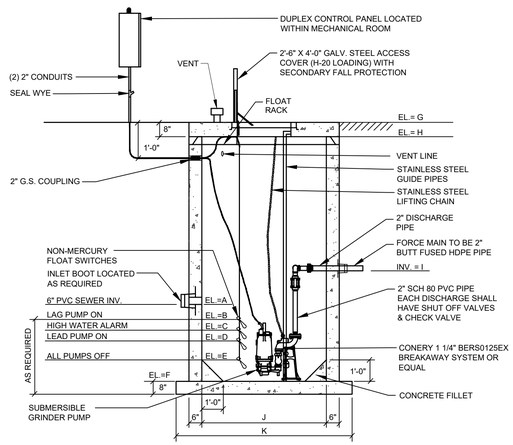
SEWER / FOUNDATION DRAIN SERVICE CONNECTION
NOT TO SCALE



NOTES:
1. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
2. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
3. PIPE CONNECTIONS SHALL BE WATERTIGHT FLEXIBLE BOOT CONNECTORS.

PRECAST MANHOLE
NOT TO SCALE





NOTES:
1. CONCRETE: 5,000 PSI AFTER 28 DAYS.
2. REINFORCING: WALLS & FLOOR 4X4/4X4 W.W.M. SLAB TOP #5 @ 8" O.C.

PUMP STATION DETAIL
NOT TO SCALE

NOTES

1. LIFT STATION SHALL BE DUPLEX LIFT STATION PANEL AND CONTROLS FOR THE OPERATIONS OF 2.0 HOMA GRINDER PUMPS OPERATING AT APPROXIMATELY THE DUTY POINT LISTED IN THE TABLE BELOW. THE PUMPS ARE MODEL GRP10/3, 3PHASE, 60 HZ, 230 VOLT, 3450 RPM AND 3.2 FLA WITH THE INSTALLED IMPELLER.
2. PUMPS SHALL HAVE BREAK AWAY FITTINGS. BREAK AWAY FITTINGS SHALL BE NON-SPARKING.
3. ALL UNDERGROUND ELECTRIC POWER LINES SHALL BE INSTALLED IN PVC CONDUIT. ABOVE GROUND SERVICES SHALL BE INSTALLED IN SCHEDULE 40 GALVANIZED CONDUIT. SIZES AS REQUIRED BY ELECTRIC COMPANY. ALL ELECTRICAL WIRING SHALL MEET ALL LOCAL AND NEC ELECTRICAL CODE REQUIREMENTS.
4. THE PANEL SHALL BE EQUIPPED WITH AN INNER DOOR THAT HAS ELAPSED TIMED METERS, WARNING LIGHTS FOR TEMPERATURE AND MOISTURE SENSORS, CONTROL SWITCHES FOR THE INDIVIDUAL PUMPS (AUTO, OFF AND RUN) AND A CONTROL SWITCH FOR THE ALARM WITH TEST AND SILENCE.
5. THE MAIN BREAKERS (CONTROL AND PUMPS) AND FUSES FOR BOTH THE ALARM AND CONTROLS SHALL BE ACCESSIBLE WITHOUT OPENING THE INNER DOOR.
6. THE PANEL SHALL HAVE BOTH AMBER VISIBLE ALARM LIGHT AND AN AUDIBLE PIEZO 80DB ALARM. THE ENCLOSURE SHALL BE A STAINLESS STEEL NEMA 4X RATED, UL698A COMPLIANT LISTED ENCLOSURE RATED FOR THE PUMPS WITH A WIRING SCHEMATIC PROVIDED ON THE INNER FACE OF THE PANEL DOOR. THE DOOR SHALL HAVE A WEATHER SEAL AND LOCKABLE LATCHES.
7. THE PANEL SHALL HAVE THE REQUIRED CIRCUITRY, CONTROLLERS, CIRCUIT BREAKERS, DELAYS, MOTOR STARTERS, RELAYS, TERMINAL BLOCK AND GROUNDING REQUIRED TO OPERATE THE PUMPS IN A AN ALTERNATING SEQUENCE. PANEL, CONTROLS AND ELECTRICAL COMPONENTS SHALL BE EXPLOSION PROOF.
8. THE PANEL SHALL BE MANUFACTURED BY SJE RHOMBUS, PRIMEX CONTROLS, CSI OR APPROVED EQUIVALENT.
9. THE PUMPS, CONTROLS, FLOATS AND FLOAT RACK SHALL BE SUPPLIED BY ONE DISTRIBUTOR OR MANUFACTURER. FLOAT SWITCHES SHALL BE INSTALLED WITH KWIK FLOAT SWITCH CONNECTION SYSTEM. DISTRIBUTOR OR MANUFACTURER SUPPLYING EQUIPMENT SHALL CONFIRM ALL EQUIPMENT MEETS THE INTENT OF THIS SPECIFICATION, AND THAT ALL EQUIPMENT SUPPLIED IS COMPATIBLE FOR THIS SPECIFIC APPLICATION. ALL EQUIPMENT SUPPLIED REQUIRING FACTORY START-UP TO OBTAIN WARRANTY SHALL BE INCLUDED AND PERFORMED BY FACTORY AUTHORIZED PERSONNEL. ANY DEFICIENCIES SHALL BE ADDRESSED PRIOR TO FINAL ACCEPTANCE.
10. PUMP POWER/CONTROL CABLES AND FLOAT CABLES SHALL BE ROUTED TO THE WET WELL IN SEPARATE CONDUITS WITH THE PROPER EXPANSION JOINTS, SEAL OFFS, AND EXPANSION JOINTS. PUMP AND FLOAT CABLES SHALL BE WIRED FORM WET WELL DIRECTLY TO PANEL WITH NO INTERMEDIATE JUNCTION BOXES. WIRE SIZING AND CONDUITS FEEDING AND LEAVING THE CONTROL PANEL SHALL BE PROPERLY SIZED, SHALL SUPPORT THE LOAD OF TWO PUMPS OPERATING AND MEET ALL APPLICABLE LOCAL, STATE AND NEC ELECTRICAL CODES.
11. PUMPS SHALL BE PROVIDED WITH TEMPERATURE AND MOISTURE SENSORS MATCHED TO THE PUMPS.
12. FLOAT CONTROLS SHALL BE NON-MERCURY MECHANICAL FLOATS.
13. CONCRETE: 5,000 PSI AFTER 28 DAYS. REINFORCING STEEL MIN. YIELD STRESS OF 40,000 PSI.
14. REINFORCING: WALLS & FLOOR 4X4/4X4 W.W.M. SLAB TOP #5 @ 8" O.C.
15. THE ACCESS HATCH SHALL BE MANUFACTURED BY THE BILCO COMPANY OR EQUIVALENT AND BE RATED FOR H-20 LOADING. HATCH SHALL OPEN TOWARDS PUMP STATION PANEL AND HAVE INTEGRAL SECONDARY FALL PROTECTION
16. ALL LIFT STATION PIPING SHALL BE SCH 80 PVC.
17. COAT EXTERIOR OF STRUCTURES WITH KOPPERS BITUMASTIC 3000 M OR EQUAL.
18. WET WELL SHALL BE INSTALLED ON A MINIMUM 12" BED OF SCREENED GRAVEL.
19. CONTRACTOR TO CONFIRM OPERATING ELEVATIONS WITH ENGINEER BEFORE ORDERING STATION.
20. CONTRACTOR TO SUBMIT SPECIFICATIONS FOR PUMPS, CONTROL PANELS, AND ALARM FOR OWNER AND ENGINEERS APPROVAL.
21. ELECTRIC SERVICES SHALL BE VERIFIED BY CONTRACTOR AND COORDINATED WITH OWNER, ELECTRIC COMPANY AND PUMP STATION MANUFACTURER PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRICAL COMPONENTS REQUIRED FOR PUMP STATION MEETING APPLICABLE STATE, FEDERAL AND LOCAL CODES.
22. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MEET ON-SITE WITH OWNER AND ENGINEER TO REVIEW LOCATION OF PUMP STATION AND VALVE PIT. DEPENDING ON PHYSICAL SITE FEATURES, THE ENGINEER RESERVES THE RIGHT TO MODIFY LOCATION.
23. UPON INSTALLATION OF PUMP STATION, CONTRACTOR SHALL PROVIDE OWNER WITH THE FOLLOWING:
    a. OPERATION AND MAINTENANCE MANUALS.
    b. ONE-YEAR WARRANTY ON ALL STRUCTURES, PUMP STATION MECHANICS AND ELECTRIC COMPONENTS, ALL PIPING AND CONNECTIONS.
    c. STARTUP REPORT THAT INCLUDES DRAW DOWN TESTS TO DETERMINE THE OPERATING POINTS FOR BOTH PUMPS.
24. CONTROL PANEL SHALL BE MOUNTED WITHIN MECHANICAL ROOM PER OWNERS DIRECTION.

PUMP PARAMETERS

STATION	I
PUMP	HOMA
MODEL	GRP10/3FM
IMPELLER	AS INSTALLED
FLOW (GPM)	35
TDH (FT)	17.7
VOLTAGE	230
FLA	3.2
HP	0.8
PHASE	3Ø
HERTZ	60
RPM	3450

PUMP STATION SCHEDULE

PUMP STATION	MEASUREMENT (FT.)										
	A	B	C	D	E	F	G	H	I	J	K
I	299.70	298.70	298.20	297.70	296.70	295.20	308.00	308.00	302.83	5'	7.5'

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

REV.	BY	DATE	STATUS
F.	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION
E.	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
B.	TFG	12/08/25	55% PROGRESS SET
A.	TFG	03/28/25	25% GMP SET

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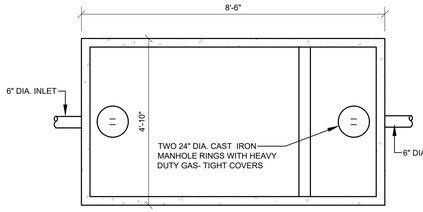
SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite A4
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

DETAILS
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

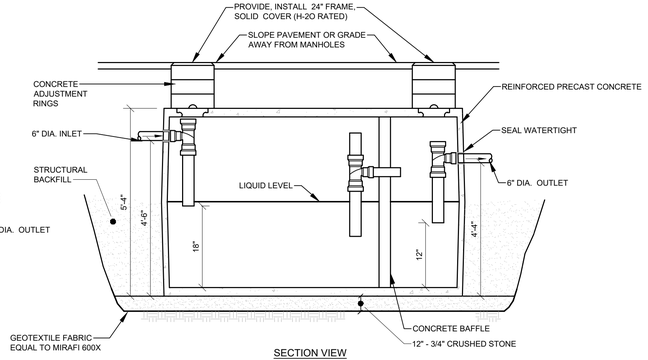
DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	NTS
PROJECT	240431-01

SHEET C-502

240431 D.dwg TAB C-502 DETAILS



PLAN VIEW

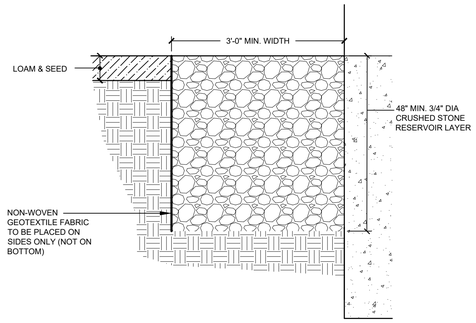


SECTION VIEW

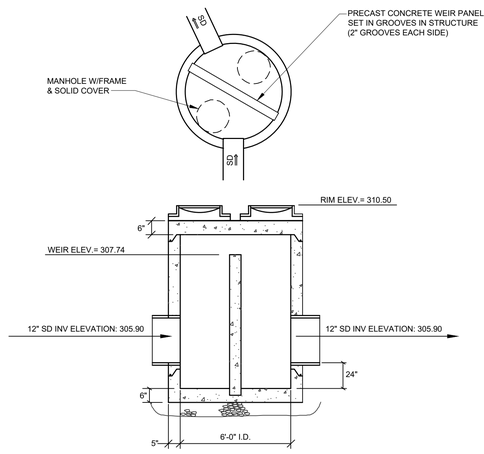
NOTES
1. COAT INTERIOR OF TANK WITH EPOXY SEALER
2. ALL CONCRETE HAS A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS.
3. SHALL BE DESIGNED FOR H-20 LOADINGS AND DEPTH OF COVER.
4. THE TONGUE AND GROOVE CENTER SEAM IS SEALED WITH A BUTYL SEALANT.
5. THE PVC TEE BAFFLES FOR THIS TANK CAN BE MOVED TO ANY OF THE (3) INLETS OR OUTLETS.
6. POLYLOK PIPE SEALS STANDARD AT ALL PIPE PENETRATIONS.
7. DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. CONTRACTOR SHALL SUBMIT PROPOSED OIL/WATER SEPARATOR INSTALLATION PLANS AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION OF SEPARATOR. PROVIDE SEPARATOR WITH ADEQUATE STRUCTURAL STRENGTH TO ACCOMMODATE VEHICULAR TRAFFIC AT INSTALLATION LOCATION.
8. COAT EXTERIOR OF CONCRETE WITH BITUMASTIC SEALANT.
9. PRECAST SUPPLIER TO CONFIRM CAPACITY. ADJUST DIMENSIONS AS NEEDED FOR SPECIFIED TANK CAPACITY.
10. ALL BAFFLES AND WEIRS TO BE PRECAST CONCRETE.
11. CONTRACTOR TO: SUPPLY AND INSTALL ALL PIPING & SAMPLING TEES GROUT IN ALL PIPES FILL WITH CLEAN WATER PRIOR TO "START-UP" OF SYSTEM VERIFY ALL BLOCKOUT SIZES AND LOCATIONS. PUMP BY OTHERS.

CAPACITY	LENGTH	WIDTH	HEIGHT	INLET	OUTLET	ITEM#	ITEM#	WGT.
1,000 REG.	8'-6"	4'-10"	5'-4"	4'-6"	4'-3"	2014	2014A	7,080 lbs.

OIL/WATER SEPARATOR
NOT TO SCALE



BUILDING DRIP EDGE (INFILTRATION)
NOT TO SCALE



NOTES:
1. SUBMIT SHOP DRAWINGS FOR OWNER/ENGINEER APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING.

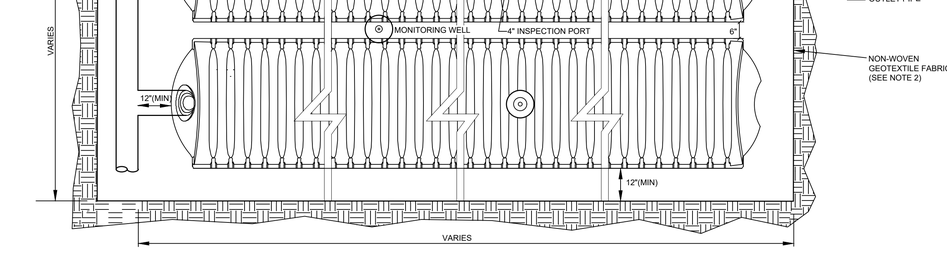
OUTLET CONTROL STRUCTURE (OCS-1)
NOT TO SCALE

SUBSURFACE SAND FILTER NOTES:
1. THE STORMWATER CHAMBER SHALL BE A STORMTECH SC-800 OR EQUIVALENT SUBSURFACE STORAGE CHAMBER APPROVED BY THE ENGINEER.
2. THE TOP AND SIDES OF THE SUBSURFACE SYSTEM, INCLUDING THE CRUSHED STONE STORAGE VOLUME, AND INFILTRATION SAND, SHALL BE WRAPPED IN A NON-WOVEN GEOTEXTILE FABRIC (MIRAFI 160N OR EQUIVALENT). NON-WOVEN GEOTEXTILE FABRIC SHALL NOT BE USED ON THE BOTTOM OF THE CHAMBER SYSTEM. CRUSHED STONE STORAGE VOLUME, OR INFILTRATION SAND TO ALLOW FOR INFILTRATION INTO EXISTING GROUND.
3. THE EMBEDMENT STONE SURROUNDING THE CHAMBERS SHALL BE A WASHED, ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4 INCH AND 2 INCH. THE BOTTOM 6 INCH LAYER OF STONE THAT ACTS AS THE FOUNDATION BELOW THE CHAMBERS SHALL BE COMPACTED TO ACHIEVE A 95% STANDARD PROCTOR DENSITY.
4. THE INFILTRATION MATERIAL SHALL BE A UNIFORM MIX, FREE OF STONES LARGER THAN 2 INCHES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS. THE MATERIAL SHALL MEET THE SPECIFICATIONS FOR MDOT AGGREGATE SAND (MDOT #703.01). HOWEVER, THIS AGGREGATE SAND SHALL BE MIXED WITH LOAM TO ACHIEVE A MATERIAL WITH BETWEEN 8% AND 10% PASSING THE #200 SIEVE. THE LOAM USED IN THIS MIXTURE SHALL HAVE LESS THAN 2% CLAY CONTENT. THIS 18 INCH LAYER OF SAND FILTRATION MEDIA SHALL BE PLACED TO ACHIEVE A LEVEL OF COMPACTION BETWEEN 92% AND 95% STANDARD PROCTOR DENSITY.
5. THE CONTRACTOR SHALL PERFORM PERMEABILITY TESTS FOR THE SAND FILTER MATERIAL TO ENSURE A STORMWATER RELEASE TIME RANGING BETWEEN 24 AND 48 HOURS.

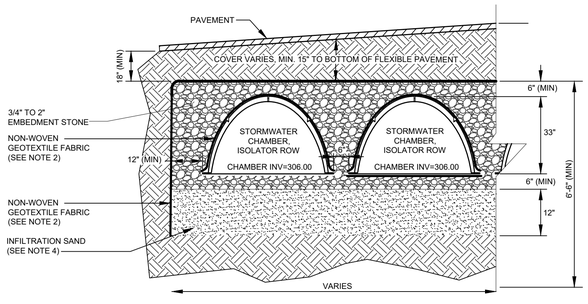
CONSTRUCTION OVERSIGHT NOTES FOR SUBSURFACE DETENTION AND INFILTRATION SYSTEM:
1. INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE CONSTRUCTION AND STABILIZATION OF THE PROPOSED SUBSURFACE CHAMBERS AND ITS INFILTRATION COURSE MATERIAL TO BE BUILT ON THE SITE. INSPECTIONS SHALL CONSIST OF AN APPROPRIATE NUMBER OF VISITS TO THE SITE TO INSPECT THE INSTALLATION OF THE SUBGRADE, INFILTRATION BED MATERIAL PLACEMENT, INSTALLATION OF EMBEDMENT STONE, SURROUNDING STONE, FABRIC PLACEMENT AND STORMWATER OVERFLOW BYPASS CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO BACKFILL OVER CHAMBERS.

SUBSURFACE SAND FILTER TABLE

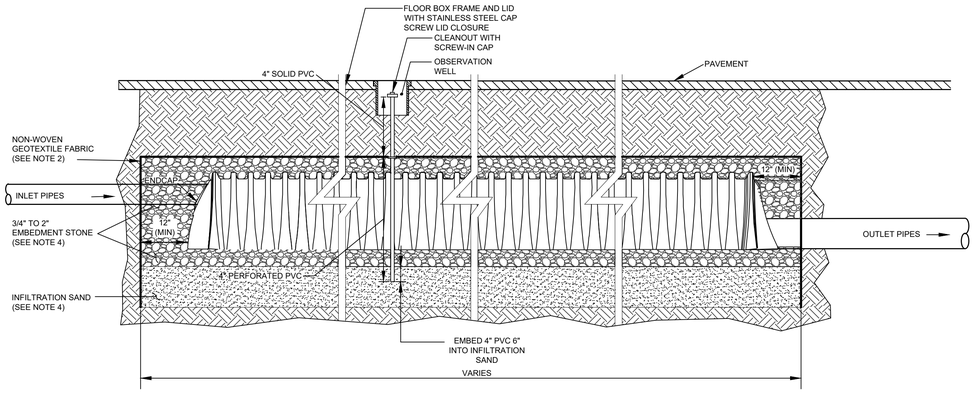
CHAMBER INV.	306.00
CHAMBER OUTLET PIPE INV.	306.00



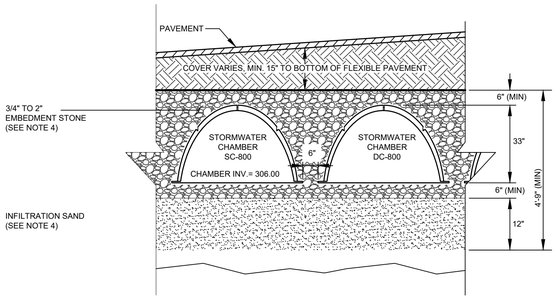
SUBSURFACE SAND FILTER PLAN VIEW



SUBSURFACE DETENTION AND INFILTRATION SYSTEM ISOLATOR ROW
NOT TO SCALE



SUBSURFACE DETENTION AND INFILTRATION SYSTEM ELEVATION VIEW



SUBSURFACE DETENTION AND INFILTRATION SYSTEM SECTION VIEW

SUBSURFACE DETENTION AND INFILTRATION SYSTEM
NOT TO SCALE

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

REV.	BY	DATE	STATUS
A.	TFG	03/28/25	25% GMP SET
B.	TFG	12/08/25	55% PROGRESS SET
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
E.	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
F.	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION

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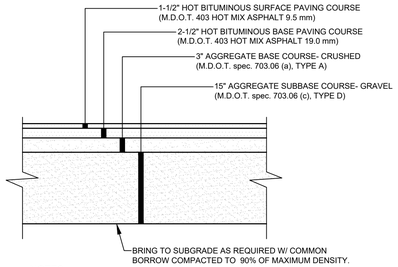
SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick

DETAILS
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	NTS
PROJECT	240431-01

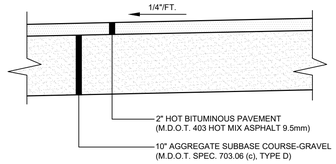
SHEET C-503

240431 D.dwg, T-ABC-503 DETAILS

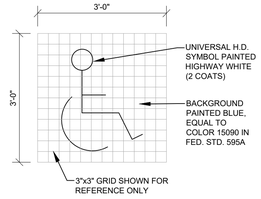


NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

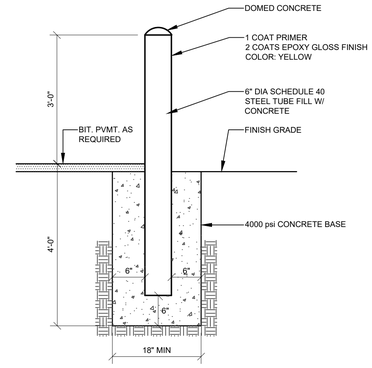
PAVED PARKING LOT SECTION
NOT TO SCALE



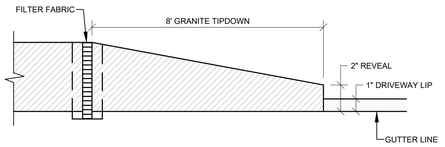
BITUMINOUS SIDEWALK
NOT TO SCALE



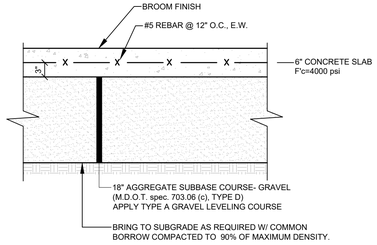
RESERVED PARKING
NOT TO SCALE



METAL DOMED CONCRETE BOLLARD
NOT TO SCALE

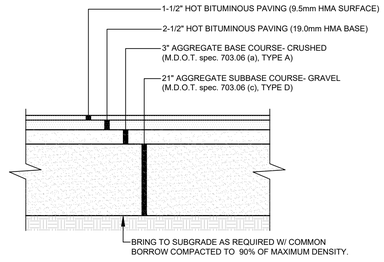


FLUSH GRANITE CURB TIPDOWN INSTALLATION
NOT TO SCALE



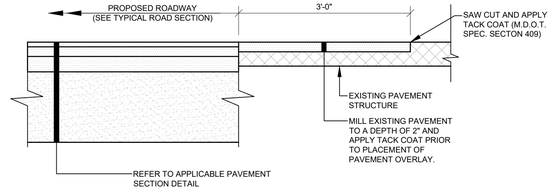
NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
3. PROOF ROLL SUBGRADE PER GEOTECHNICAL REPORT.

CONCRETE DUMPSTER PAD
NOT TO SCALE

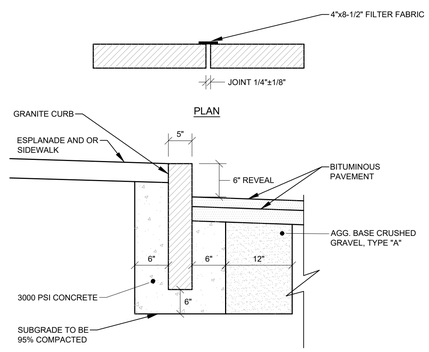


NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

HEAVY DUTY BITUMINOUS PAVEMENT
NOT TO SCALE

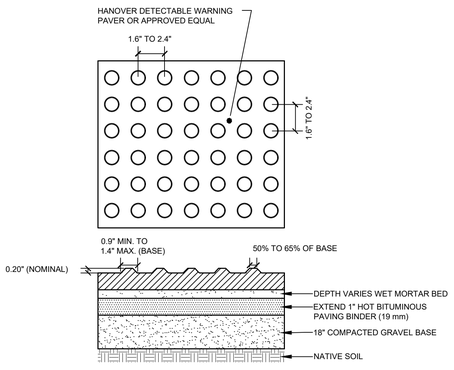


PAVEMENT JOINT
NOT TO SCALE



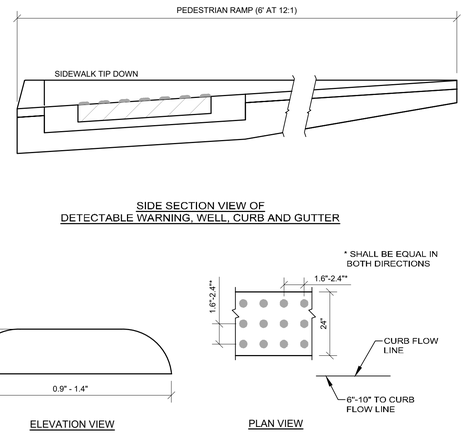
NOTES:
1. INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.
2. THE MINIMUM HEIGHT OF THE CONCRETE BACKING SHALL BE 10-INCHES OR TO THE BOTTOM OF THE HOT MIX.
3. ASPHALT PAVEMENT, WHICHEVER IS GREATER, MEASURED FROM THE BOTTOM OF CURB.
4. CURBING SHALL BE SET IN A 6-INCH BED OF POURED IN PLACE 3,000 PSI CONCRETE MIX.
5. WOODEN SHIMS MAY BE USED TO SET CURB.

VERTICAL GRANITE CURB
NOT TO SCALE



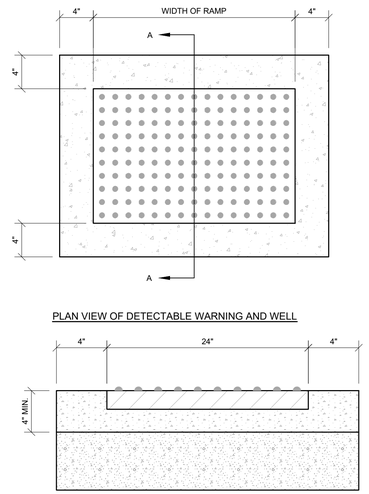
NOTES:
1. PAVERS ARE INSTALLED IN A WET MORTAR BED OVER HOT BITUMINOUS OR COMPACTED FILL BASE. THE WET MORTAR BED IS REQUIRED TO LEVEL THE PAVERS.
2. SPACING REQUIREMENTS:
   A. TRUNCATED DOME PAVERS HAVE A BASE DIAMETER OF 0.9" (23 MM) MINIMUM TO 1.4" (36 MM) MAXIMUM, A TOP DIAMETER OF 50% OF THE BASE DIAMETER MINIMUM TO 65% OF THE BASE DIAMETER MAXIMUM, AND A NOMINAL DOME HEIGHT OF 0.2" (5 MM).
   B. TRUNCATED DOME PAVERS IN A DETECTABLE WARNING SURFACE HAVE A CENTER-TO-CENTER SPACING OF 1.6" (41 MM) MINIMUM AND 2.4" (61 MM) MAXIMUM, AND A BASE-TO-BASE SPACING OF 0.65" (16 MM) MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON THE SQUARE GRID.
   C. DETECTABLE WARNING SURFACES COLOR: YELLOW.

TRUNCATED DOME DETAIL
NOT TO SCALE



NOTE: ALL DETECTABLE WARNING AREAS SHALL START 6" - 10" FROM THE FLOW LINE OF THE CURB, BE 24" IN DEPTH, AND COVER THE COMPLETE WIDTH OF THE RAMP AREA ONLY.

TRUNCATED DOME PAVING
NOT TO SCALE



NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

REV.	BY	DATE	STATUS
F.	TFG	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION
E.	TFG	05/20/2026	ISSUED FOR MAINEDEP COMMENT RESPONSE
D.	TFG	02/25/2026	ISSUED TO MAINE DEP FOR SITE LOCATION OF DEVELOPMENT APPLICATION
C.	TFG	02/16/2026	DRAFT ISSUED FOR PUBLIC INFORMATIONAL MEETING
B.	TFG	12/08/25	55% PROGRESS SET
A.	TFG	03/28/25	25% GMP SET

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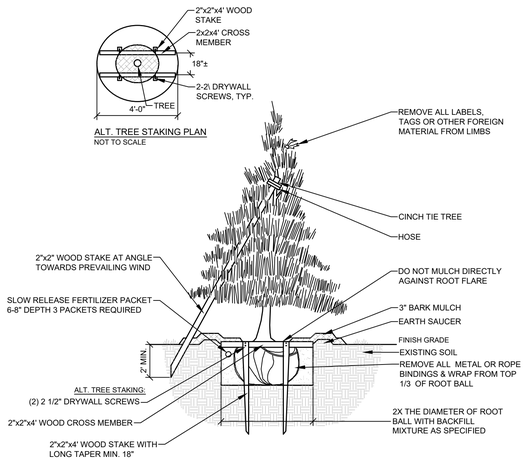
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DETAILS
OF:
NORTH WINDHAM PUBLIC SAFETY
FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	NTS
PROJECT	240431-01

SHEET C-504

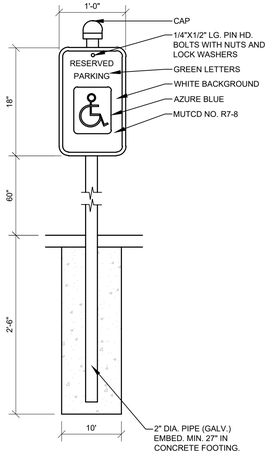
240431 D.dwg TAB:C-504 DETAILS



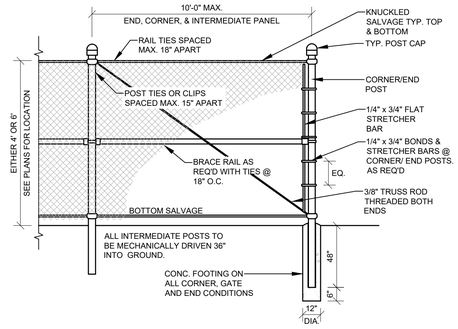
ALT. TREE STAKING PLAN
NOT TO SCALE

NOTES:
INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:
1. THE TREE IS OF SUBSTANTIAL SIZE.
2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

EVERGREEN TREES
NOT TO SCALE



RESERVED PARKING SIGN-POST
NOT TO SCALE

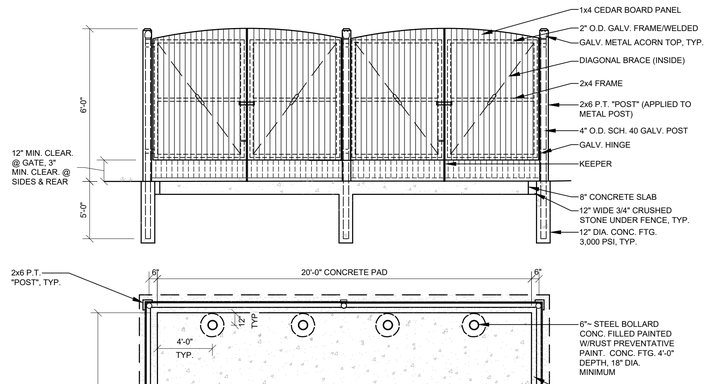


NOTES:
1. CORNER OR END POST: NOMINAL 3" O.D. GALVANIZED STEEL PIPE, MIN. 5.79 lbs./LF.
2. INTERMEDIATE POST: NOMINAL 2-1/2" O.D. GALVANIZED STEEL PIPE, MIN. 3.65 lbs./LF.
3. BRACES (TOP & BOTTOM): NOMINAL 1-5/8" O.D. GALVANIZED STEEL PIPE, MIN. 2.27 lbs./LF.
4. THE OUTSIDE OF THE FENCE FABRIC SHALL BE 3" INSIDE THE EDGE OF PAVEMENT.
5. BRACE RAIL AND DIAGONAL BRACE ROD SHALL BE INSTALLED AT EACH 10' CORNER SECTION OF ENCLOSURE.
6. CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH (f) c OF 3,000 psi WITH 6%; AIR ENTRAINMENT.
7. SUBMIT SHOP DRAWINGS FOR OWNER'S/ENGINEER'S APPROVAL.
8. FENCE FABRIC, POST, RAILS AND APPURTENANCES SHALL BE VINYL CLAD; COLOR: BLACK

CHAIN LINK FENCE

DECIDUOUS & EVERGREEN SHRUB
NOT TO SCALE

FLAG POLE DETAIL
NOT TO SCALE

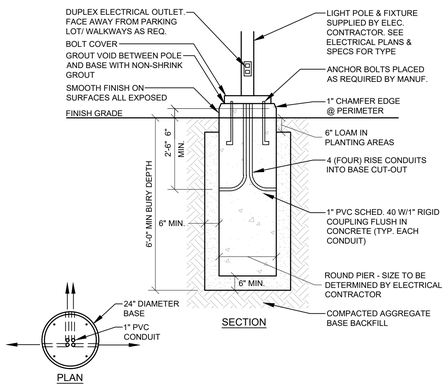


DUMPSTER ENCLOSURE - DOUBLE
NOT TO SCALE

NOTES:
INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:
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3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

ALT. TREE STAKING PLAN
NOT TO SCALE

DECIDUOUS TREES
NOT TO SCALE



NOTES:
1. CONCRETE f'c=5000 psi. @ 28 DAYS WITH STEEL REINFORCEMENT
2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONTRACTOR
3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
4. INSTALL BASE 3'-0" ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE IN PARKING LOT PAVEMENT. MAINTAIN MINIMUM BURY DEPTH.
5. LIGHT POLE BASE AS MANUFACTURED BY SUPERIOR CONCRETE OR APPROVED EQUAL

24" ROUND LIGHT POLE BASE
NOT TO SCALE

NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE — PAUL D. OSTROWSKI — No. 11175 — REGISTERED PROFESSIONAL ENGINEER — 06/11/2026

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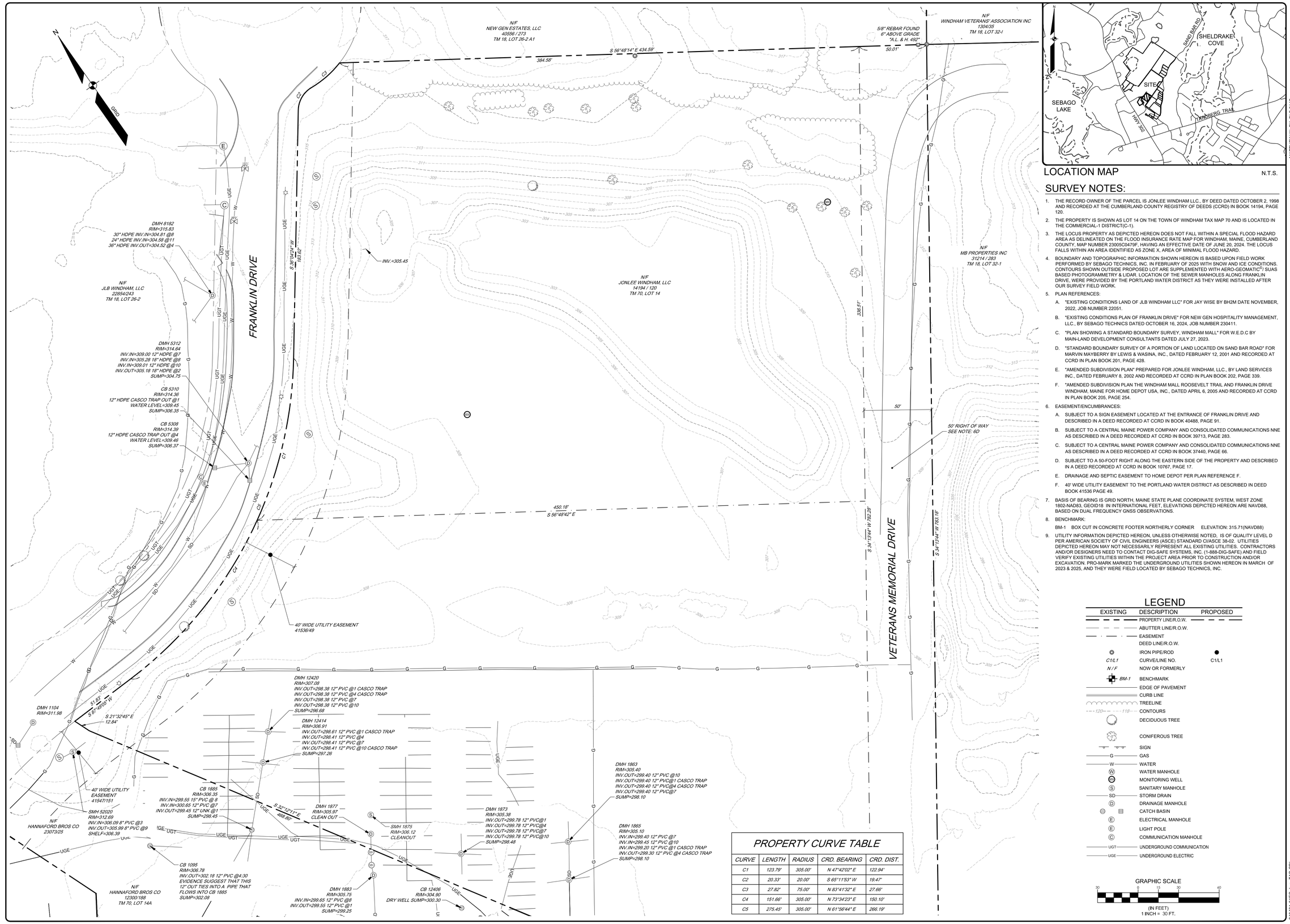
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DETAILS
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FRANKLIN DRIVE
WINDHAM, MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

DESIGNED	MRA/TNL
DRAWN	MRS
CHECKED	TFG
DATE	06/11/2026
SCALE	NTS
PROJECT	240431-01

SHEET C-505

240431 D.dwg, TAB:C-505 DETAILS



LOCATION MAP N.T.S.

SURVEY NOTES:

1. THE RECORD OWNER OF THE PARCEL IS JONLEE WINDHAM LLC., BY DEED DATED OCTOBER 2, 1998 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 14194, PAGE 120.
2. THE PROPERTY IS SHOWN AS LOT 14 ON THE TOWN OF WINDHAM TAX MAP 70 AND IS LOCATED IN THE COMMERCIAL-1 DISTRICT(C-1).
3. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR WINDHAM, MAINE, CUMBERLAND COUNTY, MAP NUMBER 23005C0479F, HAVING AN EFFECTIVE DATE OF JUNE 20, 2024. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD.
4. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. IN FEBRUARY OF 2025 WITH SNOW AND ICE CONDITIONS. CONTOURS SHOWN OUTSIDE PROPOSED LOT ARE SUPPLEMENTED WITH AERO-GEOMATICS SUAS BASED PHOTOGRAMMETRY & LIDAR. LOCATION OF THE SEWER MANHOLES ALONG FRANKLIN DRIVE, WERE PROVIDED BY THE PORTLAND WATER DISTRICT AS THEY WERE INSTALLED AFTER OUR SURVEY FIELD WORK.
5. PLAN REFERENCES:
   A. "EXISTING CONDITIONS LAND OF JLB WINDHAM LLC" FOR JAY WISE BY BH2M DATE NOVEMBER, 2022, JOB NUMBER 22051.
   B. "EXISTING CONDITIONS PLAN OF FRANKLIN DRIVE" FOR NEW GEN HOSPITALITY MANAGEMENT, LLC., BY SEBAGO TECHNICS DATED OCTOBER 16, 2024, JOB NUMBER 230411.
   C. "PLAN SHOWING A STANDARD BOUNDARY SURVEY, WINDHAM MALL" FOR W.E.D.C BY MAIN-LAND DEVELOPMENT CONSULTANTS DATED JULY 27, 2023.
   D. "STANDARD BOUNDARY SURVEY OF A PORTION OF LAND LOCATED ON SAND BAR ROAD" FOR MARVIN MAYBERRY BY LEWIS & WASINA, INC., DATED FEBRUARY 12, 2001 AND RECORDED AT CCRD IN PLAN BOOK 201, PAGE 428.
   E. "AMENDED SUBDIVISION PLAN" PREPARED FOR JONLEE WINDHAM, LLC., BY LAND SERVICES INC., DATED FEBRUARY 8, 2002 AND RECORDED AT CCRD IN PLAN BOOK 202, PAGE 339.
   F. "AMENDED SUBDIVISION PLAN THE WINDHAM MALL ROOSEVELT TRAIL AND FRANKLIN DRIVE WINDHAM, MAINE FOR HOME DEPOT USA, INC., DATED APRIL 6, 2005 AND RECORDED AT CCRD IN PLAN BOOK 205, PAGE 254.
6. EASEMENT/ENCUMBRANCES:
   A. SUBJECT TO A SIGN EASEMENT LOCATED AT THE ENTRANCE OF FRANKLIN DRIVE AND DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 40488, PAGE 91.
   B. SUBJECT TO A CENTRAL MAINE POWER COMPANY AND CONSOLIDATED COMMUNICATIONS NNE AS DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 39713, PAGE 283.
   C. SUBJECT TO A CENTRAL MAINE POWER COMPANY AND CONSOLIDATED COMMUNICATIONS NNE AS DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 37440, PAGE 66.
   D. SUBJECT TO A 50-FOOT RIGHT ALONG THE EASTERN SIDE OF THE PROPERTY AND DESCRIBED IN A DEED RECORDED AT CCRD IN BOOK 10767, PAGE 17.
   E. DRAINAGE AND SEPTIC EASEMENT TO HOME DEPOT PER PLAN REFERENCE F.
   F. 40' WIDE UTILITY EASEMENT TO THE PORTLAND WATER DISTRICT AS DESCRIBED IN DEED BOOK 41536 PAGE 49.
7. BASIS OF BEARING IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, GEOID18 IN INTERNATIONAL FEET, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL FREQUENCY GNSS OBSERVATIONS.
8. BENCHMARK:
   BM-1 BOX CUT IN CONCRETE FOOTER NORTHERLY CORNER ELEVATION: 315.71(NAVD88)
9. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PRO-MARK MARKED THE UNDERGROUND UTILITIES SHOWN HEREON IN MARCH OF 2023 & 2025, AND THEY WERE FIELD LOCATED BY SEBAGO TECHNICS, INC.

PROPERTY CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C1	123.79'	305.00'	N 47°42'02" E	122.94'
C2	20.33'	20.00'	S 65°11'53" W	19.47'
C3	27.82'	75.00'	N 83°41'32" E	27.66'
C4	151.66'	305.00'	N 73°34'23" E	150.10'
C5	275.45'	305.00'	N 61°58'44" E	266.19'

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER LINE/R.O.W.	
	EASEMENT	
	DEED LINE/R.O.W.	
	IRON PIPE/ROD	
C1/L1	CURVE/LINE NO.	C1/L1
N/F	NOW OR FORMERLY	
BM-1	BENCHMARK	
	EDGE OF PAVEMENT	
	CURB LINE	
	TREELINE	
120 118	CONTOURS	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	SIGN	
G	GAS	
W	WATER	
	WATER MANHOLE	
	MONITORING WELL	
	SANITARY MANHOLE	
SD	STORM DRAIN	
	DRAINAGE MANHOLE	
	CATCH BASIN	
	ELECTRICAL MANHOLE	
	LIGHT POLE	
	COMMUNICATION MANHOLE	
UGT	UNDERGROUND COMMUNICATION	
UGE	UNDERGROUND ELECTRIC	

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

MATTHEW W. EK, PLS 2117

STATE OF MAINE
MATTHEW W. EK
2117
PROFESSIONAL LAND SURVEYOR
Matthew W. Ek

REV.	BY	DATE	STATUS
A	CDL	2/27/2025	WORK SHEET FOR PROJECT DELIVERY
B	CDL	3/02/2026	ISSUED TO CLIENT
C	MWE	06/11/2026	ISSUED TO TOWN OF WINDHAM FOR LOCAL SUBMISSION

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PROVIDED BY OTHERS, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Brunswick.

EXISTING CONDITIONS PLAN
OF:
NORTH WINDHAM FIRE STATION
87 FRANKLIN DRIVE
WINDHAM MAINE
FOR:
TOWN OF WINDHAM
8 SCHOOL ROAD
WINDHAM, ME 04062

RECORD OWNER:
JONLEE WINDHAM, LLC.
5060 BELMONT AVENUE
YOUNGSTOWN OHIO 44505

DESIGNED	-
DRAWN	CDL / JMC
CHECKED	CDL
DATE	02/25/2025
SCALE	1" = 30'
PROJECT	240431-01

SHEET 1 OF 1

240431-01EC.dwg, TAB C2DL