SITE PLAN REVIEW
FINAL APPLICATION

CONVENIENCE STORE AND OFFICE BUILDING

TAX MAP 5, LOTS 47C & 48-1
134 MAIN STREET
EAST WATERBORO, MAINE

June 19, 2019

Prepared For

NEW HORIZONS MANAGEMENT COMPANY, LLC
3391 White Sulphur Road
Gainesville, GA 30501

Prepared By

119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011
207-725-1200 ▪ www.sitelinespa.com

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SITELINES
Civil Engineers • Land Surveyors

June 19, 2019

3841-7

Mr. Lee Jay Feldman, Director of Planning
Town of Waterboro
24 Townhouse Road
East Waterboro, Maine 04030

Re: Site Plan Review Application
CONVENIENCE STORE AND OFFICE BUILDING
134 MAIN STREET, EAST WATERBORO, MAINE
Tax Map 5, Lot 47C & 48-1

Dear Lee:

On behalf of New Horizons Management Company, LLC, Sitelines PA is submitting twelve (12) copies of a Site Plan Review Application and plans for the construction of a convenience store building with associated gasoline and diesel filling stations, an office building, and associated parking, infrastructure, and landscaping located at 134 Main Street. This letter is intended to summarize the project in order to facilitate the review process.

PROPERTY

New Horizons Management Company, LLC owns two (2) parcels of land located at 124 and 134 Main Street, respectively (Tax Map 5, Lots 47C & 48-1). The parcels contain approximately 2.61 acres and have frontage on Main Street (Route 202). The property at 134 Main Street is currently developed as a convenience store with gasoline and diesel fueling stations and the property at 124 Main Street is currently developed with a gravel access drive and a parking area. In total, the two properties contain approximately 35,916 s.f. (0.82 acres) of impervious area. The property is located in the Village Zoning District, in which Gas Stations, Retail and Service Stores, and Offices are permitted uses requiring lot sizes of 40,000 s.f. or greater.

PROJECT DESCRIPTION

The proposed project consists of the construction of two (2) buildings; a 6,380 s.f. convenience store, and an 1,826 s.f. office building. The project will be accessed from two (2) curb cuts from Main Street (U.S. Route 202).

In addition to the typical use of the convenience store, there will be a restaurant use within the building. As part of the development, seven (7) filling stations (5 gasoline, 1 diesel, and 1 K-1) will be constructed adjacent to the convenience store building. The existing filling stations on the property will be removed.

The existing building on the site is going to be relocated on the property and reutilized as an office building.

In total, the project will create a total of approximately 55,191 s.f. (1.27 acres) of impervious area, or a net increase of 19,275 s.f. (0.44 acres) of impervious area.

As the project results in less than an acre of new impervious area, but more than an acre of disturbed area, a Stormwater Management Law Permit-by-Rule from the Maine Department of Environmental Protection (MDEP) will be required.

The parcel has been delineated for wetlands by Atlantic Environmental, LLC which are shown on the enclosed plans. As part of the proposed development, approximately 1,359 s.f. of wetlands will be impacted for the installation of the outfall from the stormwater system. As the proposed wetland impacts are less than 4,300 s.f., the project does not require a freshwater wetlands alteration permit from the MDEP.

SITE PLAN REVIEW STANDARDS

To facilitate your review of our proposal, the following issues are summarized in accordance with *§2.10 Site Plan Review Standards* of the Waterboro Code.

1. The proposed development meets the definitions and/or requirements set forth in the Zoning Ordinance;

The project has been designed to meet the standards as outlined within the Ordinance. The applicant is requesting some waivers from the Zoning Ordinance and those consist of the following:

- Stormwater Treatment – Based on the Zoning Ordinance, the project requires treatment of 95% of the impervious area and 80% of the developed area. We request that the applicant provide stormwater treatment for the new impervious and developed areas created as a result of the proposed redevelopment.
- Groundwater Study – Based on the Zoning Ordinance, a Groundwater Study is required to ensure that the proposed septic system does not result in any adverse impacts to any adjacent properties. The impacts to the abutting properties are not a concern as the wells located on the adjacent properties have been located and are more than 100-feet from the proposed septic system. Furthermore, the proposed septic system will be sized for less than 1,000 gallons per day, which is a relatively small commercial septic system that is similar in sizing to a residential system. A Well Setback Plan is provided within the application package.

2. The proposed development will not create fire safety hazards by not providing adequate access to the site, or to the buildings on the site, for emergency vehicles; or adequate fire suppression systems;

As the development has been designed to accommodate gas-delivery vehicles, it will also provide adequate access for emergency vehicles. A plan showing the truck turning movements throughout the site has been enclosed with this submission. The fire suppression system to be installed within the new filling station canopy will comply with all NFPA regulations.

3. The proposed exterior lighting will not create hazards to motorists traveling on adjacent public streets; be inadequate for the safety of occupants or users of the site or will damage the value and diminish the usability of adjacent properties;

A Lighting Plan showing the type of lighting and illumination levels for the site and the impacts to adjacent properties has been developed and is enclosed with this submission. Lighting will include full cut-off fixtures and house shields where necessary.

4. The provisions for buffers and on-site landscaping provides adequate protection to neighboring properties from detrimental features of the development;

A Landscape Plan, conforming to the Town's Ordinances, has been developed and has been enclosed with this submission. Due to the location of the property, and the layout of the development, the landscaping will be concentrated along the frontage of Main Street (U.S. Route 202).

5. The proposed development will not have a significant detrimental effect on the use and peaceful enjoyment of abutting property as a result of noise, vibrations, fumes, odor, dust, glare or other cause;

As the project consists of a convenience store with filling stations and an office building, there is no excessive noise, vibrations, fumes, odor, dust, or glare anticipated as a result of the development. The project is being constructed in an area of the Town that is zoned for commercial use and is replacing an existing convenience store with filling stations.

6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets will not create hazards to safety or will not impose significant burdens on public facilities which could be avoided by reasonable modification of the plan;

Per the Ordinance, for a proposed convenience store, the use of "Retail shops and service store" appears to be most applicable. For that use, there is one (1) parking space required for each 200 sf of store area plus one (1) space for every three (3) employees. Within the convenience store, there is approximately 2,300 s.f. of "store area." The remainder of the store consists of bathrooms, a sit-down eating area, food preparation areas, storage areas, and cooler areas. The 2,300 s.f. of "store area" would require 11.5 parking spaces. Within the convenience store, there is also a sit-down area that consists of 24 seats. Per the Ordinance, for a restaurant use, there is one (1) parking space required for every three (3) seats plus one (1) space for every three (3) employees. The 24 seats would require 8 parking spaces. Based on discussions with the owner, there would be no more than four (4) employees on staff at one time, which would require an additional 1.3 parking spaces. In total, the convenience store would require 20.8 parking spaces. As proposed, there are currently 28 parking spaces allocated to the convenience store use.

Per the Ordinance, for a professional office, one (1) parking space is required for each 200 sf of non-storage floor area plus one (1) space for every three (3) employees. With the tenant of the building and internal floor plan not finalized, it is difficult to determine the exact parking demand.

If there were no storage areas provided in the building, the 1,826 s.f. building would require 9.2 parking spaces. With 13 parking spaces allocated for the office building, that leaves four (4) parking spaces to be utilized for employee parking. Per the Ordinance requirements, that would permit up to twelve (12) employees in the office building, which seems reasonable given the size of the building.

7. The bulk, location, height or design of proposed buildings, structures or paved areas, or the proposed uses thereof, will not have a significant detrimental effect on private development on adjacent properties, or on the value of adjacent properties which could be avoided by reasonable modifications of the plan;

The building will incorporate materials and accents traditional to New England architecture. The building proportions, height and other dimensions, windows and features of the facade have been designed by a Maine registered architect. Architectural elevation drawings have been prepared by ALPHAarchitects and are included with this submission.

8. The design of the site will not result in significant flood hazards or flood damage and is in conformance with applicable flood hazard protection requirements;

The project area is in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for Cumberland County, Maine. The project area is located on Panel 20 of 20 (Community Panel 230199-0020-C, Effective February 1, 1985). An excerpt of the applicable FIRM is enclosed with this submission.

9. Adequate provisions have been made for the disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;

Wastewater from the two (2) buildings will be treated by a new private subsurface wastewater septic field. The existing septic field is not adequately sized to accommodate the demand from the new buildings. Kenneth Gardner, LSE, has completed three (3) test pits on the property which all provided suitable locations for the new septic field. He is currently working on the septic design, which will be submitted as part of the building permit process. The proposed septic field will be located more than 300 feet away from the existing public supply well on the property and more than 100 feet away from residential wells on adjacent properties. A Well Setback Plan has been enclosed with this submission illustrating the location of the septic test pits in relation to the adjacent public and private wells. The test pit logs for the septic locations have been enclosed with this submission.

Solid waste will be stored in an enclosed dumpster on site and collected by a licensed waste hauler.

10. Adequate provisions have been made to control erosion or sedimentation;

Temporary erosion control measures include silt fence and hay bale barriers to prevent silt from leaving the development site. Permanent erosion control measures will include seeding and mulching of disturbed areas immediately after final grading is completed. Erosion control measures will remain in place until the area has been properly stabilized. The project will use methods as

outlined in the "Maine Erosion and Sediment Control Handbook for Construction: Best Management practices" by the Maine Department of Environmental Protection.

11. Adequate provisions have been made to handle storm water run-off or other drainage problems on the site and any proposed stormwater detention ponds are adequate to serve stormwater on or from the site;

The new impervious and developed areas created as a result of the redevelopment of the site will be directed to a grassed underdrained soil filter for treatment and detention prior to discharge to the large wetland complex located in the southwest corner of the property. A Stormwater Management Plan, which further details the stormwater treatment and detention system, has been developed for the project and has been enclosed with this submission.

12. The proposed water supply will meet the demands of the proposed use and is adequate for fire protection purposes;

The proposed development will utilize the existing well that currently serves the existing convenience store to serve the new convenience store and office building. As this well serves the public as part of the sit-down food service within the convenience store, it is classified as a public water supply. As such, the well requires periodic testing and requires a 300-foot setback from any septic systems. The existing septic system, and new fuel storage tanks are exempt from this setback as they are legally existing uses. The new septic system, which serves the new convenience store, is located outside of this 300-foot setback.

13. Adequate provisions have been made for the transportation, storage and disposal of hazardous substances and materials as defined by state law and the Hazardous Waste Ordinance;

The proposed gasoline, diesel, and K-1 filling stations and associated underground tanks will comply with all State and Federal Regulations concerning installation and maintenance. The existing tank will be removed as part of the project. Any soil contamination will be addressed at the time of the tank removal.

14. The proposed use will not have an adverse impact on significant scenic vistas or on significant wildlife habitat which could be avoided by reasonable modification of the plan;

There are no known scenic vistas or significant wildlife habitats within the proximity of the project site. The proposed use is not anticipated to have any adverse impact on any scenic vistas or significant wildlife habitat.

15. The project will not increase nitrate nitrogen concentrations in surface or groundwater at the property line of the site in excess of State of Maine Drinking Water Standards. If groundwater contains contaminants in excess of the primary drinking water standards and the project is to be served by on site groundwater supplies, the applicant shall demonstrate how water quality will be improved or treated to meet applicable standards.

The project will be served by a new subsurface wastewater system and an existing well. The proposed subsurface wastewater system will be located the required 100-feet away from the any residential wells on adjacent properties. The applicant is requesting a waiver from a Groundwater Study as the proposed subsurface wastewater system will meet the requirements as outlined within the State of Maine Subsurface Wastewater Disposal Rules. The proposed septic system will be sized for less than 1,000 gallons per day, which is a relatively small commercial septic system that is not anticipated to have any adverse impacts on the adjacent properties.

COMMERCIAL DESIGN STANDARDS

To facilitate your review of our proposal, the following issues are summarized in accordance with *§4.12 Commercial Design Standards* of the Waterboro Code.

1. *Proposed buildings, improvements and additions shall not be stylized to the point that the building or improvements are more an advertisement than an architectural form.*
2. *Long or continuous facades do not provide visual interest. Facades shall be articulated every 50 feet using varied designs, rooflines, materials and heights. The front facade shall be designed to look like more than one building entrance when the façade is proposed to be greater than 50 feet in width*
3. *The relationship of the width of the building to the height of the front elevation shall be visually compatible with buildings, structures and open spaces where it is visually related. A proposed new building or structure shall break up uninteresting box-like forms into smaller, varied masses comparable to a variety of form and massing which are often elements essential to the character of the streetscape. Avoid single, monolithic forms that are not relieved by variations in massing*
4. *The roof shape of a building shall be visually compatible with that of buildings to which it is visually related. When no clear pattern exists, a roof pitch of 5/12 or steeper shall be used, or the building should be designed so as to appear to have a pitched roof. The design of the roofline or parapet wall shall screen any air conditioning or other utilities placed on the roof on 3 sides most visible to the pub*

   The building will incorporate materials and accents traditional to New England architecture. The building proportions, height and other dimensions, windows and features of the facade have been designed by a Maine registered architect. Architectural elevation drawings have been prepared by ALPHAarchitects and are included with this submission.

5. *Where mechanical equipment such as HVAC are located at ground level, appropriate vegetative screening shall be used to hide the equipment while spaced to allow for routine maintenance.*

   For the convenience store, the HVAC equipment will be roof mounted on the rear of the building and will screened. Refer to the enclosed architectural elevations. The HVAC equipment for the office building will be ground-mounted but will be located at the rear of the building and will be screened from the roadway.

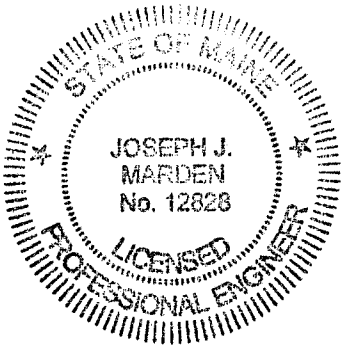
6. *For trash receptacles located on the property, where possible, natural vegetative screening and or stockade fencing shall be used to screen the containers from public view.*

   As shown on the enclosed plans, the dumpster pad is located to the rear of the property and is enclosed with a chain link fence with slats.

SUMMARY

We trust that this information satisfactorily addresses the requirements for Site Plan Review, and we look forward to meeting with you and the Planning Board at their July 10, 2019 meeting to review the project and obtain their feedback. Should you have any questions or require any additional information, please contact me.

Very truly yours,



Joseph J. Marden, P.E.
Project Manager

Enclosures

cc: Daniel Peck III, New Horizons Management Company, LLC
Wes Thames, Priority Real Estate Group, LLC

Attachment A
Application Form & Checklist

A completed copy of the Town of Waterboro Planning Board Agenda Application Form and the Checklist are enclosed.

TOWN OF WATERBORO
PLACEMENT ON
PLANNING BOARD AGENDA

Date received: _____

APPLICATION TO BE PLACED ON PLANNING BOARD AGENDA on July 10, 2019

I, New Horizons Management Company, LLC

Address: Attn: Daniel Peck III Tax Map # 5 Lot # 47C/48-1

3391 White Sulphur Road Zone Village

Gainesville, GA 30501 Telephone # 207-247-1031

HEREBY MAKE APPLICATION TO BE PLACED ON THE AGENDA OF THE WATERBORO PLANNING BOARD:

Nature of business to be presented before the board:

Townline Deli / Office Building with no tenant

Is the project in the Shoreland Zone? _____ yes X no

Estimate of time necessary for presentation: 30 min X 45 min _____

Name (s) of person (s) who will be appearing before the Planning Board:
Joseph Marden, PE (Sitelines, PA)

Please file this form with the Code Enforcement Officer, at which time a **non-refundable** fee* must be paid. You will be notified of the date and time you are to appear. **You shall notify all abutters of your property of the date, time and purpose of your meeting and allow them 10 days prior to the meeting date to submit any concerns they may have in writing to the Planning Board.** Attach the following information:

- Building permit application
- Diagram of the lot and project in relation to said lot
- Any other information to better review your application

WATERBORO PLANNING BOARD FEES*

_____	**Placement on agenda (informational)**	**N/A**
X	**Conditional use / set back reduction (includes relocation in Shoreland Zone)**	**$100.00**
_____	**Special Structures (Height modification)**	**$50.00**
_____	**Cluster development**	**$100.00 +$50.00 for each development review residential, commercial or industrial unit in the development**
_____	**Planned Unit**	**$100.00 +$50.00 for each development review residential, commercial or industrial unit in the development**
_____	**Temporary Use Review**	**$50.00**

SITE PLAN REVIEW
MASTER CHECKLIST
TOWN OF WATERBORO

Site Plan Name: Convenience Store/Office Location: 134 Main Street, East Waterboro Map 5 Lot 47C&48-1

All applications for Site Plan review shall be filed with the Code Enforcement Officer and processed to the appropriate municipal reviews by the Town Planner.

Ten (10) copies of 24" x 36" plans shall be drawn to scale of not greater than 1" to 100' and three (3) copies of the Site Plan in 11" x 17" format showing the following features, both existing and proposed:

ITEM SUBMITTED	ITEM REVIEWED BY	SITE PLAN DETAILS
☑		Name of project, names and addresses of owners of record; tax map and lot number.
☑		North arrow, date of plat, scale; name, address and seal of person preparing the plan with an appropriate signature block
☑		Vicinity sketch and zoning district(s)
☑		Boundaries of the site and abutting streets with widths, including length of lot lines
☑		Footprint of building – showing the number of stories, dimensions of structure(s), accesses and use, including decks and outbuildings
☑		Layout and location of off-street parking and loading, access drives and vehicular maneuvering areas
☑		Location and size of all signs, gasoline pumps, and similar free standing structures
☑		Waste/dumpster locations and snow storage areas
☑		Location, direction and type of outdoor lighting
☑		Location and type of screening and/or buffers and other landscaping
☑		Location of all utilities
☑		Topography of a contour interval not greater than 2 ft. showing the effects upon adjacent property
☐		Hydrogeological impact study for any site where a septic system design flow is in excess of 800 gallons or if predominantly made up of non-typical septic waste. This study must contain components as listed in Section D.9a-f of Site Plan Ordinance.
☑		Meets definitions and requirements set forth in the Zoning Ordinance

ITEM SUBMITTED	ITEM REVIEWED BY	SITE PLAN DETAILS
☑		Provides adequate access to the site for emergency vehicles; access without parked cars in way
☐		Provides adequate dry hydrants and access to the hydrants and Fire Department sprinkler connection and pressure hydrants and/or cisterns, as applicable
☑		Proposed exterior lighting creates no hazard to motorists on adjacent streets or occupants of adjacent properties
☑		Provide a detailed buffer zone and on-site landscaping for protection of neighboring properties
☑		Proposed use will not disturb the peaceful enjoyment of abutting property owners as a result of noise, vibrations, fumes, odor, dust, glare or other cause.
☑		The provisions for parking and loading and pedestrian circulation on the site and adjacent streets will not create any safety hazard or impose significant burdens on public facilities which could be avoided by reasonable modifications of the plan. Parking will not prohibit access of emergency vehicles.
☑		The proposed use of the site or its buildings will have no significant effect on private development of adjacent properties, or the value of adjacent properties which could be avoided by reasonable modifications to the plan. Keep with character of neighborhood.
☑		The design of the site will not result in significant flood hazards or flood damage and is in conformance with applicable flood hazard requirements.
☑		The site contains an adequate storm water management plan.
☑		Adequate provisions are made for the disposal of wastewater and solid waste.
☑		Adequate provisions for drainage on site.
☑		The proposed water supply meets the demands of the use and/or for fire protection.
☑		Snow removal and adequate storage, so it will not obstruct parking or civilian/emergency vehicle traffic.
☑		Provisions for the storage of hazardous waste as defined by State law and Waterboro Hazardous Waste Ordinance. Hazardous materials proposed will be identified.
☑		The proposed use had no adverse impact on significant scenic vistas or on significant wildlife habitat which could be avoided by reasonable modification to the plan.
☐		A nitrate study has been submitted if the nitrogen concentration in surface or groundwater at the property line of the site is in excess of 5 mg/l. Demonstrate the treatment of the water supply if the groundwater contains contaminants in excess of primary drinking water standards and the project is to be served by on-site groundwater supplies.
☐		Performance bond as per section 12.04 of the Zoning Ordinance (see process below)
☐		Sprinklered or not with additional infrastructure
☐		Site walk date determined

ITEM SUBMITTED	ITEM REVIEWED BY	SITE PLAN DETAILS
☐		
☐		

	STATE AND FEDERAL REVIEWS
☐ Letter Received	MDOT scoping session/traffic impact report
☐ Letter Received	MDEP Site Location Review complete
☐ Letter Received	State Fire Marshall
	LOCAL DEPARTMENT REVEIWS
☐ Letter Received	Waterboro Water District (consultation)
☐ Letter Received	Waterboro Fire Department
☐ Letter Received	Waterboro Road Review Committee
☐ Letter Received	Waterboro Code Enforcement Officer
☐ Letter Received	Waterboro Town Planner
	PERFORMANCE BOND PROCESS
☐ Letter Received	Calculated infrastructure costs (from applicant's engineer)
☐ Letter Received	Municipal review and peer review of infrastructure costs
☐ Letter Received	Anticipated build out schedule
☐ Passbook Received	Savings Deposit Book to Town of Waterboro

Received Date:_____
Receiver Initials_____

WAIVER REQUEST FORM
Town of Waterboro, Maine

If there is more than one waiver requested, each waiver request is to be individually listed and described, as each waiver is considered individually by the Town of Waterboro Planning Board. Each petition for waiver shall be submitted in writing by the applicant with the application (site plan or subdivision) for review. The request shall fully state the reasons for which the waiver is requested and any/all facts supporting the request. Additionally, each waiver that may be granted by the Planning Board, shall be listed on the approved site or subdivision plan.

Name of Site/Subdivision Plan: Convenience Store and Office Building

Site/Subdivision Location: 134 Main Street, East Waterboro

Map #: 5 Lot#: X Zoning: V

Owner(s) New Horizons Management Company, LLC

Address of Owners: 3391 White Sulphur Road, Gainesville, GA 30501

Phone #: N/A Email: N/A

Land Surveyor: X

Phone #: _____ Email: _____

Engineer: Sitelines, PA Attn: Joseph J. Marden, PE

Phone #: 207-725-1200 Ext. 12 Email: jmarden@sitelinespa.com

I Joseph Marden seek the following described waiver to the Town of Waterboro: (Be specific and reference sections of Site Plan, Zoning or Subdivision Ordinances)

2.10.11 - Stormwater Management
Based on the Zoning Ordinance, the project requires treatment of 95% of the impervious area and 80% of the developed area. We request that the applicant provide stormwater treatment for the new impervious and developed areas created as a result of the proposed redevelopment. Per that standard, the project provides treatment of 182% of the new impervious area and 141% of the total new developed area.

AS AGENTS 06/19/19

Signature of Owner/Applicant Date of submittal

Review Date by Planning Board:_____

Planning Board Decision:_____

Approved, Approved with Modifications, Denied (with reasons

Received Date:_____
Receiver Initials_____

WAIVER REQUEST FORM
Town of Waterboro, Maine

If there is more than one waiver requested, each waiver request is to be individually listed and described, as each waiver is considered individually by the Town of Waterboro Planning Board. Each petition for waiver shall be submitted in writing by the applicant with the application (site plan or subdivision) for review. The request shall fully state the reasons for which the waiver is requested and any/all facts supporting the request. Additionally, each waiver that may be granted by the Planning Board, shall be listed on the approved site or subdivision plan.

Name of Site/Subdivision Plan: Convenience Store and Office Building

Site/Subdivision Location: 134 Main Street, East Waterboro

Map #: 5 Lot#: 47C * 48-1 Zoning: V

Owner(s) New Horizons Management Company, LLC

Address of Owners: 3391 White Sulphur Road, Gainesville, GA 30501

Phone #: N/A Email: N/A

Land Surveyor: _____

Phone #: _____ Email: _____

Engineer: Sitelines, PA Attn: Joseph J. Marden, PE

Phone #: 207-725-1200 Ext. 12 Email: jmarden@sitelinespa.com

I Joseph Marden seek the following described waiver to the Town of Waterboro: (Be specific and reference sections of Site Plan, Zoning or Subdivision Ordinances)

2.10.15 - Groundwater Study
Based on the Zoning Ordinance, a Groundwater Study is required to ensure that the proposed septic system does not result in any adverse impacts to any adjacent properties. The impacts to the abutting properties are not a concern as the wells located on the adjacent properties have been located and are more than 100-feet from the proposed septic system. Furthermore, the proposed septic system will be sized for less than 1,000 gallons per day, which is a relatively small commercial septic system that is similar in sizing to a residential system. A Well Setback Plan is provided within the application package.

As Agent 06/19/19

Signature of Owner/Applicant Date of submittal

Review Date by Planning Board:_____

Planning Board Decision:_____

Approved, Approved with Modifications, Denied (with reasons

SITELINES
Civil Engineers • Land Surveyors

June 13, 2019

3841-2

Mr. Daniel Peck III
New Horizon Management Company, LLC
3391 White Sulphur Road
Gainesville, GA 30501
<via email>

Re: Designation of Agent Authorization
Convenience Store and Office Building
134 Main Street, East Waterboro, Maine
Tax Map 5, Lots 47C & 48-1

Dear Daniel:

As required by various approval agencies, please indicate by signing below that Sitelines, PA is authorized to act as agent for New Horizon Management Company, LLC, for the specific purpose of preparation and submission of local and state permitting applications on your behalf for the proposed convenience store and office building to be located at 134 Main Street in East Waterboro, Maine.

Sincerely,

Joseph J. Marden, P.E.
Project Manager

The undersigned hereby gives Sitelines, PA the authority to act as agent for New Horizons Management Company, LLC for the specific purpose of preparation and submission of local and state permitting applications for the project specifically identified above.

Daniel Peck III — Date 6/14/19

Attachment B
Right, Title, & Interest

A copy of the current deeds is included with this attachment.

DEBRA L. ANDERSON, REGISTER OF DEEDS
E-RECORDED **Bk 17591 PG 438**
Instr # 2017046054
10/27/2017 03:28:31 PM
Pages 2 YORK CO

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS that **ABBOTT INVESTMENTS, LLC**, a Maine Limited Liability Company, whose mailing address is 29 Hamilton Road, Lyman, Maine 04002, for consideration paid hereby grants to **NEW HORIZON MANAGEMENT COMPANY, LLC,** a Georgia Limited Liability Company, whose mailing address is 3395 White Sulphur Road, Gainesville, GA 30501, with WARRANTY COVENANTS, the premises situated in the Town of Waterboro, County of York, and State of Maine, bounded and described as follows:

SEE EXHIBIT "A" ATTACHED HERETO
AND INCORPORATED HEREIN BY REFERENCE.

IN WITNESS WHEREOF, the said **ABBOTT INVESTMENTS, LLC**, has caused this instrument to be executed this 27th day of October, 2017.

Witness

ABBOTT INVESTMENTS, LLC

By: David J. Abbott
Its: Manager, duly authorized

STATE OF MAINE
YORK, ss.

October 27, 2017

Then personally appeared the above-named **David J. Abbott in his capacity as Manager of Abbott Investments, LLC,** and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,

Notary Public/Attorney at Law

STEPHEN Y. HODSDON
Maine Notary Public
Commission Expires
January 29, 2020

Maine R.E. Transfer Tax Paid

EXHIBIT "A"

A certain lot or parcel of land, together with buildings and improvements thereon, situated on the southerly side of Routes 4, 5, & 202, in the Town of Waterboro, County of York, State of Maine, and being more particularly bounded and described as follows:

Beginning at a point, being a set 3/4" iron rod on the assumed southerly sideline of Routes 4, 5, & 202, at the northwesterly corner of land now or formerly as described in the deed of Warren A. Eaton and Mary A. Eaton to Kenneth W. Eaton and Claire L. Eaton dated October 10, 1964, and recorded in the York County Registry of Deeds in Book 1622, Page 309, said point of beginning also being N 13° 51' 15" E, 1.85 feet, from a found iron pipe;

Thence N 80° 51' 15" W, along said Routes 4, 5, & 202, 200.40 feet, to a set 3/4" iron rod; thence S 14° 33' 15" W, along the remaining land now or formerly of Forrest M. Abbott, Jr. and Isabel O. Abbott, 205.16 feet, to a found 5/8" iron rod; thence S 26° 42' 45" E, along remaining land now or formerly of said Forrest M. Abbott, Jr. and Isabel O. Abbott, 170.00 feet, to a found 5/8" iron rod; thence S 75° 21' 05" E, along the remaining land now or formerly of said Forrest M. Abbott, Jr. and Isabel O. Abbott, 91.69 feet, to a set 3/4" iron rod at the land now or formerly of said Eaton, being N 01° 43' 30" E, 4.79 feet, from a found 1-1/4" iron pipe; thence N 13° 51' 15" E, along said Eaton land and remains of a stonewall, 352.00 feet to the point of beginning.

Containing 1.42 Acres, more or less.

The basis for this description is Grid North determined between the found Maine Department of Transportation railroad spikes in the pavement of station p.c. 124+36.15, and station p.c. 138+17.48 as shown on the Maine Department of Transportation Right of Way Map dated September 1980 and revised last May 10, 1981, and recorded in said Registry in Plan 140, Page 15. Said bearing is S 76° 55' 05" E.

This description is based from a "Standard Boundary Survey For Forrest M. Abbott, Jr." dated July 21, 1994, by Robert A. Yarumian, II, P.L.S. 1303 of Maine Boundary Consultants of West Buxton, Maine.

All said found 5/8" iron rods are rebar with a yellow plastic cap marked "PLS 2161".

All said set 3/4" iron rods are rebar with an aluminum cap marked "SET BY ROBERT A YARUMIAN PLS 1303 LAND SURVEY MONUMENT" .

Title reference may be had to Warranty Deed from David J. Abbott and Judith A. Abbott to Abbott Investments, LLC, dated February 10, 2010 and recorded in the York County Registry of Deeds in Book 15815, Page 770.

DEBRA L. ANDERSON, REGISTER OF DEEDS
E-RECORDED **Bk 17826 PG 864**
Instr # 2018044506
10/19/2018 02:32:55 PM
Pages 3 YORK CO

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS that **DOUGLAS F. ABBOTT** and **CONSTANCE J. ABBOTT** of Zeffer, Florida, for consideration paid hereby grant to **NEW HORIZON MANAGEMENT COMPANY, LLC**, with a mailing address of 3395 White Sulphur Road, Gainsville, GA 30501, with WARRANTY COVENANTS, the premises situated in the Town of Waterboro, County of York and State of Maine, bounded and described as follows:

SEE EXHIBIT "A" ATTACHED HERETO
AND INCORPORATED HEREIN BY REFERENCE.

IN WITNESS WHEREOF, the said **DOUGLAS F. ABBOTT** and **CONSTANCE J. ABBOTT** have hereunto set their hands and seals this 5th day of October, 2018.

Witness

DOUGLAS F. ABBOTT

Witness

CONSTANCE J. ABBOTT

STATE OF MAINE
YORK, ss. October 5, 2018

Then personally appeared the above-named Douglas F. Abbott and Constance J. Abbott and acknowledged the foregoing instrument to be their free act and deed.

Before me,

Notary Public/Attorney-at-Law

STEPHEN Y. HODSDON
Maine Notary Public
Commission Expires
January 29, 2020

nh/\\server\Data\Lisa\Documents\Real\Peck, Daniel (Purchase of land from Abbott)\warranty deed for Peck.doc

Maine R.E. Transfer Tax Paid

EXHIBIT A

Portion of Tax Map 5; Lot 47C (124 Main Street, Waterboro)

A certain lot or parcel of land located on the southerly side of Rt. 202, aka Main Street, so called, in the Town of Waterboro, County of York and State of Maine, bounded and described as follows, to wit:

Beginning at a 1" iron pipe, marking the easterly corner of land conveyed to New Horizon Management Co. LLC as described in Deed Book 17591, Page 436, recorded in the York County Registry of Deeds;

Thence S 62° 29' E along said Rt. 202 and the land of these Grantors, a distance of 260.2 feet, to a 5/8" capped rebar and the land of Mary Young as described in Deed Book 3168, Page 177;

Thence S 40° 03' W along the land of said Young, and the land of Warren as described in Deed Book 15950, Page 761, a distance of 224.0 feet to a 5/8" capped rebar set;

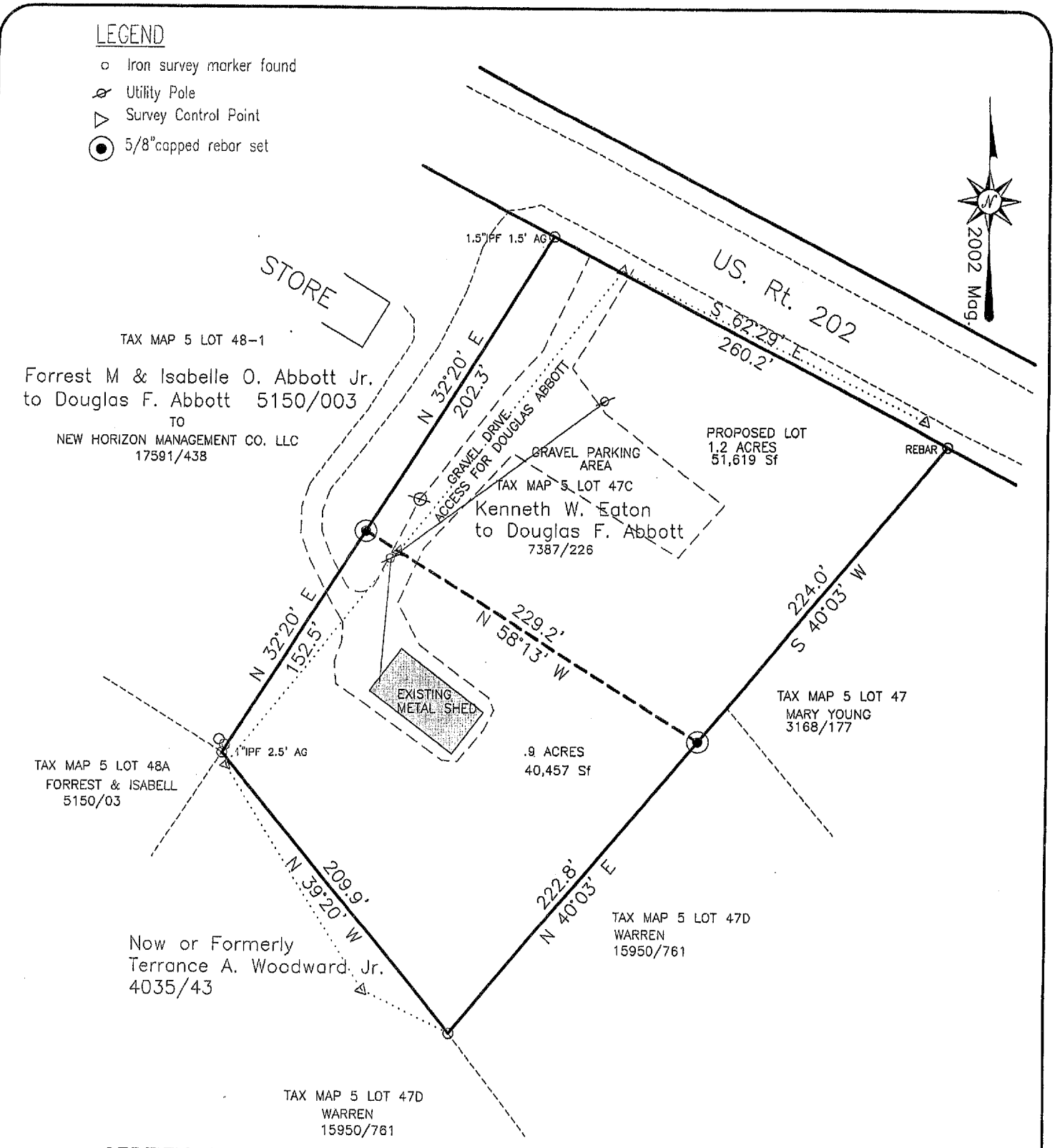
Thence N 58° 13' W through the land of these Grantors, a distance of 229.2 feet to the easterly boundary of said New Horizon Management Co. LLC, and a 5/8" rebar set;

Thence N 32° 20' E along the land of said New Horizon Management Co. LLC, a distance of 202.3 feet to the point of beginning, containing 51,619 Square Feet.

Meaning to describe and hereby describing a portion of the land as described in a deed from Kenneth W. Eaton to Douglas F. Abbott and Constance J. Abbott in Book 7387, Page 226, recorded in said Registry of Deeds and shown on a Division Survey for Douglas F. Abbott, prepared by Stephen W. Everett, dated September 22, 2018, attached hereto.

Said premises are conveyed subject to Standard Easement Deed from the Grantors to Central Maine Power Company & Saco River Telephone Company dated August 28, 1997 and recorded in the York County Registry of Deeds in Book 8451, Page 350.

EXCEPTING & RESERVING to the Grantors, their heirs and assigns, a right of way for ingress and egress and an easement for installation, maintenance, repair and replacement of all utility services, including without limitation thereof, electricity, water, sewer, telephone & cable telephone services, for the Grantors' remaining property, on, over, under and across the area depicted on the attached Division Survey and labelled thereon as "gravel drive, access for Douglas Abbott."



CERTIFICATION

I hereby certify to Douglas F. Abbott that this meets the accuracy requirements of the Board of Licensure for Land Surveyors of the State of Maine for it's expressed purpose.

Proposed Lot Division

Douglas F. Abbott

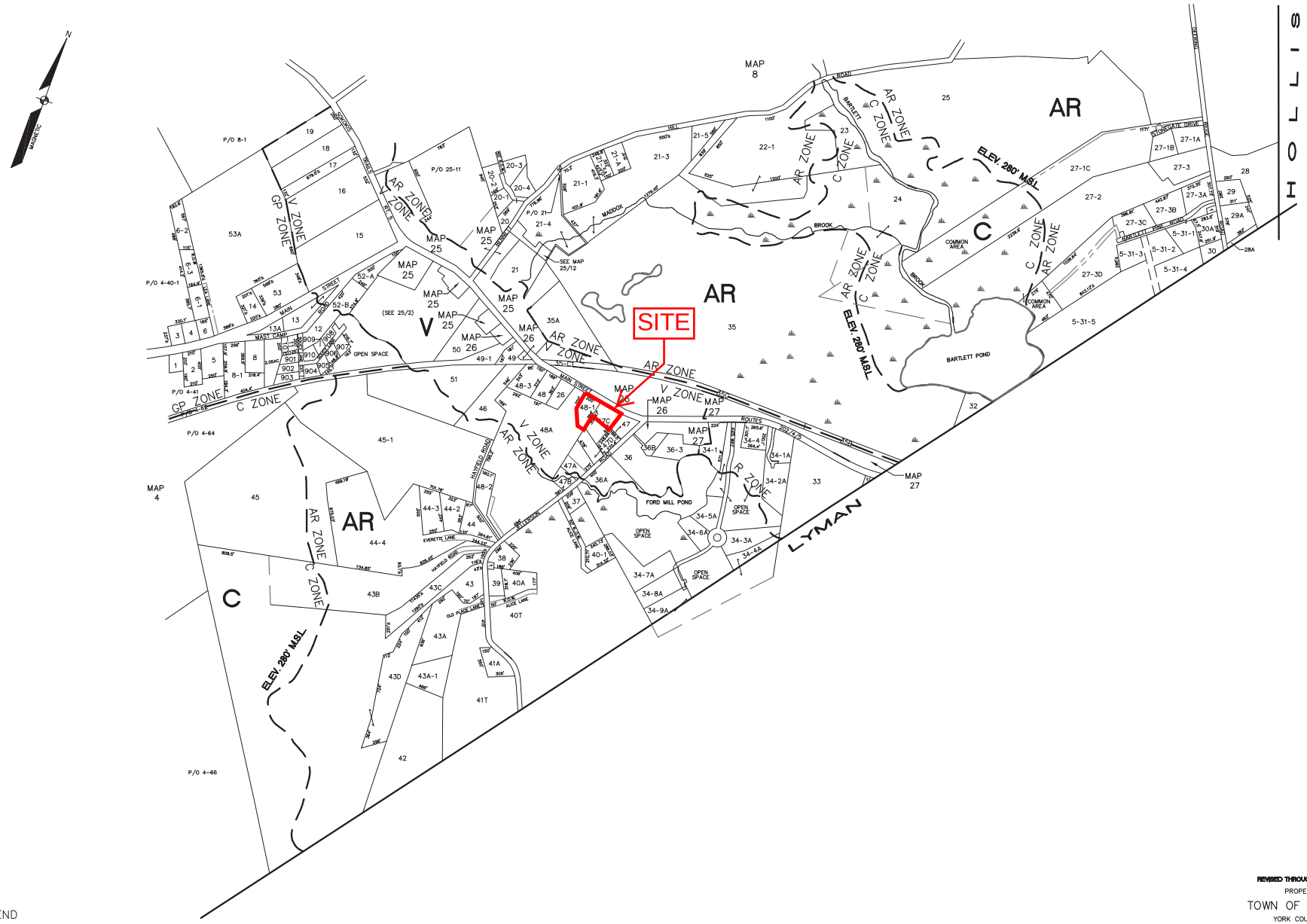
Rt. 202
located in Waterboro, Maine

Scale 1"=80' *Sept. 22, 2018*

Prepared by Stephen W. Everett PLS 2161

Attachment C
Abutting Property Owners

A copy of the abutters map and a list of abutting property owners are included in this attachment for reference.



LEGEND

PARCEL NUMBER ——— 25

ADJACENT MAPS ——— MAP 21

MATCH LINE — — — —

FOR ASSESSMENT PURPOSES ONLY.
NOT TO BE USED FOR CONVEYANCES.

THE 100 YEAR FLOOD HAZARD AREA SHOWN HERON IS APPROXIMATE AS DETERMINED BY FLOOD INSURANCE RATE MAPS DATED 2/1/1985. ANY APPARENT DISCREPANCIES OR CONCERNS THAT MAY ARISE SHOULD BE ADDRESSED ON A LOT B LOT BASIS BY AN APPROPRIATE PROFESSIONAL.

REVISED THROUGH APRIL 2019

PROPERTY MAP

TOWN OF WATERBORO

YORK COUNTY MAINE

SCALE: 1 INCH = 500± FEET

PREPARED BY SEBAGO TECHNICS, INC

15423MAP5.dwg, TAB:MAP5

Abutters List

134 Main Street, East Waterboro, Maine

Locus Properties

N/F
NEW HORIZON MANAGEMENT CO, LLC
3395 WHITE SULPHUR RD
GAINESVILL, GA 30501
BK 17591, PG 438
MAP 5 LOT 48-1

N/F
NEW HORIZON MANAGEMENT CO, LLC
3395 WHITE SULPHUR RD
GAINESVILL, GA 30501
MAP 5 LOT 47C

Abutters

N/F
MARY YOUNG
656 JELLERSON ROAD
EAST WAERBORO, ME 04030
BK 3168, PG 177
MAP 5 LOT 47

N/F
DOUGLAS & CONSTANCE ABBOTT
7 ABBOTT LANE
EAST WATERBORO, ME 04030
MAP 5 LOT 47C

N/F
JOSEPH & JOAN WARREN
C/O NORWAY SAVINGS BANK
261 MAIN ST
NORWAY, ME 04268
BK 15950, PG 761
MAP 5, LOT 47D

N/F
FORREST & ISABELLE ABBOTT
PO BOX 21
EAST WATERBORO, ME 04030
MAP 5 LOT 48A

N/F
ROSS & JENNIFER BOOKER
6910 NW BELVIDERE PKWY
KANSAS CITY, MO 64152
BK 17251 PG 322
MAP 26 LOT 6

N/F
ROBERT HAMEL JR
PO BOX 294
EAST WATERBORO, ME 04030
BK 16418 PG 196
MAP 26 LOT 6A

Attachment D
Photographs

Photographs of the existing conditions of the project site are enclosed.

SITE PHOTOGRAPHS

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

Photograph 1: Main Street, Looking West, from Proposed Entrance Location

Photograph 2: Main Street, Looking East, from Proposed Entrance Location

Photographs taken by Sitelines PA, April 2019.

SITE PHOTOGRAPHS

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

Photograph 3: Existing Townline Deli Building

Photograph 4: Existing Filling Station Canopy and Concrete Pad

Photographs taken by Sitelines PA, April 2019.

SITE PHOTOGRAPHS

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

Photograph 5: Rear of Existing Townline Deli Building

Photograph 6: Rear of Existing Townline Deli Building

Photographs taken by Sitelines PA, April 2019.

SITE PHOTOGRAPHS

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

Photograph 7: Wetland Bog at Rear of Site

Photograph 8: Existing Culvert Outlet Across Main Street

Photographs taken by Sitelines PA, April 2019.

SITE PHOTOGRAPHS

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

Photograph 9: Existing Gravel Access Drive to Garage

Photograph 10: Existing Garage Building on Adjacent Property

Photographs taken by Sitelines PA, April 2019.

Attachment E
Supporting Documents

Copies of relevant correspondence and documents pertaining to the project are enclosed.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: Waterboro

Street, Road, Subdivision: RT202

Owner's Name: Townline Deli

SITE PLAN Scale 1" = _____ ft. or as shown

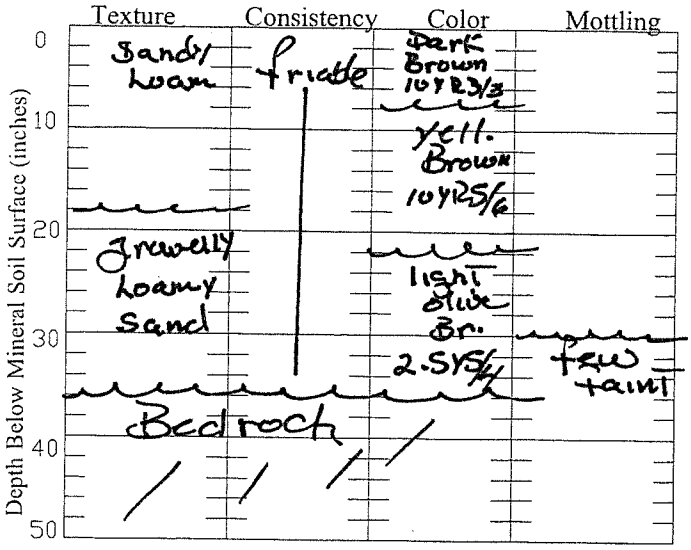
See Survey Plan

SITE LOCATION PLAN
(map from Maine Atlas recommended)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 1 ☑ Test Pit ☐ Boring

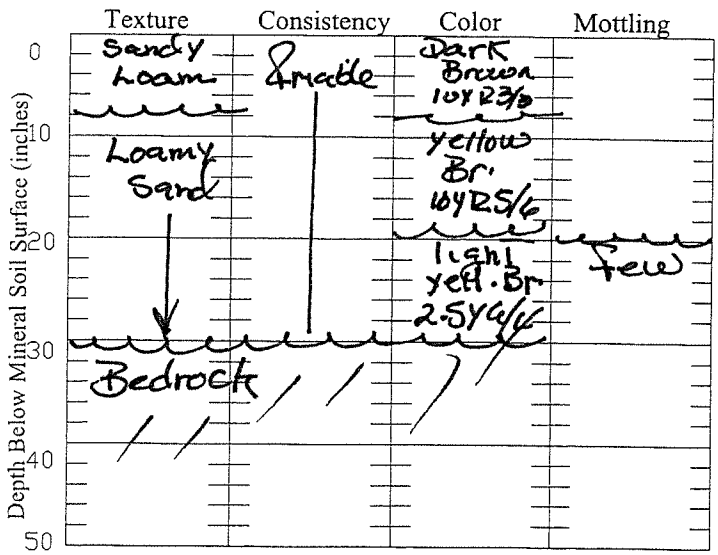
1 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
4 / A III/C (Profile / Condition)	3-5%	30"	[4] Ground Water; [ ] Restrictive Layer; [4] Bedrock 36"; [ ] Pit Depth

Observation Hole 2 ☑ Test Pit ☐ Boring

1 " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
4 / A III/C (Profile / Condition)	0-1%	20"	[4] Ground Water; [ ] Restrictive Layer; [4] Bedrock 30"; [ ] Pit Depth

Kenneth Gardner 73 6-7-19

Site Evaluator Signature SE # Date

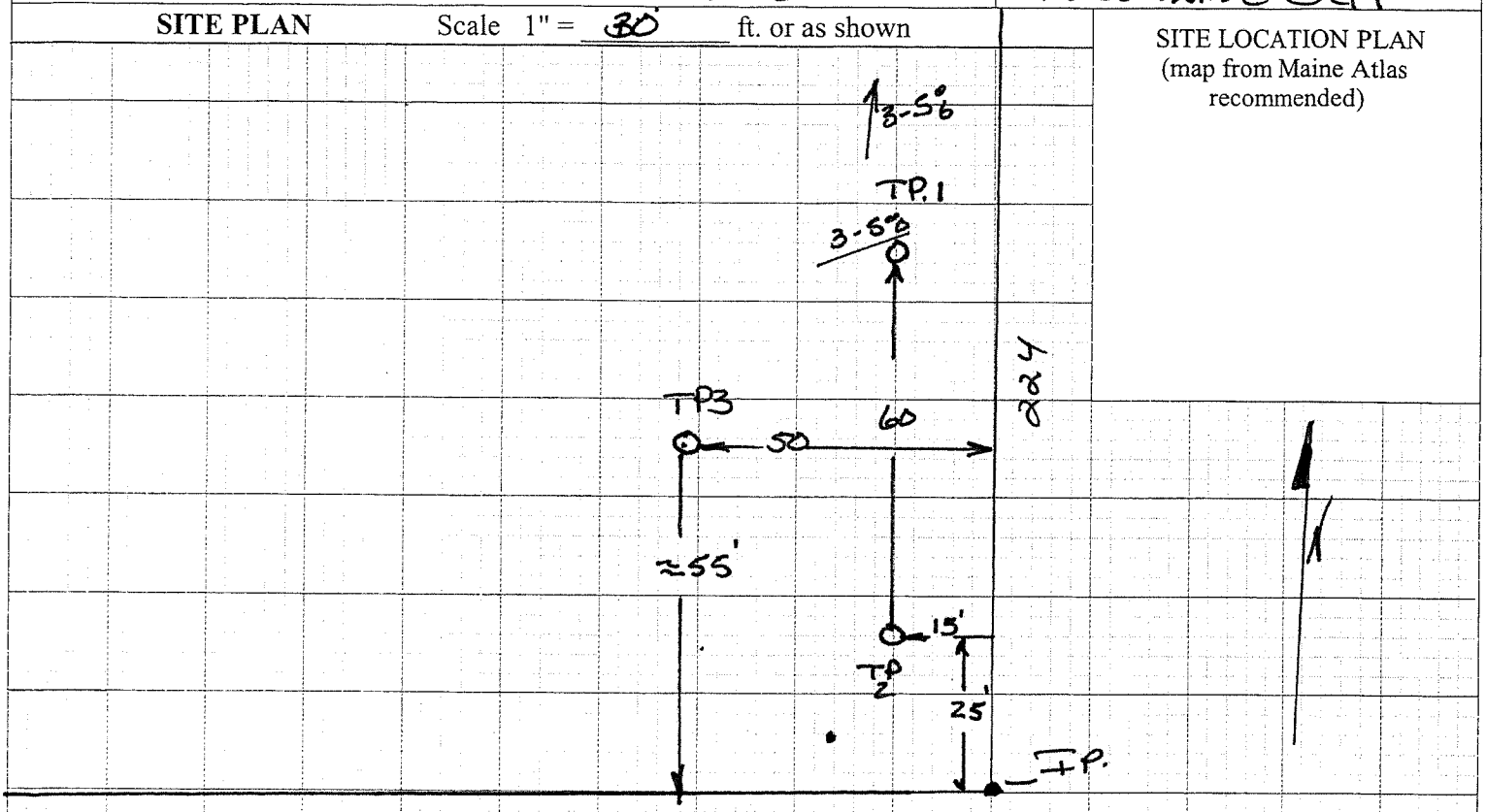
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
Waterboro	RT202	TownLine Deli

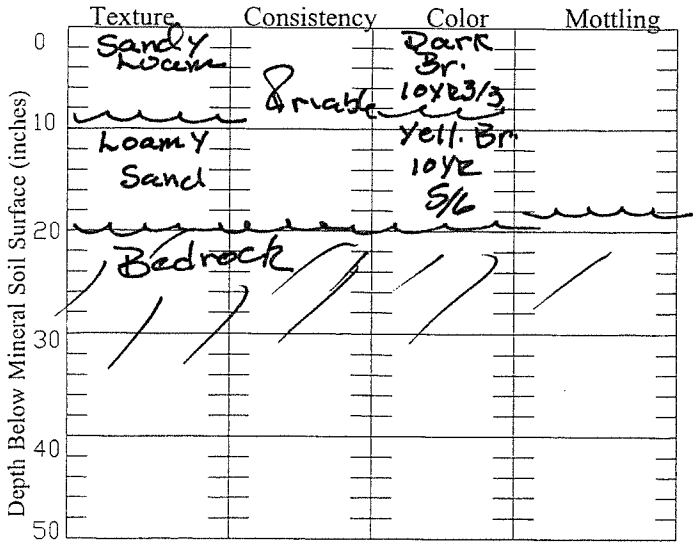
SITE PLAN Scale 1" = 30 ft. or as shown

SITE LOCATION PLAN
(map from Maine Atlas recommended)



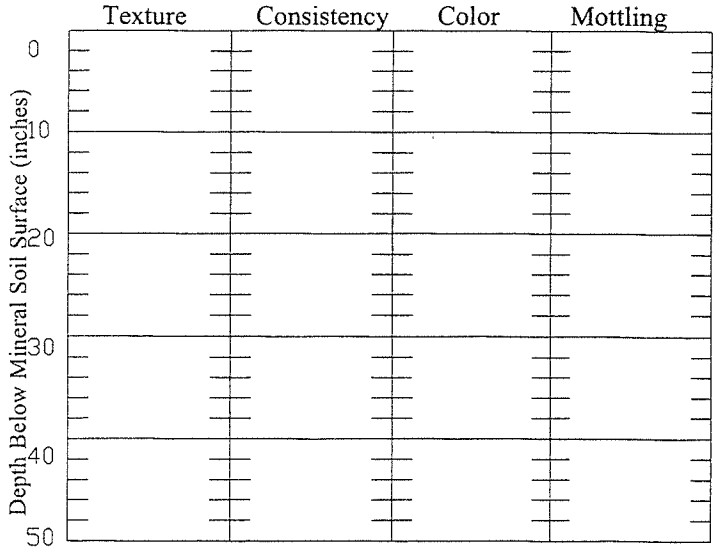
SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 3 ☑ Test Pit ☐ Boring
1 " Depth of Organic Horizon Above Mineral Soil



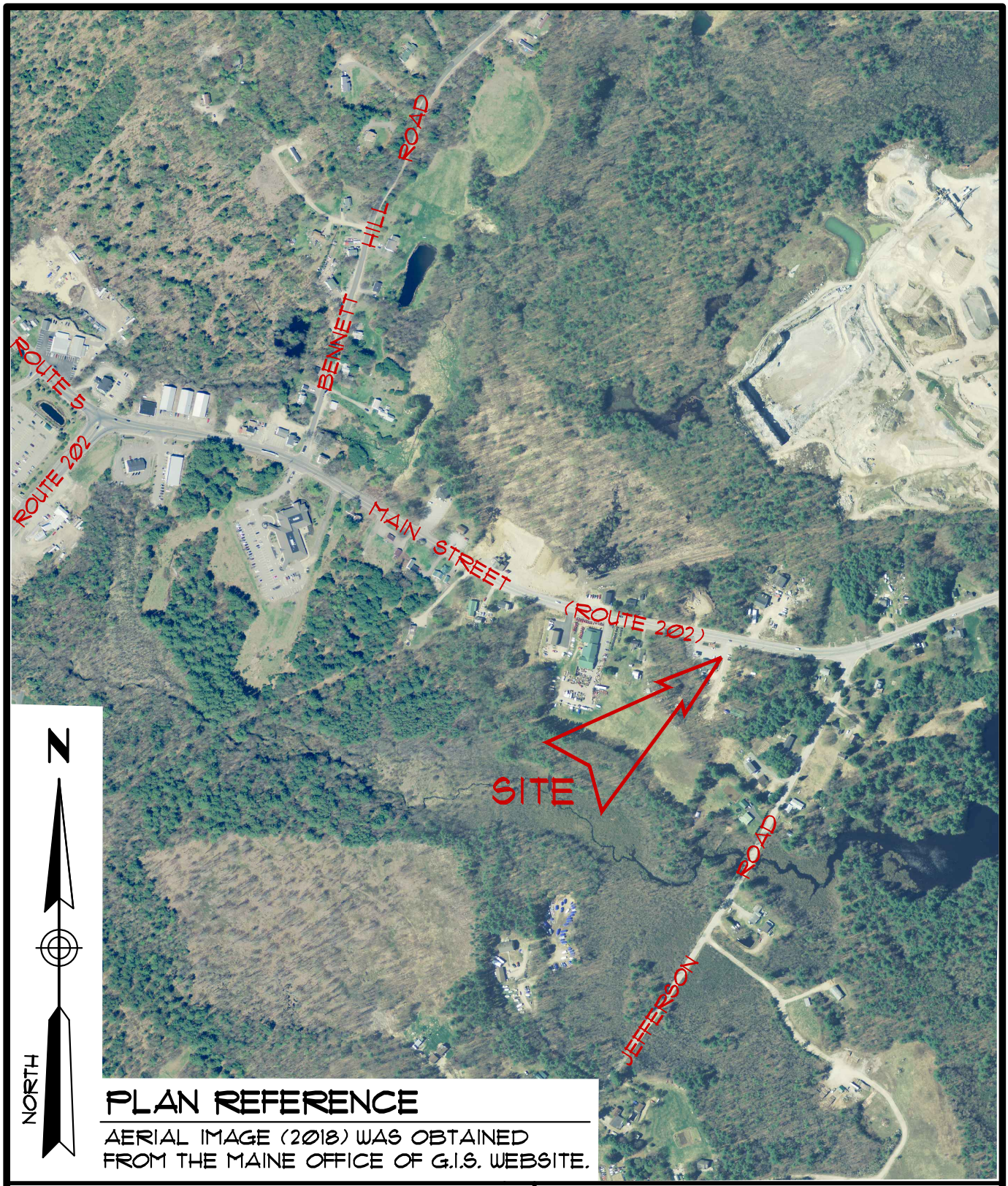
Soil Classification	Slope	Limiting Factor	
4 / A III/C (Profile / Condition)	2- %	18"	[✓] Ground Water [ ] Restrictive Layer [ ] Bedrock [✓] Pit Depth 20

Observation Hole ____ ☐ Test Pit ☐ Boring
____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification	Slope	Limiting Factor	
____ / ____ (Profile / Condition)	____ %	____ "	[ ] Ground Water [ ] Restrictive Layer [ ] Bedrock [ ] Pit Depth

Kenneth Gardner 23 6-7-19



PLAN REFERENCE

AERIAL IMAGE (2018) WAS OBTAINED FROM THE MAINE OFFICE OF G.I.S. WEBSITE.

LOCATION MAP
NEW STORE & POST OFFICE

134 MAIN STREET - EAST WATERBORO, MAINE

PREPARED FOR

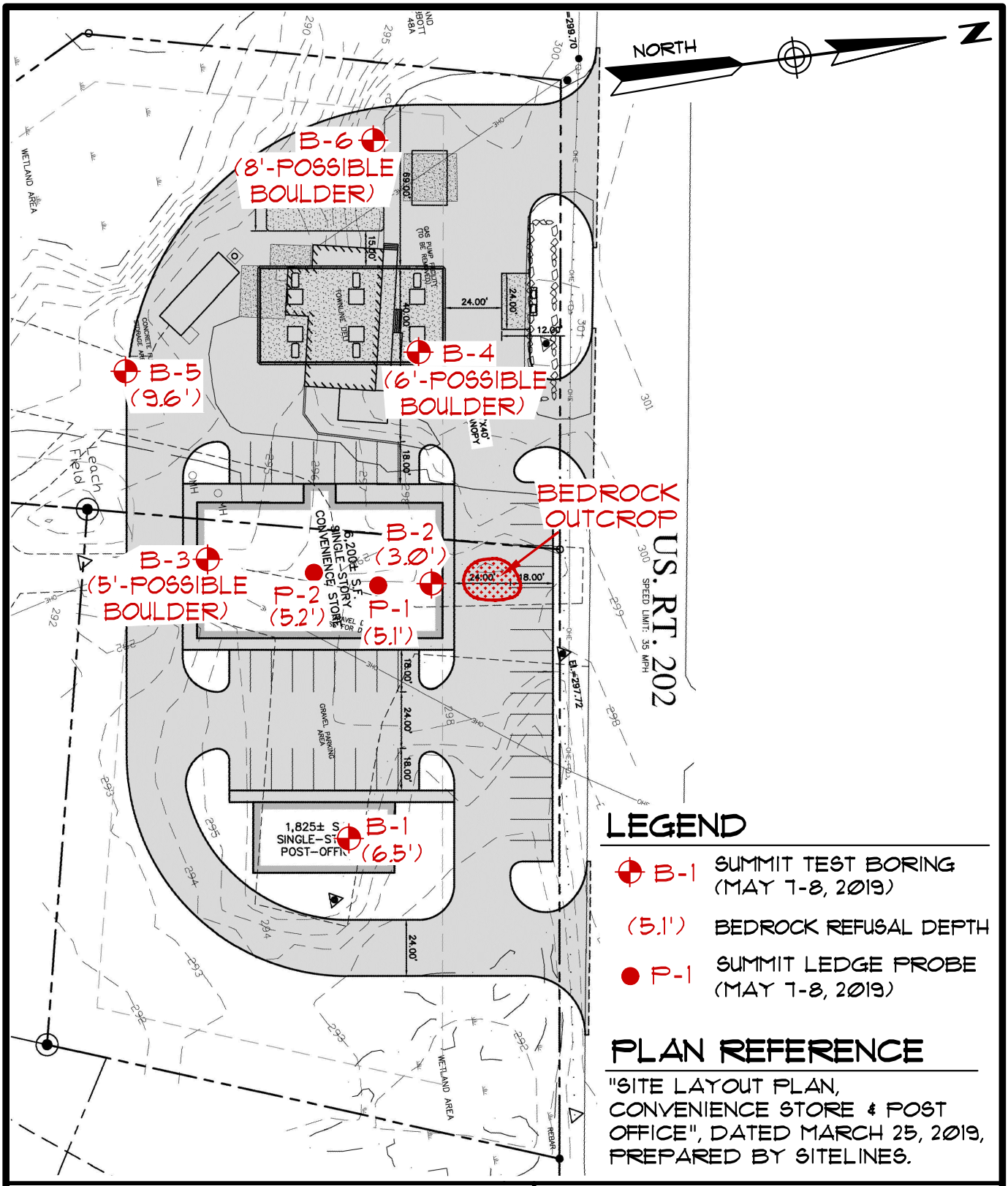
PRIORITY REAL ESTATE GROUP

DATE: 5-17-2019	DRAWN BY: KRF	CHECKED BY: ELS
JOB: 19114	SCALE: 1" = 600'	FILE: 19114 MAPS

145 LISBON ST. - SUITE 701
LEWISTON, ME 04240
Tel.: (207) 576-3313

173 PLEASANT STREET
ROCKLAND, ME 04841
Tel.: (207) 318-7761

SUMMIT
GEOENGINEERING SERVICES
www.summitgeoeng.com



LEGEND

B-1	SUMMIT TEST BORING (MAY 7-8, 2019)
(5.1')	BEDROCK REFUSAL DEPTH
P-1	SUMMIT LEDGE PROBE (MAY 7-8, 2019)

PLAN REFERENCE

"SITE LAYOUT PLAN, CONVENIENCE STORE & POST OFFICE", DATED MARCH 25, 2019, PREPARED BY SITELINES.

EXPLORATION LOCATION PLAN
NEW STORE & POST OFFICE

134 MAIN STREET - EAST WATERBORO, MAINE

PREPARED FOR

PRIORITY REAL ESTATE GROUP

DATE: 5-21-2019	DRAWN BY: KRF	CHECKED BY: ELS
JOB: 19114	SCALE: 1" = 60'	FILE: 19114 MAPS

145 LISBON ST. - SUITE 701
LEWISTON, ME 04240
Tel.: (207) 576-3313

173 PLEASANT STREET
ROCKLAND, ME 04841
Tel.: (207) 318-7761

SUMMIT
GEOENGINEERING SERVICES
www.summitgeoeng.com

EXPLORATION COVER SHEET

The exploration logs are prepared by the geotechnical engineer from both field and laboratory data. Soil descriptions are based upon the Unified Soil Classification System (USCS) per ASTM D2487 and/or ASTM D2488 as applicable. Supplemental descriptive terms for estimated particle percentage, color, density, moisture condition, and bedrock may also be included to further describe conditions.

Drilling and Sampling Symbols:

S = Split Spoon Sample
UT = Thin Wall Shelby Tube
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RW = Rotary Wash
SV = Lab Shear Vane (Torvane)
PP = Pocket Penetrometer
C = Rock Core Sample
FV = Field Vane Shear Test
SP = Concrete Punch Sample

Hyd = Hydraulic Advancement of Drilling Rods
Push = Direct Push of Drilling Rods
WOH = Weight of Hammer
WOR = Weight of Rod
PI = Plasticity Index
LL = Liquid Limit
MC = Natural Moisture Content
USCS = Unified Soil Classification System
Su = Undrained Shear Strength
Su(r) = Remolded Shear Strength

Water Level Measurements:

Water levels indicated on the boring logs are the levels measured in the boring at the times indicated. In pervious soils, the indicated elevations are considered reliable groundwater levels. In impervious soils, the accurate determination of groundwater elevations may not be possible, even after several days of observations. Groundwater monitoring wells may be required to record accurate depths and fluctuation.

Gradation Description and Terminology:

Boulders:	Over 12 inches	Trace:	Less than 5%
Cobbles:	12 inches to 3 inches	Little:	5% to 15%
Gravel:	3 inches to No.4 sieve	Some:	15% to 30%
Sand:	No.4 to No. 200 sieve	Silty, Sandy, etc.:	Greater than 30%
Silt:	No. 200 sieve to 0.005 mm		
Clay:	less than 0.005 mm		

Density of Granular Soils and Consistency of Cohesive Soils:

CONSISTENCY OF COHESIVE SOILS		DENSITY OF GRANULAR SOILS	
SPT N-value blows/ft	**Consistency**	**SPT N-value blows/ft**	**Relative Density**
0 to 2	Very Soft	0 to 4	Very Loose
2 to 4	Soft	5 to 10	Loose
5 to 8	Firm	11 to 30	Compact
9 to 15	Stiff	31 to 50	Dense
16 to 30	Very Stiff	>50	Very Dense
>30	Hard		

SUMMIT
GEOENGINEERING SERVICES

Project Name: Convenience Store & Post Office
Location: 134 Main Street, Rockport, ME

Project Number: 19114
Date: 5/8/19

EXPLORATION SUMMARY TABLE

EXPLORATION NUMBER	SURFACE ELEVATION (ft)	BEDROCK DEPTH (ft)	BEDROCK ELEVATION (ft)	NOTES
B-1	296.0	6.5	289.0	N/A
B-2	297.0	3.0	294.0	N/A
B-3	295.0	5.0*	290.0*	*Refusal on Possible Boulder
B-4	300.0	6.0*	294.0*	*Refusal on Possible Boulder
B-5	293.0	9.6	283.0	Groundwater at 5.7'
B-6	299.0	8.0*	291.0*	*Refusal on Possible Boulder
P-1	297.0	5.1	292.0	N/A
P-2	296.0	5.2	291.0	N/A

NOTES:

1.) Explorations were performed using a truck mounted PowerProbe 9630 Pro on May 7 & 8, 2019. Borings were advanced using 2¼-inch hollow stem augers with SPT split spoon sampling. Probes were advanced using 2½-inch solid stem augers.

2.) Surface elevations were estimated to the nearest foot from Site Layout Plan, Convenience Store & Post Office - dated 3/25/19 by Sitelines. Bedrock elevations are calculated based on surface elevations and measured depth to bedrock, rounded to the nearest foot.

3.) Groundwater was observed in in boring B-5, as noted in the table above. Based on the explorations, the soil consists of fill overlying ice-contact (sand & gravel) deposits with cobbles and boulders, overlying bedrock. Glacial till was encountered in

SUMMIT GEOENGINEERING SERVICES

SOIL BORING LOG

Project:	Convenience Store & Post Office	Boring #:	**B-1**
Location:	134 Main Street	Project #:	19114
City, State:	East Waterboro, Maine	Sheet:	1 of 1
		Chkd by:	CWC

Drilling Co:	Summit Geoengineering Services	Boring Elevation:	296 feet +/-
Driller:	Craig Coolidge, P.E.	Reference:	Site Layout Plan, Convenience Store & Post Office - Dated 3/25/19 by Sitelines
Summit Staff:	Erika Stewart, P.E.	Date started:	5/7/2019 Date Completed: 5/7/2019

DRILLING METHOD		SAMPLER	
Vehicle:	AMS, Truck	Length:	24" SS
Model:	9630 Pro	Diameter:	2"OD/1.5"ID
Method:	2-¼" Augers	Hammer:	140 lb
Hammer Style:	N/A	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
5/7/2019	NE	N/A	None observed

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/18	0 - 2	2	Brown Gravelly SAND to Sandy GRAVEL, little Silt, loose, humid, SP-SM to GP-GM		GRANULAR FILL
1				3			
				2			
2				4			
					Auger advanced through occasional cobbles at 2' - 5'		2'+/- ICE-CONTACT DEPOSIT
3							
4							
5							
	S-2	18/18	5 - 6.5	8	Brown Silty SAND, some Gravel, occasional cobbles and boulders, compact, damp, SM		
6				10			
				15			
7				50/0"	Spoon refusal on bedrock at 6.5'. Auger advanced 6.5' to 7'		6.5' BEDROCK
					End of Exploration at 7', Auger Refusal on Bedrock		7'
8							
9							
10							
12							

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
SP = Punch Sample, S = Split Spoon Sample

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SOIL BORING LOG

SUMMIT GEOENGINEERING SERVICES

Project:	Convenience Store & Post Office	Boring #:	**B-2**
Location:	134 Main Street	Project #:	19114
City, State:	East Waterboro, Maine	Sheet:	1 of 1
		Chkd by:	CWC

Drilling Co:	Summit Geoengineering Services	Boring Elevation:	297 feet +/-
Driller:	Craig Coolidge, P.E.	Reference:	Site Layout Plan, Convenience Store & Post Office - Dated 3/25/19 by Sitelines
Summit Staff:	Erika Stewart, P.E.	Date started: 5/8/2019	Date Completed: 5/8/2019

DRILLING METHOD		SAMPLER	
Vehicle:	AMS, Truck	Length:	24" SS
Model:	9630 Pro	Diameter:	2"OD/1.5"ID
Method:	2-¼" Augers	Hammer:	140 lb
Hammer Style:	N/A	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
5/8/2019	NE	N/A	None observed

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/15	0 - 2	3	Brown Gravelly SAND to Sandy GRAVEL, little Silt, loose, humid, SP-SM to GP-GM		GRANULAR FILL
1				2			
				3	Dark brown to mottled brown Silty SAND, little Gravel and organics, firm, damp to moist, SM		1'+/- ICE-CONTACT DEPOSIT
2				2			
	S-2	11/6	2 - 2.9	3	Mottled brown Silty SAND, little Gravel and organics (wood fibers), loose, moist, SM		
3				50/5"	(Spoon Refusal on Bedrock at 2.9'. Auger refual at 3'.)		
					End of Exploration at 3', Auger Refusal on Bedrock Offset boring south, auger refusal at 2.7'. Offset boring north, auger refusal at 2.5'.		3' BEDROCK
4							
					*A bedrock outcrop is visible at edge of existing gravel driveway, near boring B-2.		
5							
6							
7							
8							
9							
10							
12							

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
SP = Punch Sample, S = Split Spoon Sample

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SOIL BORING LOG

SUMMIT GEOENGINEERING SERVICES

Project:	Convenience Store & Post Office	Boring #:	**B-3**
Location:	134 Main Street	Project #:	19114
City, State:	East Waterboro, Maine	Sheet:	1 of 1
		Chkd by:	CWC

Drilling Co:	Summit Geoengineering Services	Boring Elevation:	295 feet +/-
Driller:	Craig Coolidge, P.E.	Reference:	Site Layout Plan, Convenience Store & Post Office - Dated 3/25/19 by Sitelines
Summit Staff:	Erika Stewart, P.E.	Date started: 5/8/2019	Date Completed: 5/8/2019

DRILLING METHOD		SAMPLER	
Vehicle:	AMS, Truck	Length:	24" SS
Model:	9630 Pro	Diameter:	2"OD/1.5"ID
Method:	2-¼" Augers	Hammer:	140 lb
Hammer Style:	N/A	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
5/8/2019	NE	N/A	None observed

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/12	0 - 2	1	Brown Gravelly SAND, little to trace Silt, loose, humid, SP-SM to SP		GRANULAR FILL
1				2	Dark brown to mottled brown SILT-SAND, little Clay and Gravel, trace rootlets/organics, loose, moist, SM-ML		0.8' ICE-CONTACT DEPOSIT
				1			
2				2			
3							
4							
					Auger refusal on boulder at 4'. Offset boring, auger refusal at 4'.		
5					Offset boring, auger advanced through 2 cobbles, refusal at 5.		
					End of Exploration at 5', Auger Refusal on Boulder or Bedrock.		5' BOULDER OR BEDROCK
6							
7							
8							
9							
10							
12							

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
SP = Punch Sample, S = Split Spoon Sample

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SOIL BORING LOG

Project:	Convenience Store & Post Office	Boring #:	**B-4**
Location:	134 Main Street	Project #:	19114
City, State:	East Waterboro, Maine	Sheet:	1 of 1
		Chkd by:	CWC

Drilling Co:	Summit Geoengineering Services	Boring Elevation:	300 feet +/-
Driller:	Craig Coolidge, P.E.	Reference:	Site Layout Plan, Convenience Store & Post Office - Dated 3/25/19 by Sitelines
Summit Staff:	Erika Stewart, P.E.	Date started: 5/8/2019	Date Completed: 5/8/2019

DRILLING METHOD		SAMPLER	
Vehicle:	AMS, Truck	Length:	24" SS
Model:	9630 Pro	Diameter:	2"OD/1.5"ID
Method:	2-¼" Augers	Hammer:	140 lb
Hammer Style:	N/A	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
5/8/2019	NE	N/A	None observed

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	SP-1	12/12	0 - 1	PUSH	Bituminous Pavement = 4"		PAVEMENT
1					Brown SAND, some Gravel, trace Silt, compact, humid to damp, SP-SM	Gravel = 24% Sand = 71% Fines = 5% MC = 3.1%	0.3' GRANULAR FILL
	S-1	12/6	1' - 2'	4	Same as above, compact, damp, SP-SM		
2				15			
				50/0"	Spoon refusal on cobble at 2'. Frequent cobbles from 2' to 6'.		2'+/- ICE-CONTACT DEPOSIT (Portions Reworked)
3							
4							
5							
	S-2	12/8	5' - 6'	9	Brown Gravelly SAND, some to little Silt, compact, damp to moist, SM		
6				26			
				50/0"	Spoon refusal at 6'. Auger advanced from 6' - 6.3'		6' BOULDER OR BEDROCK
7					End of Exploration at 6.3', Auger Refusal on Boulder or Bedrock		6.3'
8							
9							
10							
12							

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
SP = Punch Sample, S = Split Spoon Sample

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SUMMIT GEOENGINEERING SERVICES

SOIL BORING LOG

Project:	Convenience Store & Post Office	Boring #:	**B-5**
Location:	134 Main Street	Project #:	19114
City, State:	East Waterboro, Maine	Sheet:	1 of 1
		Chkd by:	CWC

Drilling Co:	Summit Geoengineering Services	Boring Elevation:	293 feet +/-
Driller:	Craig Coolidge, P.E.	Reference:	Site Layout Plan, Convenience Store & Post Office - Dated 3/25/19 by Sitelines
Summit Staff:	Erika Stewart, P.E.	Date started:	5/8/2019 Date Completed: 5/8/2019

DRILLING METHOD		SAMPLER	
Vehicle:	AMS, Truck	Length:	24" SS
Model:	9630 Pro	Diameter:	2"OD/1.5"ID
Method:	2-¼" Augers	Hammer:	140 lb
Hammer Style:	N/A	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
5/8/2019	5.7'	285'+/-	Measured in augers

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/15	0' - 2'	6	Brown Gravelly SAND to Sandy GRAVEL, little to trace Silt, compact, cobbles, humid, SP-SM to GP-GM		GRANULAR FILL
1				8			
				8	Dark brown Silty SAND, some to little Gravel, cobbles, compact, damp, SM		1'+/- ICE-CONTACT DEPOSIT
2				11			
3							
4							
5							
	S-2	4/4	5' - 5.3'	50/4"	Light brown SAND, some Gravel, trace Silt, compact to dense, damp to moist, SP		
6					(Spoon refusal at 5.3' on cobble/boulder. Augered through cobbles at 5.3' - 6'.)		
					From auger cuttings: Gray SILT-SAND, some Gravel, cobbles, trace Clay, stiff to very stiff, moist to wet, SM-ML		6'+/- GLACIAL TILL
7							
8							
9							
10					End of Exploration at 9.6', Auger Refusal on Bedrock		9.6' BEDROCK
12							

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
SP = Punch Sample, S = Split Spoon Sample

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

SOIL BORING LOG

SUMMIT GEOENGINEERING SERVICES

Project:	Convenience Store & Post Office	Boring #:	**B-6**
Location:	134 Main Street	Project #:	19114
City, State:	East Waterboro, Maine	Sheet:	1 of 1
		Chkd by:	CWC

Drilling Co:	Summit Geoengineering Services	Boring Elevation:	299 feet +/-
Driller:	Craig Coolidge, P.E.	Reference:	Site Layout Plan, Convenience Store & Post Office - Dated 3/25/19 by Sitelines
Summit Staff:	Erika Stewart, P.E.	Date started:	5/8/2019 Date Completed: 5/8/2019

DRILLING METHOD		SAMPLER	
Vehicle:	AMS, Truck	Length:	24" SS
Model:	9630 Pro	Diameter:	2"OD/1.5"ID
Method:	2-¼" Augers	Hammer:	140 lb
Hammer Style:	N/A	Method:	ASTM D1586

ESTIMATED GROUND WATER DEPTH

Date	Depth	Elevation	Reference
5/8/2019	NE	N/A	None observed

Depth (ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	SAMPLE DESCRIPTION	Geological/ Test Data	Geological Stratum
	S-1	24/12	0' - 2'	1	Dark brown Silty SAND, rootlets, soft, damp, SM		TOPSOIL
1				3	Brown Gravelly SAND, little Silt, loose, humid to damp, SP-SM		0.3' GRANULAR FILL
				5			
2				4			
3							
							3'+/- ICE-CONTACT DEPOSIT (Portions Reworked)
4							
5	S-2	3/3	4.5' - 4.7'	50/3"	Spoon refusal on cobble/boulder at 4.7'. Rock fragments in spoon tip. Auger refusal at 5' on boulder. Offset 2' east, auger refusal at 5.5'. Offset 2' west, cobble at 6.9', auger refusal at 8' on boulder or bedrock.		
6							
7							
8							
					End of Exploration at 8.0', Auger Refusal on Boulder or Bedrock		8.0' BOULDER OR BEDROCK
9							
10							
12							

Granular Soils		Cohesive Soils		% Composition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D2487
0-4	V. Loose	<2	V. soft	
5-10	Loose	2-4	Soft	< 5% Trace
11-30	Compact	5-8	Firm	5-15% Little
31-50	Dense	9-15	Stiff	15-30% Some
>50	V. Dense	16-30	V. Stiff	> 30% With
		>30	Hard	

NOTES: PP = Pocket Penetrometer, MC = Moisture Content
SP = Punch Sample, S = Split Spoon Sample

Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches
Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200

Soil Moisture Condition
Dry: S = 0%
Humid: S = 1 to 25%
Damp: S = 26 to 50%
Moist: S = 51 to 75%
Wet: S = 76 to 99%
Saturated: S = 100%

STATE OF GEORGIA

Secretary of State

Corporations Division
313 West Tower
2 Martin Luther King, Jr. Dr.
Atlanta, Georgia 30334-1530

ANNUAL REGISTRATION

Electronically Filed
Secretary of State
Filing Date: 3/28/2019 1:49:46 PM

BUSINESS INFORMATION	
CONTROL NUMBER	08010302
BUSINESS NAME	NEW HORIZON MANAGEMENT COMPANY, LLC
BUSINESS TYPE	Domestic Limited Liability Company
EFFECTIVE DATE	03/28/2019

PRINCIPAL OFFICE ADDRESS	
ADDRESS	3391 White Sulphur Road, Gainesville, USA

REGISTERED AGENT

NAME	ADDRESS	COUNTY
Peck III, Daniel J.	3391 White Sulphur Road, Gainesville, GA, 30501, USA	Hall

AUTHORIZER INFORMATION	
AUTHORIZER SIGNATURE	Karen D Peck
AUTHORIZER TITLE	Organizer

1. 06-19-2019 SUBMITTED TO TOWN FOR FINAL REVIEW JJM

TITLE:
WELL SETBACK PLAN

PROJECT:
CONVENIENCE STORE AND OFFICE BUILDING
134 MAIN STREET, EAST WATERBORO, ME 04030

PREPARED FOR:
NEW HORIZONS MANAGEMENT COMPANY, LLC
3391 WHITE SULPHUR ROAD, GAINESVILLE, GA 30501

PROGRESS PRINT
THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

CALL DIG SAFE UTILITY LOCATION
1-888-344-7233
STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

ISSUED FOR:
PERMITTING

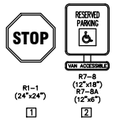
STATE OF MAINE JOSEPH J. MARDEN 12828 LICENSED PROFESSIONAL ENGINEER
06-19-19

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS ▪ PLANNERS ▪ LAND SURVEYORS

FIELD WK: OTHERS	SCALE: 1"=30'	SHEET: 1
DRN BY: JJM	JOB #: 3841	
CH'D BY: CYN	MAP/LOT: 5/37C&48-1	
DATE: 03-25-19	FILE: 3841-SITE	

X:\LAND PROJECTS\3841 PRIORITY 134 MAIN ST E. WATERBORO\DWG\3841-SITE.DWG, WELL SETBACK PLAN, 6/18/2019 1:59 PM, JOSEPH MARDEN

SIGN LEGEND:



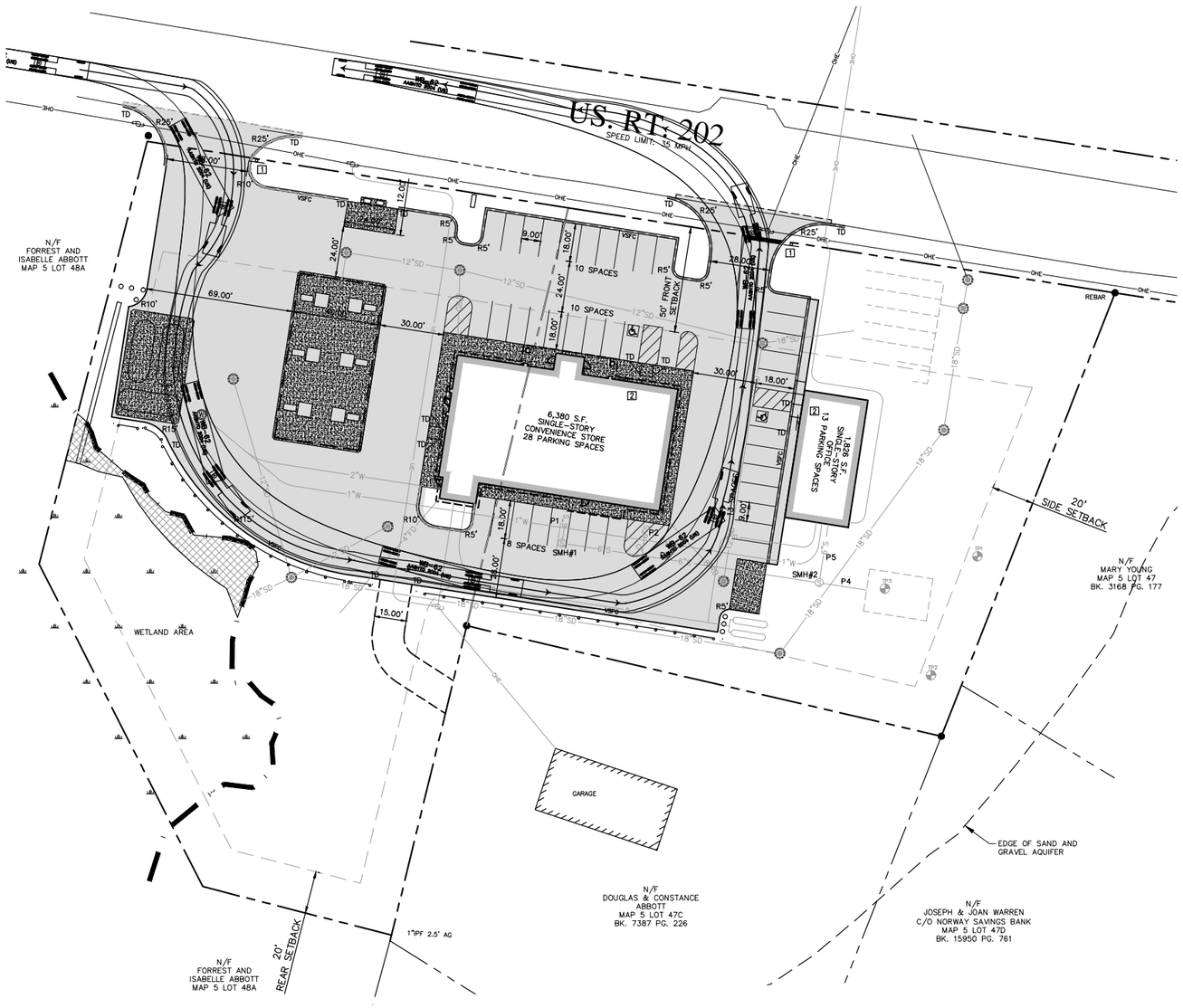
R1-1 (24"x24") [1]

R7-8 (12"X18") R7-8A (12"x6") [2]

CURBING LEGEND:

VERTICAL SLIPFORM CONCRETE CURB: VSFC

TD — TIP DOWN



1. 06-19-2019 SUBMITTED TO TOWN FOR FINAL REVIEW — JJM

TITLE: TRUCK TURNING PLAN

PROJECT: CONVENIENCE STORE AND OFFICE BUILDING
134 MAIN STREET, EAST WATERBORO, ME 04030

PREPARED FOR: NEW HORIZONS MANAGEMENT COMPANY, LLC
3391 WHITE SULPHUR ROAD, GAINESVILLE, GA 30501

PROGRESS PRINT
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CALL DIG SAFE UTILITY LOCATION
1-888-344-7233
STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

ISSUED FOR: PERMITTING

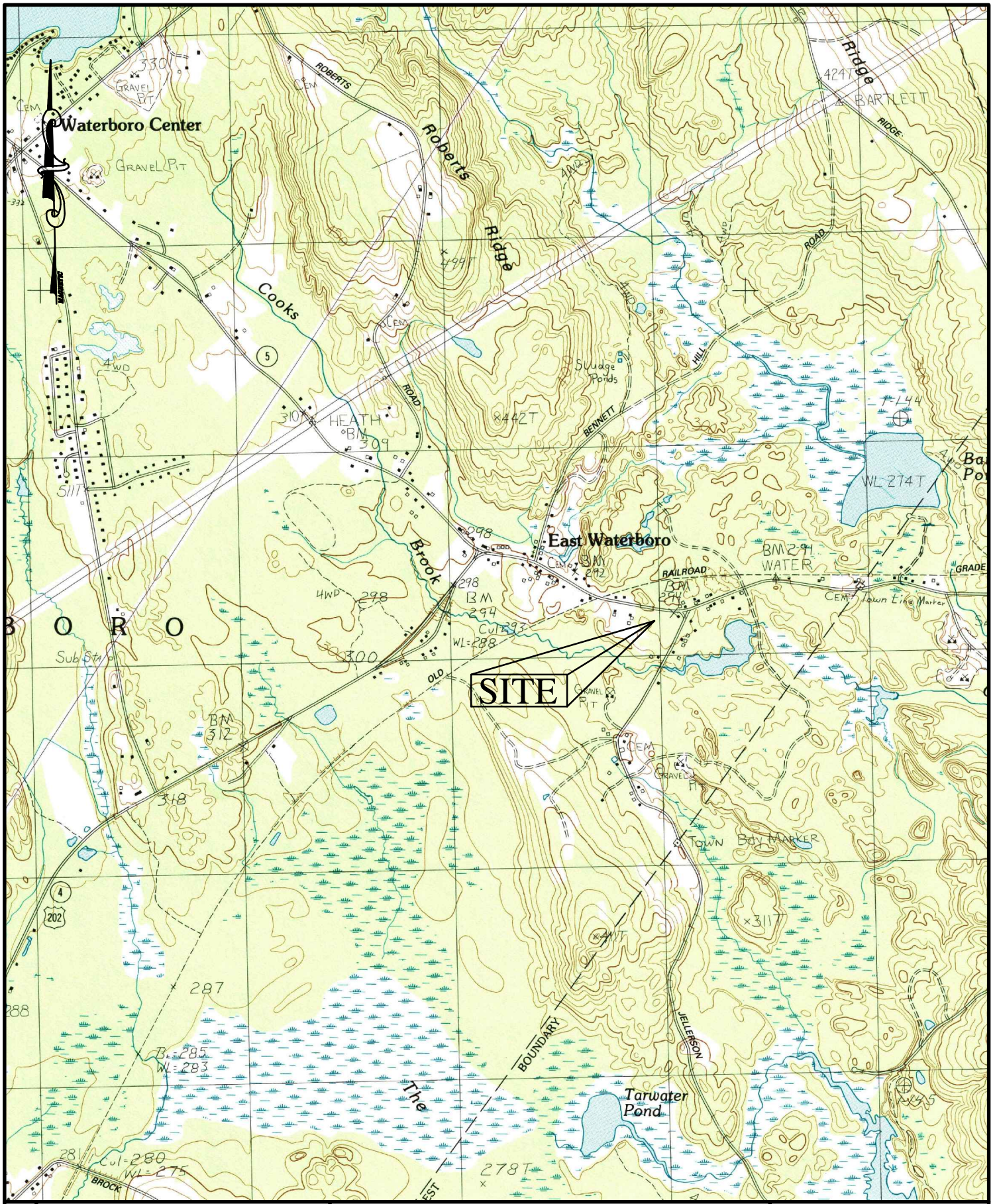
STATE OF MAINE — JOSEPH J. MARDEN 12828 LICENSED PROFESSIONAL ENGINEER — 06-19-19

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS ▪ PLANNERS ▪ LAND SURVEYORS

FIELD WK: OTHERS	SCALE: 1"=30'	SHEET: 2
DRN BY: JJM	JOB #: 3841	
CH'D BY: CYN	MAP/LOT: 5/37C&48-1	
DATE: 03-25-19	FILE: 3841-SITE	

Attachment F
Supporting Graphics

This attachment includes supporting materials and graphics for the application. This includes an excerpt of the FEMA flood rate insurance map (FIRM) and reduced size copies of the zoning map and tax maps. An excerpt of the applicable USGS 7.5 minute quadrangle map is provided for reference.



SHEET: 1 OF 1

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, ME 04011
207.725.1200
CIVIL ENGINEERS ▪ LAND SURVEYORS

USGS LOCATION MAP

CONVENIENCE STORE AND OFFICE BUILDING
134 MAIN STREET
EAST WATERBORO, MAINE

DATE: 04–16–19
SCALE: 1" = 2000'
JOB: 3841
FILE: 3841–USGS

Map Scale: 1:983 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 45 90 180 270

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CoB	Colton gravelly loamy coarse sand, 0 to 8 percent slopes	0.1	3.5%
CrB	Croghan loamy sand, 0 to 8 percent slopes	0.5	15.7%
HnE	Hermon sandy loam, 15 to 60 percent slopes, extremely stony	2.5	80.8%
Totals for Area of Interest		**3.1**	**100.0%**

York County, Maine

CoB—Colton gravelly loamy coarse sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9k58
Elevation: 10 to 2,000 feet
Mean annual precipitation: 30 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Colton and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colton

Setting

Landform: Outwash terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy-skeletal glaciofluvial deposits derived from granite and gneiss

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material
H1 - 2 to 12 inches: gravelly loamy sand
H2 - 12 to 20 inches: gravelly coarse sand
H3 - 20 to 65 inches: very gravelly coarse sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A

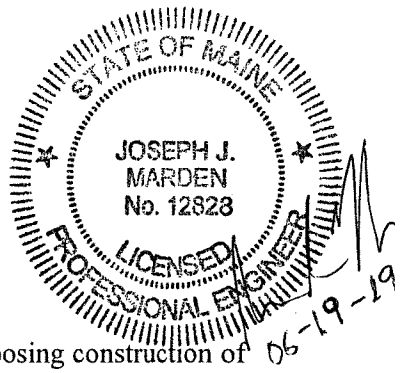
Hydric soil rating: No

Data Source Information

Soil Survey Area: York County, Maine
Survey Area Data: Version 17, Sep 11, 2018

Attachment G
Stormwater Management

A copy of the stormwater analysis is included in accordance with the Waterboro Zoning Ordinance.



Stormwater Management Plan
Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

Introduction

New Horizons Management Company, LLC (herein referred to as Applicant) is proposing construction of two (2) buildings; a 6,200 s.f. convenience store, and a 1,825 s.f. office building, along with associated access drive and parking areas. The proposed development will result in approximately 55,191 sq. ft. (1.27 acres) of impervious area, or an increase of 19,275 s.f. (0.44 acres). A portion of the stormwater runoff from the site will be conveyed to a grassed underdrained soil filter for treatment and detention prior to discharge to the adjacent wetland complex.

As the project results in less than one (1) acre of new impervious area since 2005, but more than an acre of disturbance, a Stormwater Law Permit-by-Rule (PBR) will be required from the Maine Department of Environmental Protection (MDEP). Per strict adherence to the Town of Waterboro Zoning Ordinances, stormwater runoff from 95% of the impervious area and 80% of the developed area is required to be treated. Per discussions with the Town Planner, he agrees that as the project is the redevelopment of an existing development, treatment of only the new impervious area is needed to meet the intent of the Ordinance. A waiver from that portion of the Ordinance is being requested as part of the Site Plan Review application to the Town.

The proposed stormwater management plan has been designed to mitigate any stormwater runoff impacts from the project and direct the stormwater runoff to existing drainage water courses and avoid impacts to abutting properties.

Study Methodology

Topographical data was obtained from on-the-ground survey collected by Stephen Everett and supplemented by survey from Sitelines, PA. Hydrologic boundaries were generated using the topographic mapping and the drainage patterns were verified by a site reconnaissance visit.

Surficial soils located in the vicinity of the site were obtained from the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic (SSURGO) Database. The Applicant's parcel includes the soil classifications listed below. Soils units found in the development area are primarily Lamoine.

SOILS TYPES IN LOCAL STUDY AREA

Soils Series	Symbol(s)	Hydrologic Group (HSG) **
Colton	CoB	A
Croghan	CrB	A
Hermon	HnE	A

**Hydrologic Soils Group taken from SCS TR-55 Manual

Water Quantity

Per the Town of Waterboro Zoning Ordinance, a comparison of pre- and post-development peak stormwater runoff rates is needed to determine what impact, if any, there is to downstream drainageways and abutting properties, as a result of the project.

Flooding

The project area is located in Zone C (Areas of minimal flooding) of the Flood Insurance Rate Maps (FIRMs) for York County, Maine. The project area is located on Panel 20 of 20 (Community Panel

230199-0020-C, Effective February 1, 1985). An excerpt of the applicable FIRM is included as an attachment to this section. There is no impact from flooding anticipated for this project.

Off-Site Watersheds

The watershed area analyzed for the pre- and post-development analysis consists of the project site, a portion of the abutting property to the south, and a portion of Main Street directly adjacent to the site. There is a 12-inch culvert which discharges across Main Street (Rt. 202) and discharges on the property. Without any outlet, the stormwater ponds up and infiltrates into the existing soils. Looking at aerial topography, I anticipate that the natural drainage used to flow from the northwest corner to the southwest corner of the property, however development of the property has resulted in the culvert being hydraulically "cut-off" from the large wetland complex in the southeast corner. As part of the drainage design, the culvert which crosses Main Street (Rt. 202) will be incorporated into the new drainage system and directed to the large wetland complex. The stormwater from this culvert was not analyzed or incorporated into our pre- or post-development drainage calculations. It is anticipated that incorporating the culvert into the drainage system will alleviate existing stormwater impacts on adjacent properties.

Stormwater Analysis Subcatchments

Pre-Development Conditions

A summary of the subcatchments is provided below:

Subcatchment 1 represents approximately 1.37 acres comprised of the Townline Deli building and parking areas, a portion of the access drive for the garage on the abutting property, lawn area, and wooded areas. Stormwater runoff is conveyed overland towards the large wetland complex in the southwest corner of the property (POI#1).

Subcatchment 2 represents approximately 1.19 acres comprised of a portion of the access drive for the garage on the abutting property, lawn area, and wooded area. Stormwater runoff is conveyed overland to low areas on the eastern portion of the property. This area does not have any outlet and the stormwater infiltrates into the soils.

Post-Development Conditions

Under post-development conditions, two (2) buildings will be constructed; a 6,200 s.f. convenience store, and a 1,825 s.f. office building, along with associated access drive and parking areas, resulting in approximately 55,191 sq. ft. (1.27 acres) of impervious area, or an increase of 19,275 s.f. (0.44 acres). Stormwater runoff from a portion of the impervious area will be directed to a grassed underdrained soil filter for treatment and attenuation of the anticipated flows. A summary of the subcatchments is provided below:

Subcatchment 10 represents approximately 0.97 acres comprised the new buildings, paved areas, and lawn areas. Stormwater runoff is conveyed via catch basins to the grassed underdrained soil filter. From the soil filter, the stormwater runoff will be directed to the large wetland complex in the southwest corner of the property (POI#1).

Subcatchment 11 represents approximately 0.88 acres comprised of paved areas and lawn areas. Stormwater runoff is conveyed via catch basins towards the large wetland complex in the southwest corner of the property (POI#1).

Subcatchment 12 represents approximately 0.75 acres comprised of Main Street and lawn areas. Stormwater runoff is conveyed overland to low areas on the eastern portion of the

property. This area does not have any outlet and the stormwater infiltrates into the soils.

Results

A comparison of pre- and post-development peak stormwater runoff rates at the Points of Interest is presented in the following table. Peak runoff rates were estimated for the 2, 10, and 25-year, 24-hour storm events. Point of Interest 1 is located at the large wetland complex.

Design Storm	Pre	Post	Change
2-Year	2.37	1.62	-0.75
10-Year	3.43	2.81	-0.62
25-Year	4.26	5.45	+1.19

As shown in the table, the peak runoff rate is decreased for the 2- and 10-year storm events and increased for the 25-year storm event at the Point of Interest. Per the Waterboro Zoning Ordinance, the *"Stormwater management system must include treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms..."* With the reduction in peak runoff rates during the smaller storms, the proposed design meets the design standards as outlined within the Ordinance. Furthermore, due to the size of the wetland complex, the increase in peak runoff rate during the25-year storm event will have a minimal impact of the peak runoff rate further downstream.

Water Quality

The proposed project will result in approximately 55,191 sq. ft. (1.27 acres) of impervious area, or an increase of 19,275 s.f. (0.44 acres). Runoff from a portion of the impervious areas will be conveyed to a grassed underdrained soil filter for water quality treatment. Approximately 35,160 s.f. (0.81 acres), or 182%, of the new impervious areas will be conveyed this grassed underdrained soil filter. The remaining 20,031 s.f. (0.46 acres) of impervious area will remain untreated and will either be directed to the large wetland complex in the southwest corner or the low spot along the eastern portion of the property.

Approximately 29,550 s.f. (0.68 acres) of new developed area will be created as a result of the proposed development. Approximately 41,539 s.f. (0.95 acres), or 141% of the total developed area, will be conveyed to the grassed underdrained soil filter. The remaining developed area will remain untreated and will either be directed to the large wetland complex in the southwest corner or the low spot along the eastern portion of the property.

Grassed Underdrained Soil Filter

A Grassed Underdrained Soil Filter will be utilized for water quality treatment. The soil filters have been sized to capture and detain a water quality capture volume of 1" of runoff from impervious area and 0.4" of runoff from landscaped areas and allows it to filter through the filter material to an underdrain system. A filtration rate of 2.4 inches/hour was used in modeling the area as a conservative estimate for ponding evaluation. This rate considers a decrease in filtration rate that will likely be realized over time. An overflow structure is proposed that will safely bypass runoff volumes in excess of the 1-inch storm.

The impervious and landscaped areas tributary to the grassed underdrained soil filter and the required sizing are summarized in the table below.

Impervious Area and Volume Requirements

	(a)	(b)	(c)	(d)	(e)	(i)
Sub-Area	Impervious area (sq. ft.)	Required Storage (cu. ft.)	Landscaped Area (sq. ft.)	Required Storage (cu. ft.)	Total Storage Required / Provided (cu. ft.)	Filter Area Required / Provided (sq. ft.)
	(from plan)	(a)x0.083'	(from plan)	(c)x0.033'	(b)+(d)	(a)x0.05+ (c)x0.02+
GUSF*	35,160	2,930	7,254	242	3,172 / 4,023	1,903 / 2,166

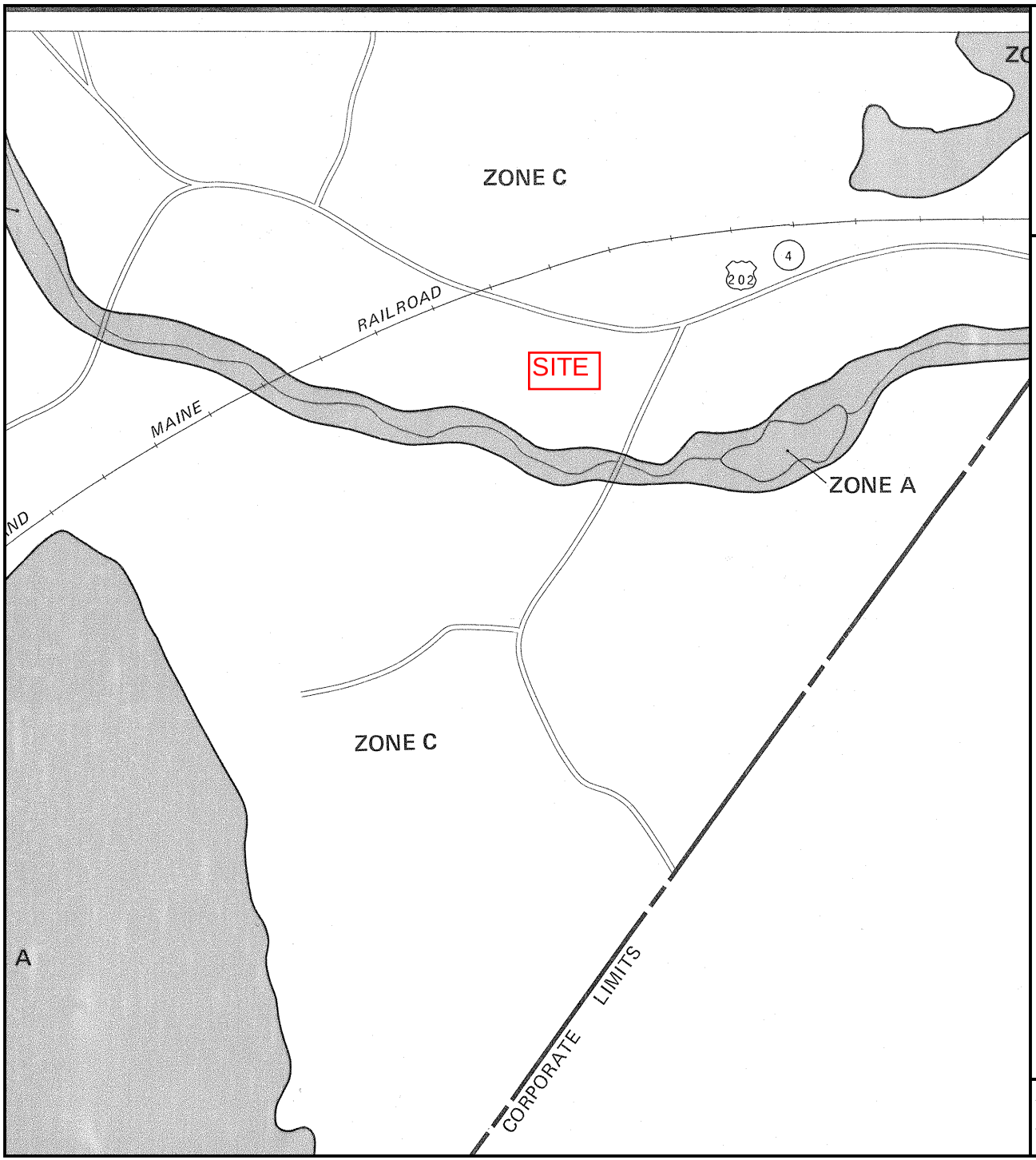
*Grassed Underdrained Soil Filter

Conclusion

Based on the stormwater analysis, development of the subject property results in a decrease from the pre-development peak runoff rates during the 2- and 10-year storm events and meets the design standards as outlined within the Waterboro Zoning Ordinance.

Runoff from 182% of the new impervious area and 141% of the total developed area will be captured and conveyed to forested buffers for water quality treatment. By capturing and treating runoff from the impervious surfaces and developed areas the project likewise meets the requirements of the Waterboro Zoning Ordinance.

Attachment A – FEMA Flood Map
Attachment B – Stormwater Facilities Inspection and Maintenance Plan
Attachment C – Pre- and Post-Development HydroCAD Report
Attachment D– Pre- and Post-Development Watershed Plans



APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

TOWN OF
WATERBORO,
MAINE
YORK COUNTY

PANEL 20 OF 20

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230199 0020 C

EFFECTIVE DATE:
FEBRUARY 1, 1985

Federal Emergency Management Agency

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine

STORMWATER FACILITIES INSPECTION AND MAINTENANCE PLAN

1.0 GENERAL

This stormwater facilities maintenance plan has been prepared in support of the Site Plan Review application for the construction of a convenience store and office building to be located at 134 Main Street in East Waterboro, Maine. The requirements of this plan shall be incorporated into the efforts associated with the development including construction and ongoing operations.

2.0 BEST MANAGEMENT PRACTICES

2.1 Best Management Practices

During Construction, a stabilized construction entrance, sediment barrier, erosion control blanket and/or erosion control mix, seeding, and mulching practices will be used in accordance with the Maine Department of Environmental Protection Best Management Practices (BMP) manual during construction and until a stabilized condition exists.

After Construction, stormwater BMPs will include housekeeping and physical measures described herein, including a grassed underdrained soil filter, sweeping of paved surfaces, maintenance of riprap erosion control and maintenance of storm drain pipes and outfalls.

The stormwater maintenance management for this project will be performed consistent with the two references listed below and as amended in this manual. Where standards are not consistent, the more stringent requirement shall apply.

2.2 References

The primary references for the stormwater management design were as follows:

1 "Stormwater Management for Maine", Maine Department of Environmental Protection No. DEPLW0738, January 2006.
2 "Maine Erosion and Sedimentation Best Management Practices", Maine Department of Environmental Protection, current edition on-line.

3.0 MAINTENANCE OF STORMWATER FEATURES

3.1 General Responsibilities

The Contractor will be responsible for maintaining the stormwater BMPs and facilities until the construction phase of the project is complete and the site is permanently stabilized and accepted by the Applicant. These efforts shall include maintenance of temporary and permanent stormwater features and addressing interim site conditions as necessary. After acceptance of the development, the Applicant will be responsible for maintaining the permanent stormwater features as shown on the plan.

The Point of Contact for the Applicant is as follows:

David Pendleton
134 Main Street
East Waterboro, Maine
Phone: 207-247-1031

3.1 General Requirements

The general requirements for this stormwater maintenance management manual will meet the standards of Reference No.1, specific to the water quality feature concerned. Additional maintenance requirements are identified in the following narratives.

3.2 Specific Maintenance Requirements

The following specific maintenance requirements apply to stormwater features as follows:

3.2.1 Grassed Underdrained Soil Filter Basin

The maintenance of grassed underdrained soil filter basins shall be in accordance with Section 7.1.6 of Reference No. 1.

- Soil Filter Inspection: The soil filter shall be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected at least once every month to ensure that it is draining completely between 24 and 72 hours after a storm event.
- Inspect the filter basin's interior side slopes twice annually. Immediately repair any sign of erosion or bare areas to assure a vigorous growth of vegetation for the stability of the slope and proper function.
- Inspect the basin's overflow outlet twice annually and after every major rainfall event, and remove any collected trash or debris on or in the outlet.
- Sediment Removal: The grass buffer area vegetation should be inspected at least once per year, preferably in the spring. Debris and sediment build-up should be removed from the buffer when noticeable accumulation has occurred.
- Restoring Infiltrative Capacity: The surface of the soil filter may clog with fine sediments over time. Maintenance of good grass cover should minimize this; however, if runoff ponded in the basin does not drain within 48 hours, rototilling of the top of the soil bed may be required to re-establish the soil's filtration capacity.
- The top several inches of the filter shall be replaced with fresh material when water ponds on the surface of the bed for more than 72 hours. The removed sediments should be disposed in an acceptable manner.
- Mowing of the filter vegetated areas should be performed no more than two times per growing season to maintain grass heights no less than 6 inches.
- Fertilization of the underdrained filter area should be avoided.
- Harvesting and pruning of excessive growth should be done occasionally to control unwanted or invasive plants.

3.2.2 Storm Drain System

- Piped drainage systems shall be inspected in spring and late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the

outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet. Sediment should be removed when its level exceeds 20% of the pipe diameter. Hydraulic flushing or any mechanical means may accomplish sediment removal. Care shall be taken to contain the sediment at the pipe outlet.

3.2.3 Drainage Structures

- The maintenance of structures shall be performed monthly to ensure proper function.
- Debris and trash shall be removed from the structure when present.
- Sediment build-up in the sump should be removed when accumulation within 1 foot of the outlet pipe is observed.

3.2.4 Vegetative Surfaces

- For most vegetative surfaces, grass should be mowed on a regular basis so that grass height does not exceed 6 inches. Any erosion rills, gullies, or bare spots should be seeded or sodded to re-establish the turf cover.
- Buffer, screening, and decorative landscaping should be inspected for health on a regular basis. Pruning, weeding, feeding, and mulching shall be performed on a regular basis.

3.2.5 Paved Surfaces

- Accumulations of winter sand along impervious areas shall be cleared at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along the edge of paved areas may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.

4.0 INSPECTION AND MAINTENANCE CHECKLIST

4.1 Maintenance Frequency

Notwithstanding any other schedule noted herein, general inspections should be conducted monthly during wet weather conditions from March to November.

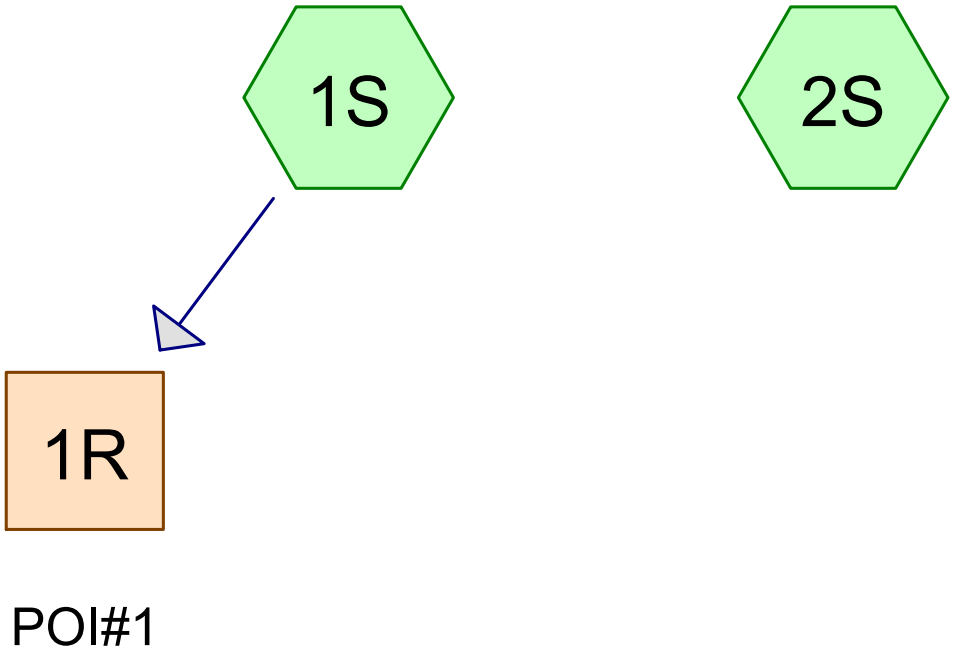
4.2 Inspection and Maintenance Checklist

Inspection of the stormwater facilities shall be completed by individual qualified by experience or training to assess their condition and performance. Maintenance actions required will be documented, completed and inspected by individuals trained or experienced in such maintenance. An inspection and maintenance checklist specific to the facilities for this development is included.

Convenience Store and Office Building
134 Main Street, East Waterboro, Maine
Stormwater Inspection and Maintenance Log

Performed by:_____ **Date:_____**

Feature	Description of maintenance	Recorded Observation
Grassed Underdrained Soil Filter Basin	Inspect for evidence of excessive sediment deposits.	
	Inspect side slopes for signs of erosion or base areas.	
	Inspect overflow for presence of sediment and/or trash.	
Storm Drain & Detention Pipes	Inspect for evidence of sediment	
	Inspect for clogging debris and material	
Drainage Structures	Inspect for presence of sediment in traps; remove sediment if within 1 foot of outlet invert.	
	Inspect frame and grate to verify grate is flush with finish grade.	
	Remove trash and debris	
Vegetative Surfaces	Inspect for vegetative cover of at least 85%	
Paved Surfaces	Remove winter sand	



Subcat Reach Pond Link

Routing Diagram for 3841-PRE
Prepared by Sitelines PA, Printed 6/18/2019

Summary for Subcatchment 1S:

Runoff = 2.37 cfs @ 12.02 hrs, Volume= 0.199 af, Depth= 1.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 2-year Rainfall=3.20"

Area (sf)	CN	Description
35,135	98	Paved parking, HSG A
16,538	39	>75% Grass cover, Good, HSG A
8,022	30	Woods, Good, HSG A
59,695		Weighted Average
24,560		41.14% Pervious Area
35,135		58.86% Impervious Area

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

Summary for Subcatchment 2S:

Runoff = 0.86 cfs @ 12.02 hrs, Volume= 0.072 af, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 2-year Rainfall=3.20"

Area (sf)	CN	Description
39,254	30	Brush, Good, HSG A
12,740	98	Paved parking, HSG A
51,994		Weighted Average
39,254		75.50% Pervious Area
12,740		24.50% Impervious Area

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

Summary for Reach 1R: POI#1

Inflow Area = 1.370 ac, 58.86% Impervious, Inflow Depth = 1.75" for 2-year event
Inflow = 2.37 cfs @ 12.02 hrs, Volume= 0.199 af
Outflow = 2.37 cfs @ 12.02 hrs, Volume= 0.199 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs

Summary for Subcatchment 1S:

Runoff = 3.43 cfs @ 12.02 hrs, Volume= 0.297 af, Depth= 2.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 10-year Rainfall=4.60"

Area (sf)	CN	Description
35,135	98	Paved parking, HSG A
16,538	39	>75% Grass cover, Good, HSG A
8,022	30	Woods, Good, HSG A
59,695		Weighted Average
24,560		41.14% Pervious Area
35,135		58.86% Impervious Area

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

Summary for Subcatchment 2S:

Runoff = 1.24 cfs @ 12.02 hrs, Volume= 0.106 af, Depth= 1.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 10-year Rainfall=4.60"

Area (sf)	CN	Description
39,254	30	Brush, Good, HSG A
12,740	98	Paved parking, HSG A
51,994		Weighted Average
39,254		75.50% Pervious Area
12,740		24.50% Impervious Area

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

Summary for Reach 1R: POI#1

Inflow Area = 1.370 ac, 58.86% Impervious, Inflow Depth = 2.60" for 10-year event
Inflow = 3.43 cfs @ 12.02 hrs, Volume= 0.297 af
Outflow = 3.43 cfs @ 12.02 hrs, Volume= 0.297 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs

Summary for Subcatchment 1S:

Runoff = 4.26 cfs @ 12.02 hrs, Volume= 0.379 af, Depth= 3.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 25-year Rainfall=5.70"

Area (sf)	CN	Description
35,135	98	Paved parking, HSG A
16,538	39	>75% Grass cover, Good, HSG A
8,022	30	Woods, Good, HSG A
59,695		Weighted Average
24,560		41.14% Pervious Area
35,135		58.86% Impervious Area

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

Summary for Subcatchment 2S:

Runoff = 1.54 cfs @ 12.02 hrs, Volume= 0.136 af, Depth= 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 25-year Rainfall=5.70"

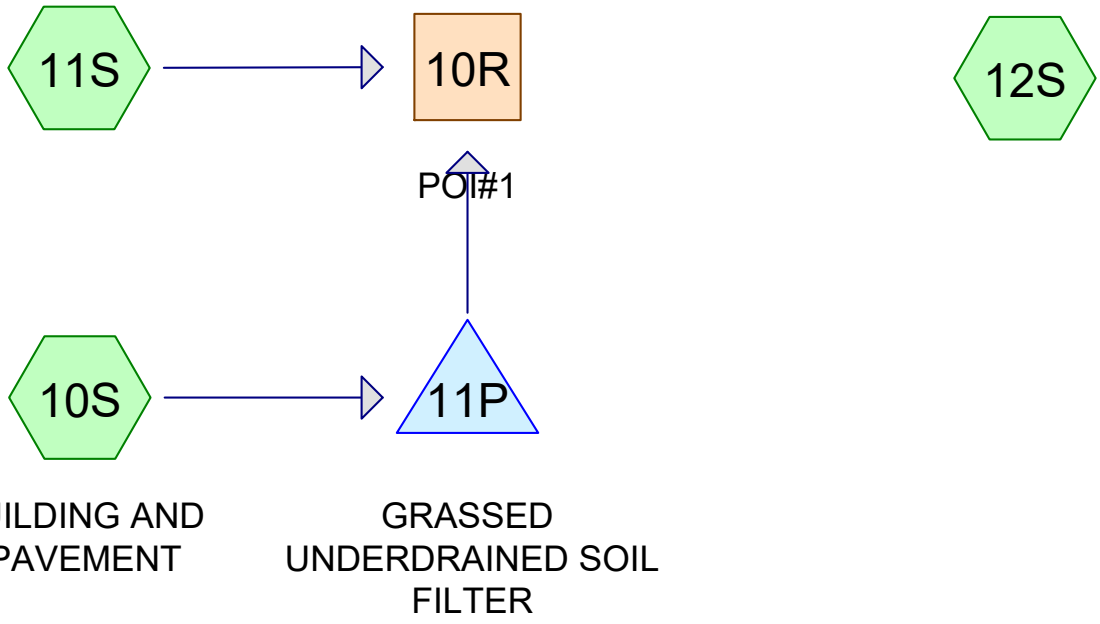
Area (sf)	CN	Description
39,254	30	Brush, Good, HSG A
12,740	98	Paved parking, HSG A
51,994		Weighted Average
39,254		75.50% Pervious Area
12,740		24.50% Impervious Area

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

Summary for Reach 1R: POI#1

Inflow Area = 1.370 ac, 58.86% Impervious, Inflow Depth = 3.32" for 25-year event
Inflow = 4.26 cfs @ 12.02 hrs, Volume= 0.379 af
Outflow = 4.26 cfs @ 12.02 hrs, Volume= 0.379 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs



Subcat Reach Pond Link

Routing Diagram for 3841-POST
Prepared by Sitelines PA, Printed 6/18/2019

Summary for Subcatchment 10S: BUILDING AND PAVEMENT

Runoff = 2.51 cfs @ 12.02 hrs, Volume= 0.212 af, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 2-year Rainfall=3.20"

Area (sf)	CN	Description
35,160	98	Paved parking, HSG A
2,166	98	Water Surface, HSG A
4,213	39	>75% Grass cover, Good, HSG A
41,539		Weighted Average
4,213		10.14% Pervious Area
37,326		89.86% Impervious Area

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

Summary for Subcatchment 11S:

Runoff = 1.47 cfs @ 12.02 hrs, Volume= 0.124 af, Depth= 1.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 2-year Rainfall=3.20"

Area (sf)	CN	Description
16,532	39	>75% Grass cover, Good, HSG A
21,787	98	Paved parking, HSG C
38,319		Weighted Average
16,532		43.14% Pervious Area
21,787		56.86% Impervious Area

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

Summary for Subcatchment 12S:

Runoff = 0.63 cfs @ 12.02 hrs, Volume= 0.053 af, Depth= 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 2-year Rainfall=3.20"

Area (sf)	CN	Description
24,040	39	>75% Grass cover, Good, HSG A
9,304	98	Paved parking, HSG A
33,344		Weighted Average
24,040		72.10% Pervious Area
9,304		27.90% Impervious Area

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

Summary for Reach 10R: POI#1

Inflow Area = 1.833 ac, 74.02% Impervious, Inflow Depth = 2.20" for 2-year event
Inflow = 1.62 cfs @ 12.02 hrs, Volume= 0.336 af
Outflow = 1.62 cfs @ 12.02 hrs, Volume= 0.336 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs

Summary for Pond 11P: GRASSED UNDERDRAINED SOIL FILTER

Inflow Area = 0.954 ac, 89.86% Impervious, Inflow Depth = 2.67" for 2-year event
Inflow = 2.51 cfs @ 12.02 hrs, Volume= 0.212 af
Outflow = 0.18 cfs @ 13.35 hrs, Volume= 0.212 af, Atten= 93%, Lag= 80.0 min
Primary = 0.18 cfs @ 13.35 hrs, Volume= 0.212 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Peak Elev= 294.49' @ 13.35 hrs Surf.Area= 3,216 sf Storage= 3,991 cf

Plug-Flow detention time= 198.9 min calculated for 0.211 af (100% of inflow)
Center-of-Mass det. time= 198.6 min (951.0 - 752.5)

Volume	Invert	Avail.Storage	Storage Description
#1	293.00'	7,629 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
293.00	2,166	0	0
294.00	2,845	2,506	2,506
295.00	3,601	3,223	5,729
295.50	4,000	1,900	7,629

Device	Routing	Invert	Outlet Devices
#1	Device 3	293.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Device 3	294.50'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	290.40'	**18.0" Round Culvert** L= 47.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 290.40' / 290.20' S= 0.0043 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.18 cfs @ 13.35 hrs HW=294.49' (Free Discharge)
└**3=Culvert** (Passes 0.18 cfs of 12.28 cfs potential flow)
  └**1=Exfiltration** (Exfiltration Controls 0.18 cfs)
  └**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Subcatchment 10S: BUILDING AND PAVEMENT

Runoff = 3.64 cfs @ 12.02 hrs, Volume= 0.313 af, Depth= 3.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 10-year Rainfall=4.60"

Area (sf)	CN	Description
35,160	98	Paved parking, HSG A
2,166	98	Water Surface, HSG A
4,213	39	>75% Grass cover, Good, HSG A
41,539		Weighted Average
4,213		10.14% Pervious Area
37,326		89.86% Impervious Area

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

Summary for Subcatchment 11S:

Runoff = 2.12 cfs @ 12.02 hrs, Volume= 0.186 af, Depth= 2.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 10-year Rainfall=4.60"

Area (sf)	CN	Description
16,532	39	>75% Grass cover, Good, HSG A
21,787	98	Paved parking, HSG C
38,319		Weighted Average
16,532		43.14% Pervious Area
21,787		56.86% Impervious Area

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

Summary for Subcatchment 12S:

Runoff = 0.91 cfs @ 12.02 hrs, Volume= 0.083 af, Depth= 1.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 10-year Rainfall=4.60"

Area (sf)	CN	Description
24,040	39	>75% Grass cover, Good, HSG A
9,304	98	Paved parking, HSG A
33,344		Weighted Average
24,040		72.10% Pervious Area
9,304		27.90% Impervious Area

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

Summary for Reach 10R: POI#1

Inflow Area = 1.833 ac, 74.02% Impervious, Inflow Depth = 3.26" for 10-year event
Inflow = 2.81 cfs @ 12.20 hrs, Volume= 0.499 af
Outflow = 2.81 cfs @ 12.20 hrs, Volume= 0.499 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs

Summary for Pond 11P: GRASSED UNDERDRAINED SOIL FILTER

Inflow Area = 0.954 ac, 89.86% Impervious, Inflow Depth = 3.93" for 10-year event
Inflow = 3.64 cfs @ 12.02 hrs, Volume= 0.313 af
Outflow = 1.89 cfs @ 12.23 hrs, Volume= 0.313 af, Atten= 48%, Lag= 12.8 min
Primary = 1.89 cfs @ 12.23 hrs, Volume= 0.313 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Peak Elev= 294.69' @ 12.23 hrs Surf.Area= 3,368 sf Storage= 4,654 cf

Plug-Flow detention time= 170.3 min calculated for 0.312 af (100% of inflow)
Center-of-Mass det. time= 170.2 min (916.7 - 746.5)

Volume	Invert	Avail.Storage	Storage Description
#1	293.00'	7,629 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
293.00	2,166	0	0
294.00	2,845	2,506	2,506
295.00	3,601	3,223	5,729
295.50	4,000	1,900	7,629

Device	Routing	Invert	Outlet Devices
#1	Device 3	293.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Device 3	294.50'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	290.40'	**18.0" Round Culvert** L= 47.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 290.40' / 290.20' S= 0.0043 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.74 cfs @ 12.23 hrs HW=294.68' (Free Discharge)
└**3=Culvert** (Passes 1.74 cfs of 12.62 cfs potential flow)
  └**1=Exfiltration** (Exfiltration Controls 0.19 cfs)
  └**2=Orifice/Grate** (Weir Controls 1.56 cfs @ 1.38 fps)

Summary for Subcatchment 10S: BUILDING AND PAVEMENT

Runoff = 4.52 cfs @ 12.02 hrs, Volume= 0.393 af, Depth= 4.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 25-year Rainfall=5.70"

Area (sf)	CN	Description
35,160	98	Paved parking, HSG A
2,166	98	Water Surface, HSG A
4,213	39	>75% Grass cover, Good, HSG A
41,539		Weighted Average
4,213		10.14% Pervious Area
37,326		89.86% Impervious Area

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

Summary for Subcatchment 11S:

Runoff = 2.64 cfs @ 12.02 hrs, Volume= 0.239 af, Depth= 3.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 25-year Rainfall=5.70"

Area (sf)	CN	Description
16,532	39	>75% Grass cover, Good, HSG A
21,787	98	Paved parking, HSG C
38,319		Weighted Average
16,532		43.14% Pervious Area
21,787		56.86% Impervious Area

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

Summary for Subcatchment 12S:

Runoff = 1.13 cfs @ 12.02 hrs, Volume= 0.114 af, Depth= 1.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Type III 24-hr 25-year Rainfall=5.70"

Area (sf)	CN	Description
24,040	39	>75% Grass cover, Good, HSG A
9,304	98	Paved parking, HSG A
33,344		Weighted Average
24,040		72.10% Pervious Area
9,304		27.90% Impervious Area

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

Summary for Reach 10R: POI#1

Inflow Area = 1.833 ac, 74.02% Impervious, Inflow Depth = 4.14" for 25-year event
Inflow = 5.45 cfs @ 12.11 hrs, Volume= 0.632 af
Outflow = 5.45 cfs @ 12.11 hrs, Volume= 0.632 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs

Summary for Pond 11P: GRASSED UNDERDRAINED SOIL FILTER

Inflow Area = 0.954 ac, 89.86% Impervious, Inflow Depth = 4.95" for 25-year event
Inflow = 4.52 cfs @ 12.02 hrs, Volume= 0.393 af
Outflow = 3.59 cfs @ 12.13 hrs, Volume= 0.393 af, Atten= 20%, Lag= 6.8 min
Primary = 3.59 cfs @ 12.13 hrs, Volume= 0.393 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.10 hrs
Peak Elev= 294.80' @ 12.13 hrs Surf.Area= 3,453 sf Storage= 5,040 cf

Plug-Flow detention time= 153.6 min calculated for 0.393 af (100% of inflow)
Center-of-Mass det. time= 153.5 min (897.1 - 743.7)

Volume	Invert	Avail.Storage	Storage Description
#1	293.00'	7,629 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
293.00	2,166	0	0
294.00	2,845	2,506	2,506
295.00	3,601	3,223	5,729
295.50	4,000	1,900	7,629

Device	Routing	Invert	Outlet Devices
#1	Device 3	293.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Device 3	294.50'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	290.40'	**18.0" Round Culvert** L= 47.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 290.40' / 290.20' S= 0.0043 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.25 cfs @ 12.13 hrs HW=294.78' (Free Discharge)
└**3=Culvert** (Passes 3.25 cfs of 12.80 cfs potential flow)
  └**1=Exfiltration** (Exfiltration Controls 0.19 cfs)
  └**2=Orifice/Grate** (Weir Controls 3.06 cfs @ 1.73 fps)

LEGEND:

1S — SUBCATCHMENT AREA

POI#1 — POINT OF INTEREST

MAGNETIC

US. RT. 202
SPEED LIMIT: 35 MPH

POLE-MOUNTED SIGN

N/F FORREST AND ISABELLE ABBOTT MAP 5 LOT 48A

GAS PUMP FACILITY

TOWNLINE DELI 2-STORY

CONCRETE FUEL STORAGE AREA

1S

2S

POI#1

WETLAND AREA

SHARED DRIVE ACCESS FOR DOUGLAS ABBOTT

GRAVEL PARKING AREA

REBAR

N/F MARY YOUNG MAP 5 LOT 47 BK. 3168 PG. 177

APPROXIMATE LOCATION OF SEPTIC LEACH FIELD

GARAGE

EDGE OF SAND AND GRAVEL AQUIFER

1"IPF 2.5' AG

N/F FORREST AND ISABELLE ABBOTT MAP 5 LOT 48A

N/F DOUGLAS & CONSTANCE ABBOTT MAP 5 LOT 47C BK. 7387 PG. 226

N/F JOSEPH & JOAN WARREN C/O NORWAY SAVINGS BANK MAP 5 LOT 47D BK. 15950 PG. 761

1. 06-19-2019 SUBMITTED TO TOWN FOR FINAL REVIEW JJM

TITLE:
PRE-DEVELOPMENT WATERSHED PLAN

PROJECT:
CONVENIENCE STORE AND OFFICE BUILDING
134 MAIN STREET, EAST WATERBORO, ME 04030

PREPARED FOR:
NEW HORIZONS MANAGEMENT COMPANY, LLC
3391 WHITE SULPHUR ROAD, GAINESVILLE, GA 30501

PROGRESS PRINT
THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

CALL DIG SAFE UTILITY LOCATION
1-888-344-7233
STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

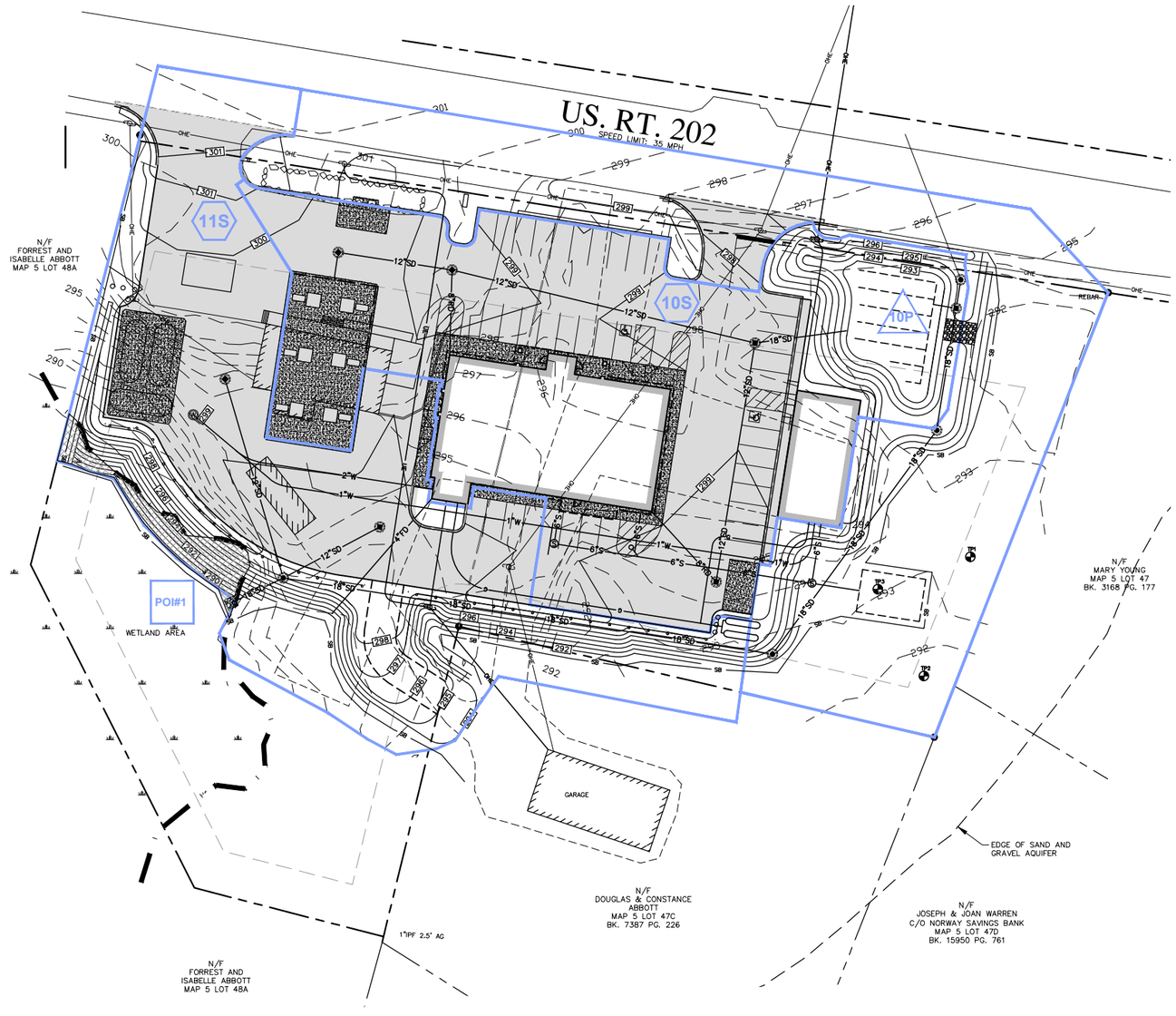
ISSUED FOR:
PERMITTING REVIEW

STATE OF MAINE — JOSEPH J. MARDEN 12828 LICENSED PROFESSIONAL ENGINEER — 06-19

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS

FIELD WK: OTHERS	SCALE: 1"=30'
DRN BY: JJM	JOB #: 3841
CH'D BY: CYN	MAP/LOT: 5/47C&48-1
DATE: 03-25-19	FILE: 3841-SITE

SHEET: D1



LEGEND:

- 1P — STORMWATER POND
- 1S — SUBCATCHMENT AREA
- POI#1 — POINT OF INTEREST

1. 06-19-2019 SUBMITTED TO TOWN FOR FINAL REVIEW — JJM

TITLE: POST-DEVELOPMENT WATERSHED PLAN

PROJECT: CONVENIENCE STORE AND OFFICE BUILDING
134 MAIN STREET, EAST WATERBORO, ME 04030

PREPARED FOR: NEW HORIZONS MANAGEMENT COMPANY, LLC
3391 WHITE SULPHUR ROAD, GAINESVILLE, GA 30501

PROGRESS PRINT
THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

CALL DIG SAFE UTILITY LOCATION
1-888-344-7233
STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

ISSUED FOR:
PERMITTING REVIEW

STATE OF MAINE — JOSEPH J. MARDEN 12828 LICENSED PROFESSIONAL ENGINEER — 06-19-19

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS ▪ PLANNERS ▪ LAND SURVEYORS

FIELD WK: OTHERS	SCALE: 1"=30'	SHEET: D2
DRN BY: JJM	JOB #: 3841	
CH'D BY: CYN	MAP/LOT: 5/47C&48-1	
DATE: 03-25-19	FILE: 3841-SITE	

X:\LAND PROJECTS\3841 PRIORITY 134 MAIN ST E. WATERBORO\DWG\3841-SITE.DWG, POST-DEVELOPMENT, 6/18/2019 2:09 PM, JOSEPH MARDEN

Attachment H
Lighting Details

Information on the proposed lighting is enclosed for reference.

HUBBELL Outdoor Lighting

DATE: | LOCATION: 134 Main Street, East Waterboro

TYPE: | PROJECT:

CATALOG #:

SLING Series

SLENDER WALLPACK

tradeSELECT®

FEATURES

- Two sizes for a variety of applications
- Ranges from 10W to 80W with up to 8000 lumens
- SG1 Series replaces from 100W-150W HID; SG2 Series replaces from 150W-250W HID
- Comfort lens available as an option or accessory provides glare control and enhanced uniformity
- Knuckle and trunnion accessory mounting kits available for flood applications
- IP65 and certified to UL 1598 for use in wet locations up to 40°C ambient
- DLC (DesignLights Consortium Qualified - see www.designlights.org

C US

*3000K and warmer CCTs only

RELATED PRODUCTS

- LNC Litepak
- LNC2 Litepak
- LNC3 Litepak
- LNC4 Litepak
- GeoPak
- GeoPak2

SPECIFICATIONS

HOUSING

- Rugged die-cast aluminum housing with corrosion resistant powder coat finish
- Heating dissipating fins provide superior thermal performance extending the life of the electronic components
- Impact resistant tempered glass offers zero uplight
- Comfort lens available as an option or accessory to reduce glare (7-10% lumen reduction) and provide better uniformity

OPTICS

- 3000K, 4000K and 5000K CCT nominal with 70 CRI
- Smaller SG1 housing has 2 LEDs, larger SG2 housing has 3 LEDs

INSTALLATION

- Side hinge allows for easy installation and wiring
- Side movement avoids damage to the lens and helps prevent injury common in drop down hinge designs
- Mounts to 4" junction box and includes a gasket to help seal electrical connections
- Four 1/2" threaded conduits hubs for surface conduit provided

ELECTRICAL

- 120-277V, 50/60Hz electronic drivers
- 347V and 480V available in large SG2 housing
- 10KA surge protection included

OPTIONS/CONTROLS

- Button photocontrol for dusk to dawn energy savings. Stock versions include 120V-277V PC with a cover which provides a choice to engage photocontrol or not. PC is installed in top hub
- Occupancy sensor available for on/off and dimming control in larger SG2 housing
- SiteSync™ wireless lighting control delivers flexible control strategies for reducing power consumption and minimizing maintenance costs while delivering the right light levels with a simple and affordable wireless solution.
- See ordering information or visit www.hubbelllighting.com/sitesync for more details
- Battery backup options available in larger SG2 housing rated for either 0˚ C or -30˚ C. Performance exceeds NEC requirement providing 1 fc minimum over 10'x10' at 11' mounting height

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 for use in wet location, listed for -40°C to 40°C applications
- IDA approved with zero uplight for 3000K and warmer CCTs
- IP65

WARRANTY

- 5 year limited warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	2263-8079
Wattage Range	21–80
Efficacy Range (LPW)	101–113
Fixture Projected Life (Hours)	L70>50K
Weights lbs. (kg)	4.3–11 (2.0–5.0)

HUBBELL Lighting

HUBBELL Outdoor Lighting

DATE: | LOCATION: 134 Main Street, East Waterboro

TYPE: | PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

ORDERING GUIDE

Example: SG1-20-3K7-FT-UNV-DB-PCU-CS

CATALOG #

ORDERING INFORMATION

Housing		CCT/CRI		Distribution		Voltage		Color/Finish		Control Options		Options	
SG1-10	Size 1, 10W	**3K7**	3000K, 70 CRI	**FT**	Fwd Throw	**UNV**	120V-277V	**DB**	Textured Dark Bronze	**PCU**	Button Photocontrol (120-277V)	**CS**	Comfort Lens
SG1-20	Size 1, 20W	**4K7**	4000K, 70 CRI			**120**	120V	**BL**	Textured Black	**SCP**[1,2,3]	Hi-Lume 1% 3-wire / EcoSystem LED Driver	**E**[1,2]	Batter 0°C
SG1-30	Size 1, 30W	**5K7**	5000K, 70 CRI			**277**	277V	**WH**	Textured White	**SWP**[1,2]	Hi-Lume 1% 2-wire LED Driver (120V only)	**EH**[1,2]	Battery w/ heater -20°C
SG1-40	Size 1, 40W					**UHV**	347V-480V	**GYS**	Smooth Gray	**SWPM**[1,2]	Osram dimming to 1% 0–10V		
SG2-50	Size 2, 50W							**PS**	Smooth Plat. Silver	**Specify MTG HT for SCO/SCP & SWPM**			
SG2-80	Size 2, 80W							**CC**	Custom Color	**8F**	Up to 8'		
										20F	Up to 20'		

Notes:

1 Available in SG2 only, UHV available in SG2-50 only

2 Sensor controls & battery backup can not be used with flood accessory or kit or for inverted/up mounting, 120-227V only for SCO/SCP, 120 or 277 only for SWP, SWPM, E & EH

3 Must order minimum of one remote control to program dimming setttings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only

STOCK ORDERING INFORMATION

Catalog Number	CCT/CRI	Wattage	Mounting Height	Color	Color	Delivered Lumens	LPW	Weight lbs. (kg)
SG1-10-PCU	5000K/70	11W	8–12ft	120–277V	Dark Bronze	1349	122	4.3 (2.0)
SG1-10-4K-PCU	4000K/70	11W	8–12ft	120–277V	Dark Bronze	1424	129	4.3 (2.0)
SG1-20-PCU	5000K/70	21W	8–12ft	120–277V	Dark Bronze	2263	108	4.3 (2.0)
SG1-20-4K-PCU	4000K/70	21W	8–12ft	120–277V	Dark Bronze	2310	110	4.3 (2.0)
SG1-30-PCU	5000K/70	29W	10–15ft	120–277V	Dark Bronze	3270	113	4.3 (2.0)
SG1-30-4K-PCU	4000K/70	29W	10–15ft	120–277V	Dark Bronze	3060	105	4.3 (2.0)
SG1-40-PCU	5000K/70	38W	10–15ft	120–277V	Dark Bronze	4008	105	4.3 (2.0)
SG1-40-4K-PCU	4000K/70	38W	10–15ft	120–277V	Dark Bronze	4070	106	4.3 (2.0)
SG2-50-PCU	5000K/70	51W	12–18ft	120–277V	Dark Bronze	5548	110	11 (5.0)
SG2-50-4K-PCU	4000K/70	51W	12–18ft	120–277V	Dark Bronze	5526	109	11 (5.0)
SG2-80-PCU	5000K/70	80W	15–25ft	120–277V	Dark Bronze	8061	101	11 (5.0)
SG2-80-4K-PCU	4000K/70	80W	15–25ft	120–277V	Dark Bronze	8079	101	11 (5.0)

HUBBELL Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

ORDERING GUIDE

OPTIONS AND ACCESSORIES

	Catalog Number	Description	Weight lbs. (kg)
☐	**SG1-CS**	Acrylic comfort lens for SG1	1 (.45)
☐	**SG2-CS**	Acrylic comfort lens for SG2	1 (.45)
☐	**SG1-YOKE**	SG1 Series Yoke/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SG1-KNUCKLE**	SG1 Series Knuckle/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SG2-YOKE**	SG2 Series Yoke/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SG2-KNUCKLE**	SG2 Series Knuckle/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SCP-REMOTE***	Remote control for SCP option. Order at least one per project to program and control fixtures	1 (.45)
☐	**SG2-PMA-3-XX**	3" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG2-PMA-4-XX**	4" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG2-PMA-5-XX**	5" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG2-PMA-6-XX**	6" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG1-SPC**	Vandal Resistant Lens (shield polycarbonate), SG1	3 (1.5)
☐	**SG2-SPC**	Vandal Resistant Lens (shield polycarbonate), SG2	3 (1.5)
☐	**SG1-WCP**	Universal Wall Cover Plate, Dark Bronze, SG1	10 (5)
☐	**SG2-WCP-H**	Horizontal Mount Wall Cover Plate, Dark Bronze, SG2	10 (5)
☐	**SG2-WCP-V**	Vertical Mount Wall Cover Plate, Dark Bronze, SG2	10 (5)
☐	**SG2XL-WCP-H**	Horizontal Mount Wall Cover Plate, DB, SG2 with battery or sensor	10 (5)
☐	**SG2XL-WCP-V**	Vertical Mount Wall Cover Plate, DB, SG2 with battery or sensor	10 (5)

ACCESSORIES AND SERVICES (ORDERED SEPARATELY)

Control Options	
SWUSB[1]	SiteSync™ interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync™ license, software and USB radio bridge node.
SWTAB[1]	Windows tablet and SiteSync™ interface software. Includes tablet with preloaded software, SiteSync™ license and USB radio bridge node.
SWBRG[2]	SiteSync™ USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.

Notes:

1 When ordering SiteSync™ at least one of these two interface options must be ordered per project.

2 If needed, an additional Bridge Node can be ordered.

MORE INFORMATION: ACCESSORIES AND SERVICES

HUBBELL Outdoor Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

PERFORMANCE DATA

Description	# of LEDs	Drive Current	System Watts	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
				Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
SG1-10	2	140mA	11	1349	122	1	0	0	1424	129	1	0	0	1003	91	1	0	0
SG1-20	2	250mA	21	2449	115	1	0	0	2310	110	1	0	0	2054	95	1	0	0
SG1-30	2	350mA	29	3332	117	2	0	0	3060	106	1	0	0	2913	100	1	0	0
SG-40	2	450mA	38	4008	105	2	0	0	4070	106	2	0	0	3845	100	2	0	0
SG2-50-UHV	3	350mA	44	4633	106	2	0	0	4609	105	2	0	0	3895	90	2	0	0
SG2-50	3	415mA	51	5548	109	2	0	0	5526	107	2	0	0	4700	92	2	0	0
SG2-80	3	650mA	80	7851	98	2	0	1	8079	103	2	0	1	6721	86	2	0	1

*347 and 480 VAC input Lumen values are from photometric test performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment application and inherent performance balances of the electrical components.

ELECTRICAL DATA

Catalog number	# of Drivers	Input Voltage	Current (AMPS)	System Power
SG1-10	1	120	0.09	11.0
	1	277	0.04	11.0
SG1-20	1	120	0.18	21.0
	1	277	0.08	21.0
SG1-30	1	120	0.24	28.9
	1	277	0.10	28.9
SG2-40	1	120	0.32	38.3
	1	277	0.14	38.3
SG-50-UHV	1	347	0.13	43.5
	1	480	0.18	43.5
SG2-50	1	120	0.42	50.6
	1	277	0.18	50.6
SG2-80	1	120	0.68	79.8
	1	277	0.29	79.8

PROJECTED LUMEN MAINTENANCE

Ambient Temperature	OPERATING HOURS					
	0	25,000	50,000	TM-21-11[1] L96 60,000	100,000	L70 (Hours)
25°C / 77°F	1.00	0.98	0.97	0.96	0.95	>791,000
40°C / 104°F	0.99	0.98	0.96	0.96	0.94	>635,000

1. Projected per IESNA TM-21-11 * (Nichia 219B, 700mA, 85°C Ts, 10,000hrs) Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08

HUBBELL Lighting

HUBBELL Outdoor Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

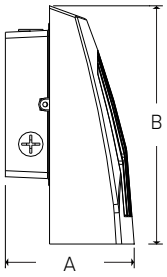
LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

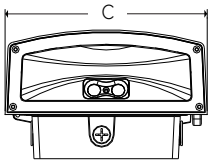
Ambient Temperature		Lumen Multiplier
0˚ C	32˚ F	1.02
10˚ C	50˚ F	1.01
20˚ C	68˚ F	1.00
25˚ C	77˚ F	1.00
30˚ C	86˚ F	1.00
40˚ C	104˚ F	0.99
50˚ C	122˚ F	0.96

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

DIMENSIONS

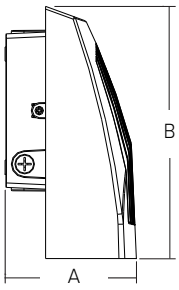
SG1

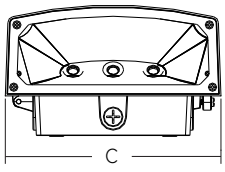




A	B	C	Weight
4.19" (107mm)	7.80" (198mm)	6.61" (168mm)	4.4lbs (2kg)

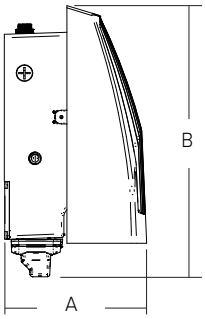
SG2

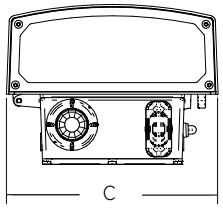




A	B	C	Weight
5.80" (147mm)	11.14" (283mm)	9.52" (242mm)	11lbs (5kg)

SG2 with occupancy sensor and battery options





A	B	C	Weight
7.26" (184mm)	13.84" (352mm)	9.52" (242mm)	11lbs (5kg)

HUBBELL Lighting

HUBBELL Outdoor Lighting

DATE: | LOCATION: 134 Main Street, East Waterboro

TYPE: | PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

PHOTOMETRY

SG1-10-4K7

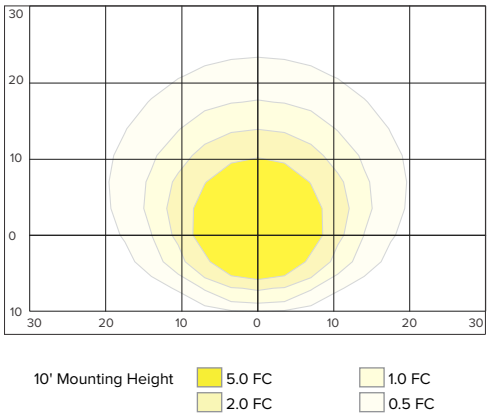
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Forward Throw**
Delivered Lumens	**1424**
Watts	**11.4**
Efficacy	**125**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	996.6	70.0
Downward House Side	427.8	30.0
Downward Total	1424.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	1424.4	100.0

ISOMETRIC FOOTCANDLE



SG1-20-4K7

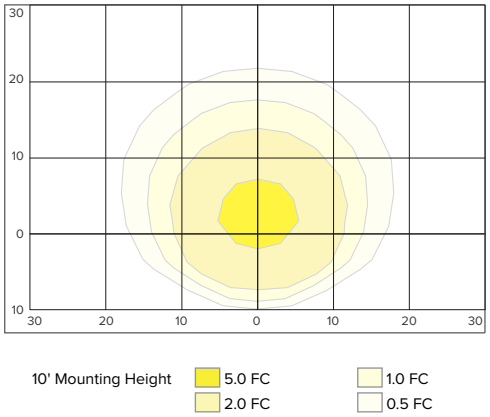
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**2310**
Watts	**20.9**
Efficacy	**111**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	1618	70.0
Downward House Side	692.1	30
Downward Total	2310	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	2310.3	100.0

ISOMETRIC FOOTCANDLE



SG1-30

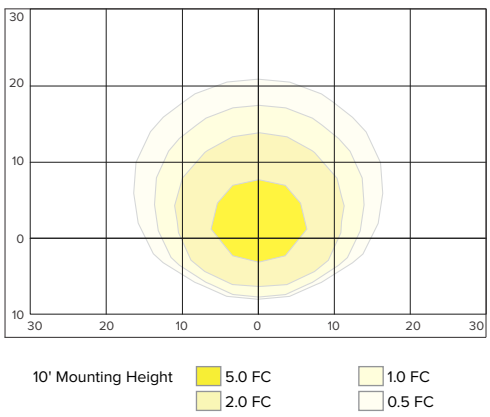
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Forward Throw**
Delivered Lumens	**3060**
Watts	**29.1**
Efficacy	**105**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	2619.4	70.9
Downward House Side	890.4	29.1
Downward Total	3059.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	3059.8	100.0

ISOMETRIC FOOTCANDLE



HUBBELL Lighting

DATE: | LOCATION: 134 Main Street, East Waterboro

TYPE: | PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

PHOTOMETRY

SG1-40-4K7

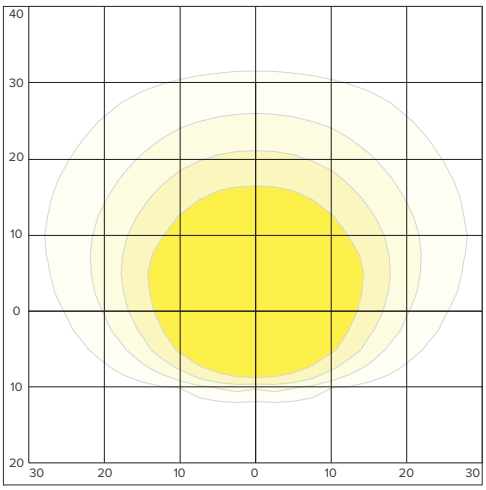
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**4070**
Watts	**38.1**
Efficacy	**107**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	2857.7	70.2
Downward House Side	1215.5	29.8
Downward Total	4070.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	4070.2	100.0

ISOMETRIC FOOTCANDLE



10' Mounting Height | 5.0 FC | 1.0 FC | 2.0 FC | 0.5 FC

SG2-50-4K7

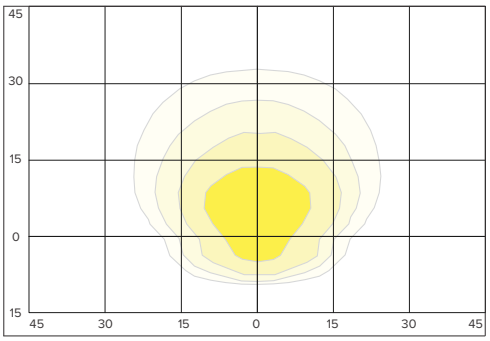
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**5525.7**
Watts	**51.7**
Efficacy	**107**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4611.8	83.5
Downward House Side	913.9	16.5
Downward Total	5525.7	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	5525.7	100.0

ISOMETRIC FOOTCANDLE



15' Mounting Height | 5.0 FC | 1.0 FC | 2.0 FC | 0.5 FC

SG2-80-4K7

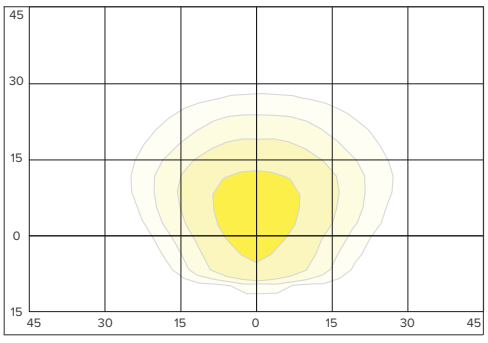
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**8453**
Watts	**78.5**
Efficacy	**108**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6677.7	79.0
Downward House Side	1775.5	21.0
Downward Total	8453.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	8453.2	100.0

ISOMETRIC FOOTCANDLE



15' Mounting Height | 5.0 FC | 1.0 FC | 2.0 FC | 0.5 FC

HUBBELL Outdoor Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

ADDITIONAL INFORMATION

Shipping Information

Catalog Number	G.W(kg)/ CTN	Carton Dimensions			Carton Qty. per Master Pack	Pallet Qty.
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)		
SG1	4.35lbs (2kg)	9.5 (24)	8.25 (21)	5.25 (13)	6	98
SG2	11lbs (5kg)	14 (36)	11.5 (29)	8 (20)	2	64

Accessories and Services

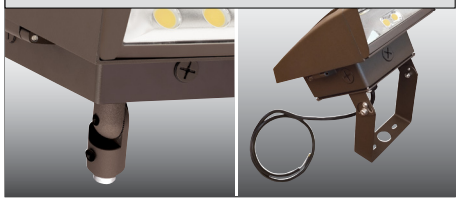
Comfort Lens

Acrylic comfort lens provides glare control, improved visual comfort and better uniformity

Visor

Visor accessory included with mounting accessory kits

Mounting Options

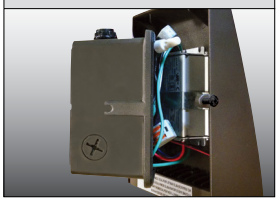


Flood mounting accessories - 1/2" threaded knuckle or yoke (includes grommet and 3' SO cord)

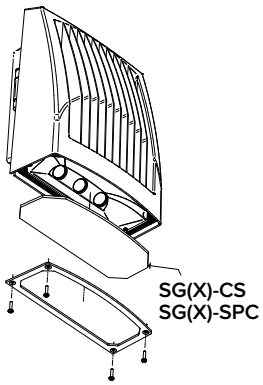
Photocontrol

Photocontrol option available for energy-saving dusk-to-dawn operation

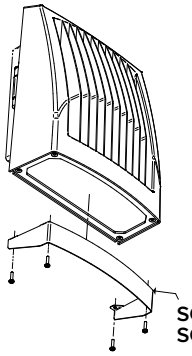
Hinged Housing Door



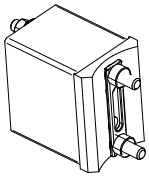
Side hinged for easy installation and wiring access, single screw secures housing closure



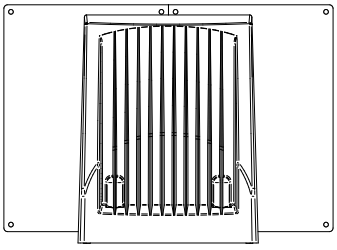
SG(X)-CS
SG(X)-SPC



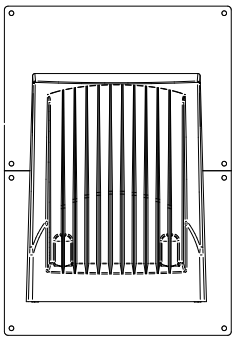
SG(X)-YOKE
SG(X)-KNUCKLE



SG(X)-PMA-(X)-XX



SG(X)-WCP-H



SG(X)-WCP-V

Features

Emergency Mode (EH)

Battery back up feature with side indicator.

Exceeds Life Safety Code average illuminance of 1.0 fc. at 12' mounting height. Assumes open space with no obstructions. Battery backup units consume 6W when charging a dead battery and 2W during maintenance charging. EH (units with a heater) consume up to an additional 8W when charging if the battery temp is lower than 10°C

Diagrams for illustration purposes only, please consult factory for application layout.

Wireless and Occupancy Controls

SiteSync™ Lighting Control delivers flexible control strategies for reducing power consumption and minimizing maintenance costs while delivering the right light levels with a simple and affordable wireless solution.

HUBBELL Lighting

VIPER L OPTICS STRIKE

LARGE VIPER LUMINAIRE

Cat.#	
Job	Type

BEACON design . performance . technology

Approvals

SPECIFICATIONS

Intended Use:

The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS. Luminaires are suitable for wet locations.

Construction:

- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant.
- One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and microcellular polyurethane foam gasket ensures a weather-proof seal around each individual optic.

Electrical:

- Luminaire accepts 100V through 277V, 50 Hz to 60 Hz (UNV), 347V, or 480V input.
- Power factor is ≥ .90 at full load.
- All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Surge protection - 20kA.
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

Controls/Options:

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see www.beaconproducts.com/products/energeni).
- In addition, Viper can be specified with **SiteSync™** wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: www.hubbelllighting.com/sitesync

Installation:

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

Finish:

- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Certifications/Ratings:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: http://www.designlights.org/QPL
- Certified to UL 1598 and CSA C22.2 No. 250.0
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved

Warranty:

Five year limited warranty for more information visit: www.hubbelllighting.com/resources/warranty

CERTIFICATIONS/LISTINGS

C SP US

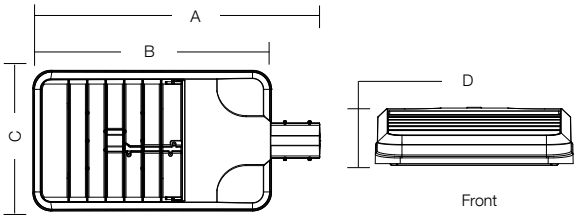
ida DARK SKY APPROVED 2016

DLC QPL LISTED

*3000K and warmer CCTs only

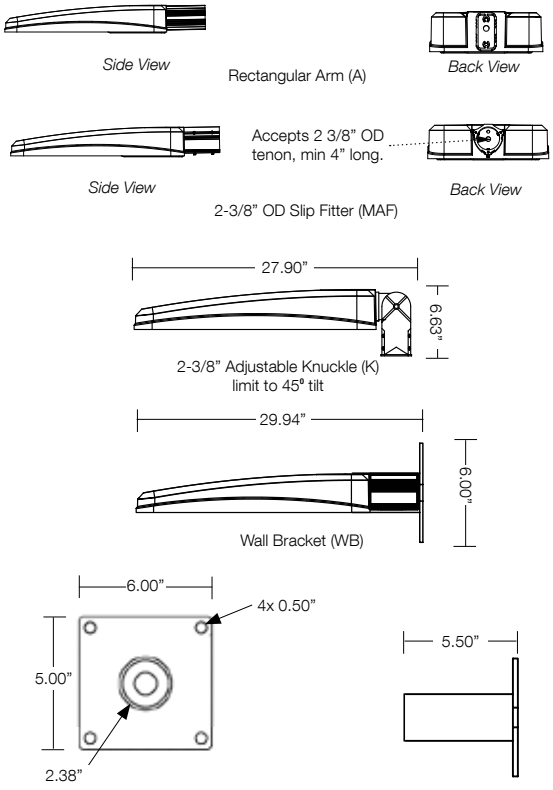
PRODUCT IMAGE(S)

DIMENSIONS



A	B	C	D	Weight:	EPA
29.12" (740 mm)	24.19" (614 mm)	14.25" (362 mm)	4.13" (105 mm)	25.0 lbs (11.3 kg)	1.2 ft²

MOUNTING OPTIONS



HUBBELL® HUBBELL Lighting

ORDERING INFORMATION ORDERING EXAMPLE: VPL/96L-280/4K7/4W/UNV/A/DBT/7PR-TL/GENI-04/BC

VPL | | | | | | | | | | |

SERIES	LED ENGINE	CCT/CRI	ROTATION	VOLTAGE	COLOR	OPTIONS
VPL Viper	**64L-135** 135W LED array	**3K7** 3000K, 70 CRI	Leave blank for no rotation	**UNV** 120-277V	**DBT** Dark Bronze Textured	**F** Fusing
	80L-180 180W LED array	**4K7** 4000K, 70 CRI	**L**[5] Optic rotation left	**120** 120V	**BMT** Black Matte Textured	**BSP** Bird Spikes
	80L-235 235W LED array	**5K7** 5000K, 70 CRI	**R**[5] Optic rotation right	**208** 208V	**PS** Platinum Silver Smooth	**BC** Backlight control (limited to Type 4W only)
	96L-220 220W LED array			**240** 240V	**WHT** White Textured	
	96L-280 280W LED array			**277** 277V	**CC** Custom Color (RAL#)	
	96L-315 315W LED array			**347** 347V		
	96L-395 395W LED array			**480** 480V		

DISTRIBUTION

- **FR** Type 1/Front Row
- **2** Type 2
- **3** Type 3
- **4** Type 4
- **4W** Type 4 Wide
- **5QM** Type 5QM
- **5QN** Type 5QN
- **5R** Type 5R (rectangular)
- **5W** Type 5W (round wide)

MOUNTING

- **A** Rectangular Arm (formerly RA)
- **MAF** Mast Arm Fitter (formerly SF2)
- **K** Knuckle (formerly PK2) limit to 45° tilt
- **WB** Wall Bracket

CONTROL OPTIONS

- **7PR** 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others)
- **7PR-SC** 7-Pin Receptacle w/Shorting Cap
- **7PR-TL** 7-Pin Receptacle w/Twist Lock photo control
- **SCP/_F**[1,2,6] Programmable Occupancy Sensor w/ daylight control (120-277 volts only)
- **WSP/_F**[1,2] WASP Occupancy Sensor w/ daylight control (347 or 480 volts only)
- **GENI-XX**[3] ENERGENI
- **SWF**[1] SiteSync Field Commission
- **SWFM**[1,2] SiteSync Field Commission with Motion Sensor
- **SWP**[1,4] SiteSync Pre-Commission
- **SWPM**[1,2,4] SiteSync Pre-Commission w/ Sensor

HOUSE SIDE SHIELD ACCESSORIES

- **HSS/EVP-L/90-FB/XXX** 90° shield front or back
- **HSS/EVP-L/90-LR/XXX** 90° shield left or right
- **HSS/EVP-L/270-FB/XXX** 270° shield front or back
- **HSS/EVP-L/270-LR/XXX** 270° shield left or right
- **HSS/EVP-L/360/XXX** Full shield

(Replace XXX with notation for desired finish color)
(Refer to page 5 for shield images)

PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-L/80L-235/4K7/3/UNV/A/DBT/SWP/ SiteSync only
VP-L/80L-235/4K7/3/UNV/A/DBT/SWPM-20F/ SiteSync with Motion Control

[1] Not available with other wireless control or sensor options
[2] Specify mounting height; 8 = 8' or less, 40 = 91 to 40'
[3] Specify routine setting code (example GENI-04). See ENERGENI brochure and instructions for setting table and options. Not available with sensor or SiteSync options.
[4] Specify group and zone at time of order. See www.hubbelllighting.com/sitesync for further details. Order at least one SiteSync interface Accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
[5] Only available with 1A, 2, 3, 4, 4W and 5R distributions
[6] Order at least one SCP-REMOTE per project location to program and control

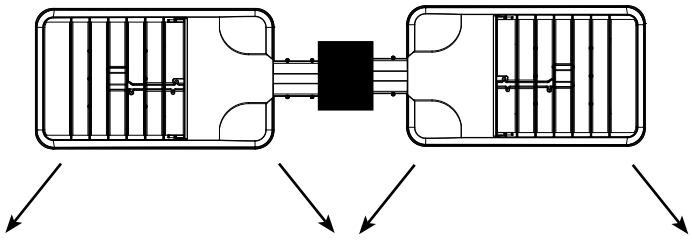
Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync loaded on USB flash drive (Windows based only)
SWTAB*	SiteSync Windows Tablet
SWBRG+	SiteSync Wireless Bridge Node
SCP-REMOTE	Remote Control for SCP/_F option. Order at least one per project to program and control

* When ordering with SiteSync, one of the interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.
+ If needed, an additional Bridge Node can be ordered.

SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

LEFT ROTATED OPTIC **RIGHT ROTATED OPTIC**

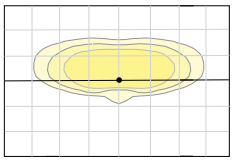


PERFORMANCE DATA				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW[1]	B	U	G	LUMENS	LPW[1]	B	U	G	LUMENS	LPW[1]	B	U	G
64	625 mA	135W	FR	18220	132	2	0	2	18783	137	2	0	2	16341	119	2	0	2
			2	17228	125	2	0	2	17761	129	2	0	2	15452	112	2	0	2
			3	17257	125	2	0	3	17791	129	2	0	3	15478	112	2	0	3
			4	16864	123	1	0	4	17386	126	1	0	4	15125	110	1	0	3
			4W	16797	122	2	0	3	17317	126	2	0	3	15066	109	2	0	3
			5QM	17259	125	4	0	2	17792	129	4	0	2	15479	112	4	0	2
			5QN	18023	131	4	0	0	18580	135	4	0	0	16165	117	4	0	0
			5R	17410	127	4	0	4	17948	130	4	0	4	15615	113	4	0	4
			5W	16498	120	4	0	2	17009	124	4	0	3	14797	108	4	0	2
80	700 mA	180W	FR	23230	128	2	0	2	23948	132	2	0	2	20835	115	2	0	2
			2	21965	121	3	0	3	22645	125	3	0	3	19701	109	2	0	3
			3	22003	121	2	0	4	22683	125	3	0	4	19734	109	2	0	4
			4	21502	119	2	0	4	22167	122	2	0	4	19285	106	2	0	4
			4W	21416	118	2	0	4	22079	122	2	0	4	19209	106	2	0	4
			5QM	22005	121	4	0	2	22686	125	4	0	2	19736	109	4	0	2
			5QN	22979	127	4	0	1	23689	131	4	0	1	20610	114	4	0	0
			5R	22197	122	4	0	4	22884	126	4	0	4	19909	110	4	0	4
			5W	21035	116	5	0	3	21686	120	5	0	3	18867	104	4	0	3
80	875 mA	235W	FR	27849	121	2	0	2	28711	125	2	0	2	24978	108	2	0	2
			2	26334	114	3	0	3	27148	118	3	0	4	23619	102	3	0	3
			3	26378	114	3	0	4	27194	118	3	0	4	23659	103	3	0	4
			4	25777	112	2	0	4	26575	115	2	0	5	23120	100	2	0	4
			4W	25675	111	3	0	4	26469	115	3	0	4	23028	100	3	0	4
			5QM	26381	114	4	0	2	27196	118	4	0	2	23661	103	4	0	2
			5QN	27548	119	5	0	1	28400	123	5	0	1	24708	107	5	0	1
			5R	26611	115	5	0	5	27434	119	5	0	5	23868	104	4	0	4
			5W	25218	109	5	0	3	25998	113	5	0	3	22618	98	5	0	3
96	700 mA	220W	FR	27876	128	2	0	2	28738	132	2	0	2	25002	115	2	0	2
			2	26359	121	3	0	3	27174	125	3	0	4	23641	109	3	0	3
			3	26403	121	3	0	4	27220	125	3	0	4	23681	109	3	0	4
			4	25802	119	2	0	4	26600	122	2	0	5	23142	106	2	0	4
			4W	25700	118	3	0	4	26494	122	3	0	4	23050	106	3	0	4
			5QM	26406	121	4	0	2	27222	125	4	0	2	23683	109	4	0	2
			5QN	27575	127	5	0	1	28427	131	5	0	1	24732	114	5	0	1
			5R	26637	122	5	0	5	27460	126	5	0	5	23890	110	4	0	4
			5W	25242	116	5	0	3	26023	120	5	0	3	22640	104	5	0	3
96	875 mA	280W	FR	33419	121	3	0	2	34453	125	3	0	2	*29974*	*108*	*2*	*0*	*2*
			2	31600	114	3	0	4	32577	118	3	0	4	*28342*	*102*	*3*	*0*	*4*
			3	31654	114	3	0	5	32633	118	3	0	5	*28390*	*103*	*3*	*0*	*4*
			4	30933	112	2	0	5	31889	115	2	0	5	*27744*	*100*	*2*	*0*	*5*
			4W	30810	111	3	0	5	31763	115	3	0	5	*27634*	*100*	*3*	*0*	*4*
			5QM	31657	114	5	0	3	32636	118	5	0	3	*28393*	*103*	*4*	*0*	*2*
			5QN	33058	119	5	0	1	34080	123	5	0	1	*29650*	*101*	*5*	*0*	*1*
			5R	31933	115	5	0	5	32921	119	5	0	5	*28641*	*104*	*5*	*0*	*5*
			5W	30262	109	5	0	4	31198	113	5	0	4	*27142*	*98*	*5*	*0*	*3*
96	1000mA	315W[2]	FR	35666	113	3	0	2	36769	117	3	0	2	*31989*	*101*	*2*	*0*	*2*
			2	33725	107	3	0	4	34768	110	3	0	4	*30248*	*96*	*3*	*0*	*4*
			3	33782	107	3	0	5	34827	110	3	0	5	*30299*	*96*	*3*	*0*	*4*
			4	33012	105	2	0	5	34033	108	2	0	5	*29609*	*94*	*2*	*0*	*5*
			4W	32882	104	3	0	5	33899	107	3	0	5	*29492*	*93*	*3*	*0*	*5*
			5QM	33785	107	5	0	3	34830	110	5	0	3	*30302*	*96*	*5*	*0*	*2*
			5QN	35280	112	5	0	1	36371	115	5	0	1	*31643*	*100*	*5*	*0*	*1*
			5R	34080	108	5	0	5	35134	111	5	0	5	*30567*	*97*	*5*	*0*	*5*
			5W	32302	102	5	0	4	33301	106	5	0	4	*28972*	*92*	*5*	*0*	*4*
96	1225mA	395W[2]	FR	39569	101	3	0	4	43125	110	3	0	3	*37518*	*96*	*3*	*0*	*2*
			2	39569	101	3	0	4	40793	104	3	0	4	*35490*	*91*	*3*	*0*	*4*
			3	39619	101	3	0	5	40845	104	3	0	5	*35535*	*91*	*3*	*0*	*5*
			4	38723	98	3	0	5	39921	101	3	0	5	*34731*	*88*	*2*	*0*	*5*
			4W	38570	98	3	0	5	39763	101	3	0	5	*34594*	*88*	*3*	*0*	*5*
			5QM	39623	101	5	0	3	40848	104	5	0	3	*35538*	*90*	*5*	*0*	*3*
			5QN	41394	105	5	0	1	42675	109	5	0	1	*37127*	*95*	*5*	*0*	*1*
			5R	39969	102	5	0	5	41205	105	5	0	5	*35848*	*91*	*5*	*0*	*5*
			5W	37877	97	5	0	4	39048	100	5	0	4	*33986*	*87*	*5*	*0*	*4*

[1] Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.
[2] 315W and 395W 3000K versions are not DLC QPL listed. Reference highlighted cells in table.

PHOTOMETRICS

Type FR - Front Row/Auto Optic



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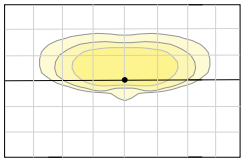

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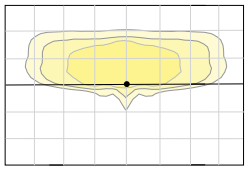

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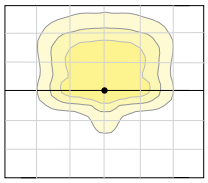
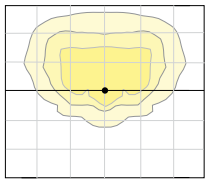
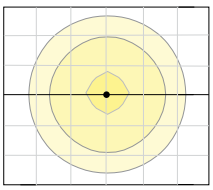


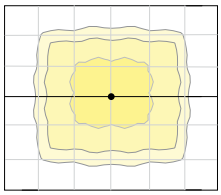
Type 4W



Type 5W



Type 5QN



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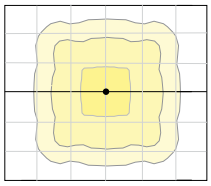
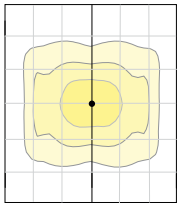


Type 5R



ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
64	1	625 mA	120	135	1.4
			277		0.6
			347		0.5
			480		0.3
80	2	700 mA	120	180	1.8
			277		0.8
			347		0.6
			480		0.5
80	2	875 mA	120	235	2.4
			277		1.0
			347		0.8
			480		0.6
96	2	700 mA	120	220	2.2
			277		1.0
			347		0.8
			480		0.6
96	2	875 mA	120	280	2.8
			277		1.2
			347		1.0
			480		0.7
96	2	1000 mA	120	315	3.2
			277		1.4
			347		1.1
			480		0.8
96	2	1225 mA	120	395	4.0
			277		1.7
			347		1.4
			480		1.0

PROJECTED LUMEN MAINTENANCE

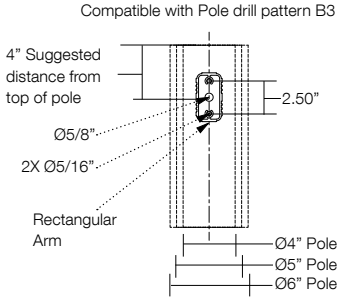
AMBIENT TEMP.	0	25,000	50,000	[1]TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.98	0.97	0.97	0.96	>377,000

[1] Projected per IESNA TM-21-11

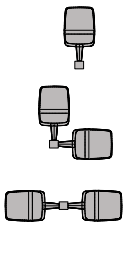
Data references the extrapolated performance projections for the 700mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

DRILL PATTERN

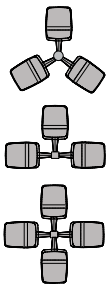
Compatible with Pole drill pattern B3



EPA



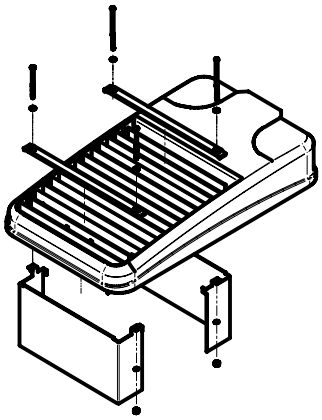
Config.	EPA
1	1.2
2 @ 90°	1.9
2 @ 180°	2.4



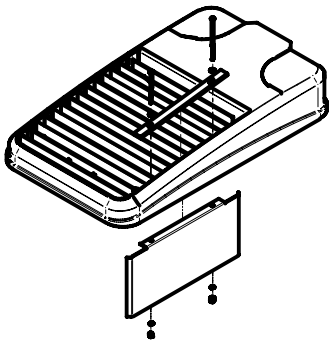
Config.	EPA
3 @ 120°	3.0
3 @ 90°	3.1
4 @ 90°	3.8

HUBBELL® Lighting

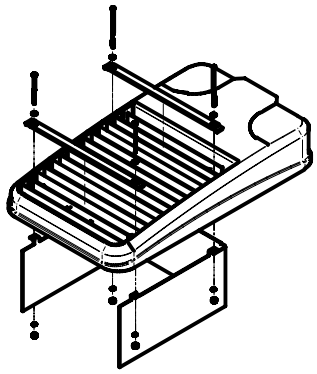
HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



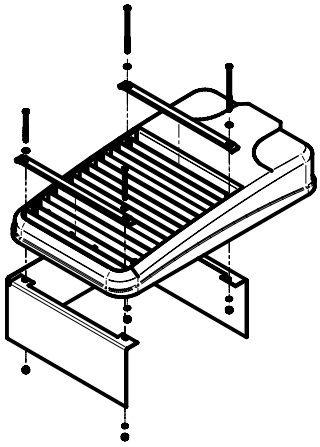
HSS/EVP-L/90-FB/XXX
90° shield front or back
(2 shields shown)



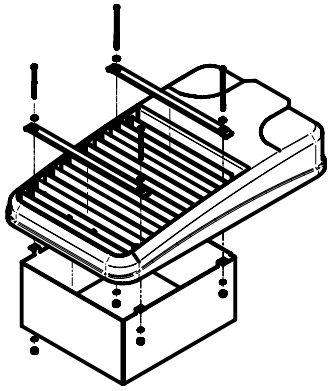
HSS/EVP-L/90-LR/XXX
90° shield left or right
(1 shield shown in left orientation)



HSS/EVP-L/270-FB/XXX
270° shield front or back
(1 shield shown in back orientation)



HSS/EVP-L/270-LR/XXX
270° shield left or right
(1 shield shown in right orientation)

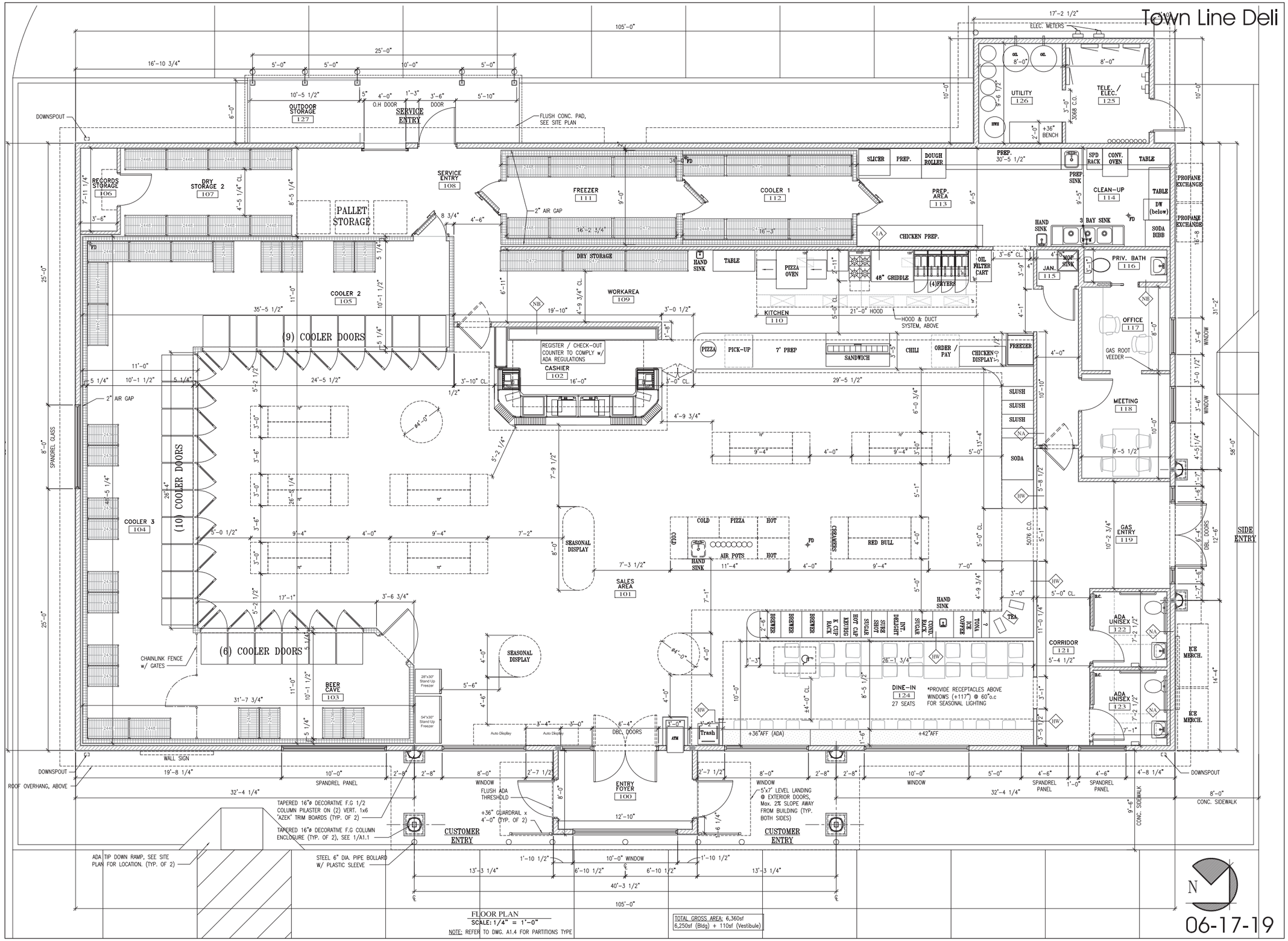


HSS/EVP-L/360/XXX
Full shield
(1 shield shown)

Attachment I
Architecture

The floor plan and architectural elevations are included here for reference.

Town Line Deli



FLOOR PLAN
SCALE: 1/4" = 1'-0"
NOTE: REFER TO DWG. A1.4 FOR PARTITIONS TYPE

TOTAL GROSS AREA: 6,360sf
6,250sf (Bldg) + 110sf (Vestibule)

06-17-19

ALPHAarchitects
17 CHESTNUT STREET
PORTLAND, ME 04101
PHONE: 207.761.9500
FAX: 207.761.9595
design@alphaarchitects.com

PRELIMINARY:
NOT FOR CONSTRUCTION

Town Line Deli
134 East Main Street
East Waterboro, ME. 04030

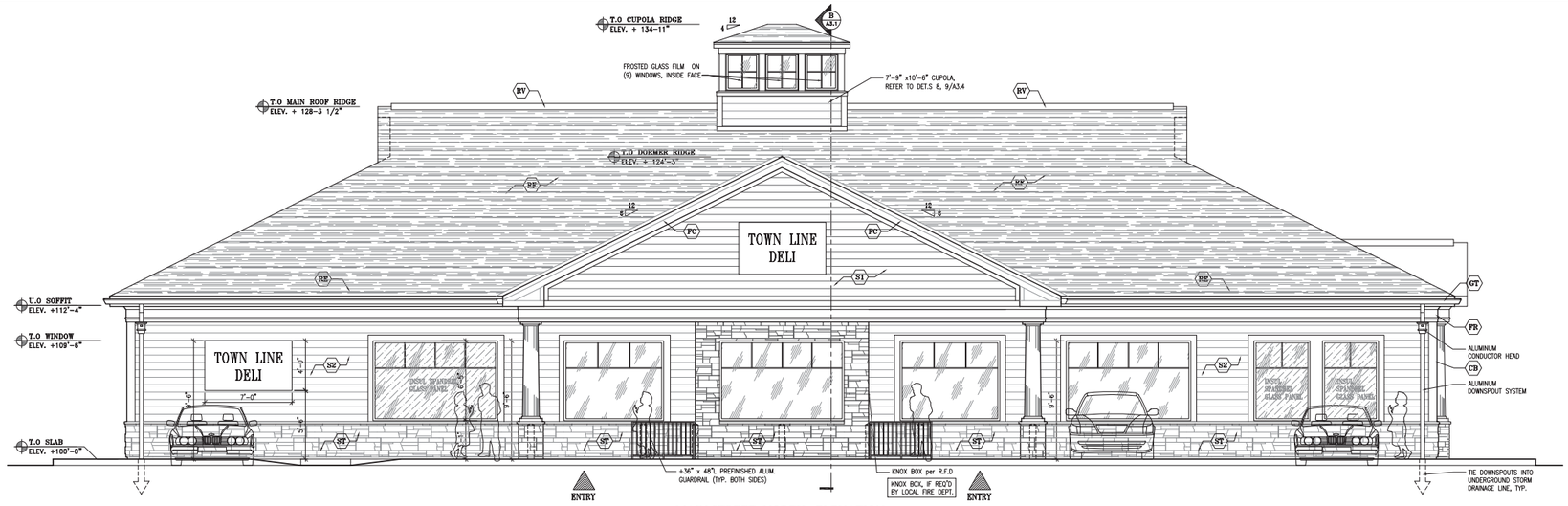
JOB: 19124

ISSUE DATE	
PRELIM	05-06-19
SFMO	-
CD's	-
REV. 1	-
REV. 2	-
PRINT	06-17-19

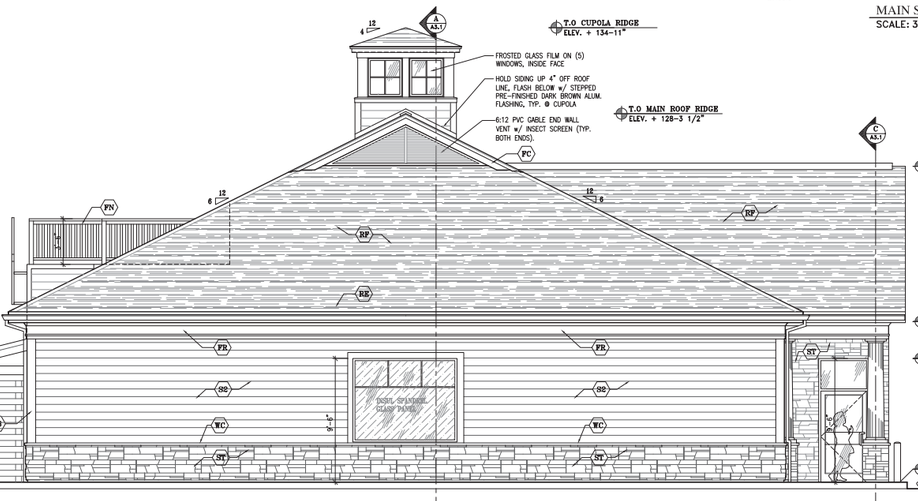
FIRST FLOOR PLAN

G1

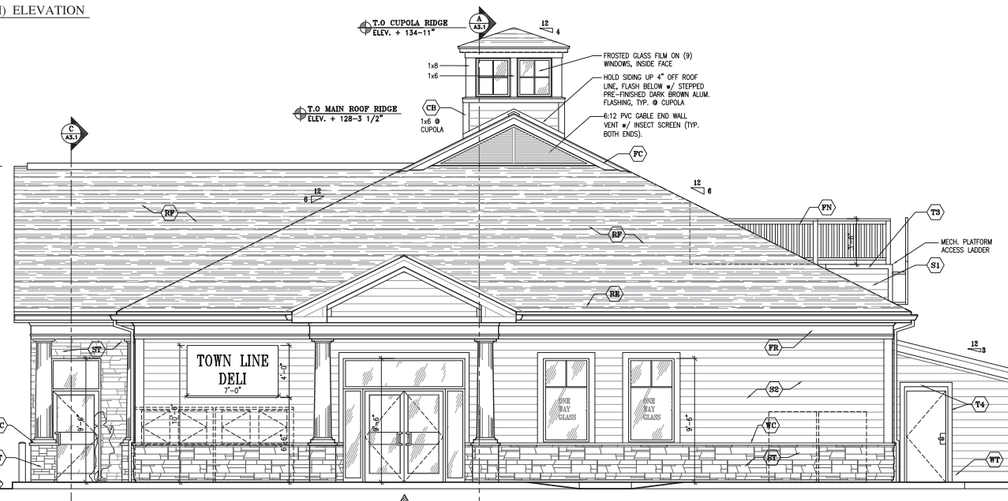
Town Line Deli



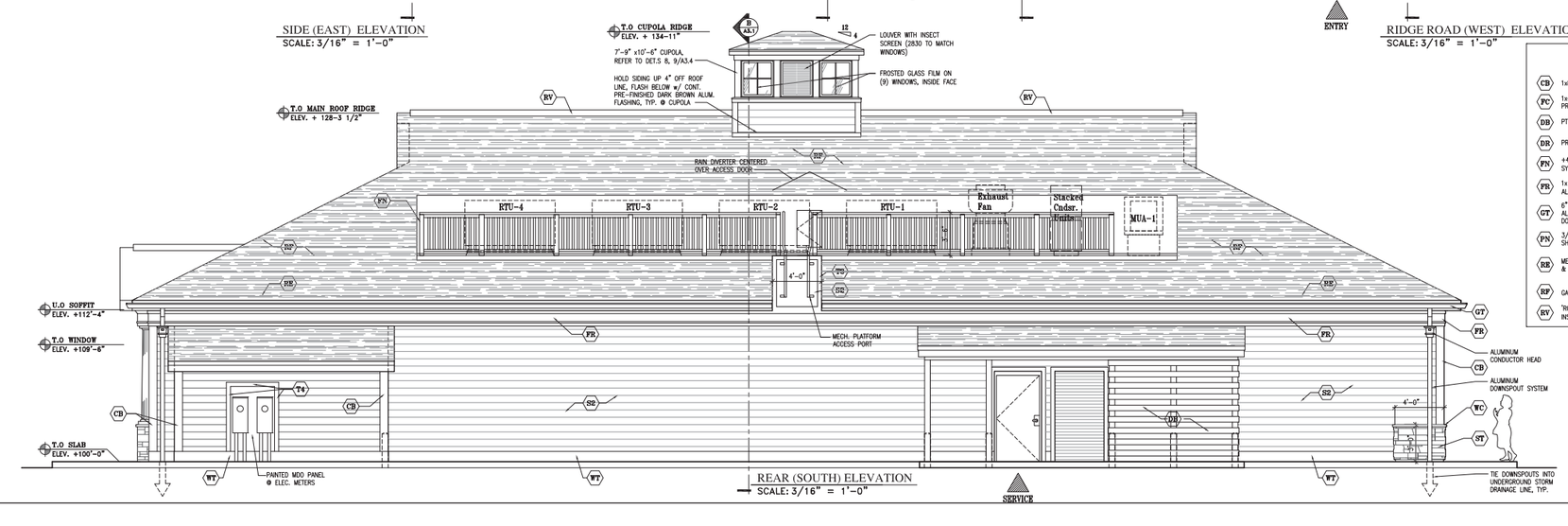
MAIN STREET (NORTH) ELEVATION
SCALE: 3/16" = 1'-0"



SIDE (EAST) ELEVATION
SCALE: 3/16" = 1'-0"



RIDGE ROAD (WEST) ELEVATION
SCALE: 3/16" = 1'-0"



REAR (SOUTH) ELEVATION
SCALE: 3/16" = 1'-0"
SERVICE

MATERIAL LEGEND:

- CB — 1x8 'HARDI' CORNER BOARDS
- FC — 1x4 ON 1x10 'HARDI' FASCIA w/ CONT. PREFINISHED ALUM. FLASHING
- DB — PT 5/4 x 6 @ 12"o.c HORIZ.
- DR — PREFINISHED BROWN ALUM. DRIP EDGE, TYP.
- FN — +42" WHITE 'PREMIER' COMPOSITE RAILING SYSTEM / HVAC SCREEN
- FR — 1x10 'HARDI' FREIZE BOARD w/ CONT. PRE-FINISHED ALUM. FLASHING (DARK BROWN)
- GT — 6" PREFINISHED WHITE ALUM. GUTTER SYSTEM ON ALUM. CLAD 1x8 FACIA – WHITE GUTTERS, BROWN DOWNSPOUTS
- PN — 3/8" PAINTED MDO PANELING OVER EXTERIOR BUILDING SHEATHING & V.B – COLOR TO BE DETERMINED
- RE — METAL EDGE ICE CUTTER w/ HEAT TRACE GUTTER & EAVE SYSTEM TIED TO T-STAT
- RF — GAF TIMBERLINE HD. G.C. TO VERIFY w/ OWNER
- RV — 'ROLL SCREEN' RIDGE AIR VENT w/ SHINGLE CAP, INSECT SCREEN & 3" THROAT Min., TYP.
- S1 — 7" T1W 'HARDI' SIDING OVER 'TYPAR' BUILDING WRAP, TYP. -COLOR: TYPE1
- S2 — 7" T1W 'HARDI' SIDING OVER 'TYPAR' BUILDING WRAP, TYP. -COLOR: TYPE2
- ST — 'VERSETTA STONE' PANEL SYSTEM OVER 'TYPAR' BUILDING WRAP, TYP.
- T3 — 1x3 'HARDI' TRIM BOARD w/ PRE-FINISHED ALUM. FLASHING @ ALL HEADS & HORIZ. TRIM BOARDS
- T4 — 1x4 'HARDI' TRIM BOARD w/ PRE-FINISHED ALUM. FLASHING @ ALL HEADS & HORIZ. TRIM BOARDS
- T6 — 1x6 'HARDI' TRIM BOARD w/ PRE-FINISHED ALUM. FLASHING @ ALL HEADS
- T10 — 1x10 'HARDI' TRIM BOARD w/ PRE-FINISHED ALUM. FLASHING @ ALL HEADS
- WC — 'VERSETTA STONE' WAINSCOT CAP
- WT — 1x10 'AZEK' WATER TABLE

06-17-19

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ISSUE DATE	
PRELIM	05-06-19
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CD's	-
REV. 1	-
REV. 2	-
PRINT	06-17-19

EXTERIOR ELEVATIONS

G2

Attachment J
Site Plans

J

Site Plans

The project site plans are included for review as a separate plan set of full-size documents.