



TOWN OF BRUNSWICK
STAFF REVIEW COMMITTEE

STAFF REVIEW COMMITTEE
- REVISED AGENDA -
BRUNSWICK TOWN HALL
85 UNION STREET
ROOM 206

WEDNESDAY, JUNE 8, 2016, 10:00 A.M.

1. **Case #16-020 Stone Cold Storage Expansion:** The Staff Review Committee (SRC) will review and approve a **Minor Development Review** application submitted by Terrance J. DeWan and Associates, on behalf of Scott Stone (Stone Cold Storage), to construct a 4800 square foot building and related site improvements. The site is located at 456 Old Portland Road within the **(MU5) Mixed Use 5/Portland Road Area, Rural Brunswick Smart Growth***, and the **Natural Resource Protection Zone, (Map 12, Lot 7)**.
2. **Other Business**
3. **Adjourn**

This agenda is mailed to owners of property within 200 feet of proposed development sites. In cases where Committee action is pending this agenda serves as notice of same. In cases where the Committee's role is to advise the Planning Board, this agenda is mailed as a courtesy along with notice of the Planning Board meeting.

The Staff Review Committee meeting is open to the public. All are invited to attend and participate. For further information call Jared Woolston at the Brunswick Department of Planning and Development (725-6660).

***6/6/2016 Added Rural Brunswick Smart Growth to agenda**

Jared Woolston, Planner
Department of Planning and Development
85 Union Street
Brunswick, Maine 04011

June 3, 2016

**RE: Application for Minor Review for Stone Cold Storage at 456 Old Portland Road
Map 7 and Lot Number 12 (REVISED FROM 05/18/2016 SUBMISSION)**

Dear Mr. Woolston,

Please accept this application for Minor Review for the addition of a second refrigerated building at Stone Cold Storage, located at 456 Old Portland Road in Brunswick.

BACKGROUND

Stone Cold Storage is a bait storage facility located at 456 Old Portland Road in Brunswick. The business has been in operation at this location since 2008. Frozen fish is currently stored on site in a single refrigerated building. Bait producers deliver the product and fisherman pick-up the product from the facility. The business employs 3-4 people to manage the facility and assist in loading and unloading the product at times of delivery and pickup.

EXISTING CONDITIONS

The business currently operates out of a 3200 sf refrigerated building with a 100 sf loading dock platform. The building has two points of access: the loading dock at the north end of the building and an at grade access point in the middle of the building's east facade. In addition to the business, there is a residential building onsite and a smaller building (200 sf) adjacent to the residence (to be removed). The driveway surface is composed of compacted gravel. The existing septic system is located north of the driveway. The area around the existing buildings is primarily lawn or low shrub vegetation. When the existing refrigerated building was constructed in 2008, several trees were planted at the front of the property and a 4' to 8' earth berm was constructed on the southwest corner of the property. This site work was completed as a visual buffer for the abutters and Old Portland Road. A stream defines the north edge of the property. There is a 23-foot grade change between the stream and the developed portion of the site. The existing building is located approximately 130 feet from the stream, well outside of the 75-foot stream setback buffer.

PROPOSED CONDITIONS

The proposed 4800 sf building will be placed perpendicular to the existing building. The two structures will be connected by a concrete platform that will allow access between the two refrigerated structures. The finish floor elevation of the new building will match that of the existing structure for ease of movement between the structures. There will be two 8ft-wide loading docks facing Old Portland Road on the west side of the building (see site plan and building elevation). The heights of the loading docks are approximately 46" above grade, allowing small box trucks and 18-wheelers to back into the loading docks. Small pick-up trucks will continue to use the at-grade access in the existing building. The pedestrian access to the buildings will be at the concrete platform between the two buildings. There are four park spaces provided for employees of the business. All other traffic will be pick-ups and drop-offs of product and do not require parking spaces.

The 200 sf structure adjacent to the residential building will be removed to make room for the new refrigerated building. The existing septic system will also be relocated to the east behind the existing residential building. This new septic system will connect to the residence. There are no bathrooms or floor drain in the proposed refrigerated building.

The existing gravel driveway will be paved. There will be no expansion of impervious surface beyond the new building. Stormwater runoff from the driveway will collect in a trench drain, located 9ft in front of the new building façade. The trench drain will extend the full width of the driveway and connect to an underground pipe that will run along the east side of the new building and discharge at an outlet stabilized with riprap just beyond the building.

All buildings, foundations, drainage infrastructure, filling, and earth moving are located outside of the 75' stream setback.

The following items are included in this submission package:

1. Completed application form for Minor Review
2. Application Fee of \$500
3. Site Plan showing site layout, grading, and drainage (one sheet)
4. HHE 200 Form - Subsurface Wastewater Disposal System Application by Dan Colby
5. Building Elevations
6. USDA Soil Map of the area
7. Streetview image of existing conditions from Old Portland Road
8. 2016 Tax Bill – Proof of Ownership
9. Boundary and Topographic Survey by Sitelines, PA. The survey was completed April 27, 2016 and the line work in the site plan is based on this survey.
10. The Stormwater Management Report by Sitelines, PA.

Please be in contact if you have further questions or would like additional information beyond what has been provided in this application. We plan to have the remaining application material submitted by the end of this week and hope to have the complete application reviewed on June 8, 2016.

We look forward to your feedback and working with the Town of Brunswick to improve upon the facilities at this successful local business.

Sincerely,

Jessica Kimball
Terrence J. DeWan & Associates
Kimball@tjda.net
207-846-0757

MINOR DEVELOPMENT REVIEW APPLICATION

1. Project Name: Stone Cold Storage Refrigeration Building Addition

2. Project Applicant

Name: Stone Cold Storage (Scott Stone)

Address: 456 Old Portland Avenue, Brunswick, ME 04011

Phone Number: 207-653-8073

3. Authorized Representative

Name: Terrence J. DeWan & Associates (Jessica Kimball)

Address: 121 West Main Street, Yarmouth, ME 04096

Phone Number: 207-846-0757

4. List of Design Consultants. Indicate the registration number, address and phone number Of any engineer, surveyor, architect, landscape architect or planner used:

1. SITE DESIGN: Terrence J. DeWan & Associates / 121 West Main St, Yarmouth, ME 04096 / 846-0757
2. SEPTIC DESIGN: Dan Colby / PO Box 125 Wiscasset, ME 04578 / 882-9742
3. FOUNDATION DESIGN: SRG Engineering / PO Box 925, Gray, ME 04039 / 657-7323
4. STORMWATER REPORT: Sitelines, PA / 8 Cumberland St., Brunswick, ME 04011 / 775-1200

5. Physical location of property being affected: 456 Old Portland Avenue, Brunswick, ME 04011

6. Lot Size: 91,009 sf

7. Zoning District: MU5

8. Indicate the interest of the applicant in the property and abutting property. For example, is the applicant the owner of the property and abutting property? If not, who owns the property subject to this application?

The applicant is the owner of the business and property.

9. Assessor's Tax Map 12 Lot Number 7 of subject property.

10. Brief description of proposed use: The business stores frozen bait product in refrigerated buildings. The use will remain unchanged with the addition of the proposed building.

11. Describe specific physical improvements to be done: The addition of a second refrigerated building and concrete pad. The total new footprint is 4900sf. The existing septic system will be relocated and the existing gravel driveway will be paved with the addition of the new building.

Owner Signature: _____

Applicant Signature (if different): _____

Required Attachments (by Applicant):

- Final Plan Check List
- Final Plan Check List Addendum for Open Space Developments (if applicable)
- Request for Waivers (if applicable)
- Required Copies of Final Plan

Required Attachment (by Planning and Development Department):

- Listing of all owners of property within 200-foot radius of property under review.

FINAL PLAN REQUIREMENTS

Key: "O" = omit; "S"=submit; "NA"=not applicable; "W" = waiver; "P" = pending

| | O | S | NA | W | P | Comments |
|---|---|---|----|---|---|---|
| Scale, date, north point, area, number of lots (if subdivision) | | X | | | | See site plan |
| Boundaries of all lots and tracts with accurate distances and bearings, locations of all permanent monuments property identified as existing or proposed. | | X | | | | See site plan |
| Certification by a professional land surveyor that the land has been surveyed and the boundaries established in accordance with the State of Maine Board of Licensure for Professional Surveyors standards for Category 1 (Standard Boundary Survey), conditions 1, 2, or 3. | | | | | X | Survey was completed April 27, 2016 and is used as base for site plan. Full size stamped survey to be submitted. |
| Existing zoning district and overlay designation. | | X | | | | See site plan |
| Names of engineer and surveyor; and professional registration numbers of those who prepared the plan. | | X | | | | See site plan and application form. |
| Names of current owner(s) of subject parcel and abutting parcels. | | X | | | | See site plan and application form. |
| Name, location, width of paving and rights-of-way, profile, cross-section dimensions, curve radii of existing and proposed streets; profiles of center-lines of proposed streets, at a horizontal scale of 1" equals 50' and vertical scale of 1 inch equals 5 feet, with all elevations referred to in U.S.G.S. datum. | | | X | | | New proposed roads or ROWs in application. |
| A general road plan noting circulation, direction, traffic control devices, street lighting and type of lighting proposed. | | | X | | | No proposed roads in application |
| Existing and proposed easements associated with the development. | | X | | | | See site plan and survey |
| Kind, location, profile and cross-section of all proposed drainage facilities, both within the development and outside of it, and a storm-water management plan which includes the submission requirements listed in the storm-water management checklist available in the Planning Department. | | | | | X | To be submitted by Sitelines, PA Engineers. |
| Location of features, natural and artificial, affecting the development, such as water bodies, wetlands, streams, vegetation, rail-roads, ditches and buildings. | | X | | | | See site plan and survey |
| Location of existing and proposed utilities; water, sewer, electrical lines, and profiles of underground facilities. Tentative locations of any private wells. | | X | | | | See site plan |

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| Existing and proposed location, size, profile and cross section of sanitary sewers; description, plan and location of other means of sewage disposal with evidence of soil suitability. | | X | | | See HHE-200 form |
| Topography with counter intervals of not more than 2 feet. | | X | | | See site plan |
| A Class A (high intensity) Soil Survey prepared in accordance with the standards of the Maine Association of Professional Soil Scientists. | | X | | | See HHE-200 form and USDA Soil Survey. Also see previously submitted Geotechnical Report completed by S.W. Cole Engineers, Inc on April 1, 2008 (submitted with initial application to establish the business at this location). |
| Location of all existing trees over 10 inches in diameter, locations of tree stands, and a plan showing all trees to removed as a result of the development proposal. | | X | | | See site plan |
| Lighting plan showing details of all proposed lighting and the location of that lighting in relation to the site. | | | X | | No lighting included with this proposal. |
| Existing locations and proposed locations, widths and profiles of sidewalks. | | | X | | No existing or proposed sidewalks included with this proposal. |
| Location map. | | X | | | See site plan |
| Approximate locations and dimensions of proposed parking areas. | | X | | | Driveway shown on site plan |
| Proposed ownership and approximate location and dimensions of open spaces for conservation and recreation. | | | X | | No open space included in proposal |
| Grading, erosion control, and landscaping plan; proposed finished grades, slopes, swells, and ground cover or other means of stabilization. | | X | | | See site plan |
| Reference to special conditions stipulated by the Planning Board, with conditions either set forth in full or on the plan or identified as specific documents filed with the Board. | | | X | | No special conditions required by Planning Board. |
| A wetlands map drawn by a specialist delineating wetland boundaries in accordance with the methods prescribed by the US Army Corps of Engineers. | | X | | | Stream is delineated on site plan and survey. Proposed building is located in upland area. |
| Dedicated public open specs, areas protected by conservation easements, and existing and proposed open spaces or recreation areas. | | | X | | No open space included in proposal. |
| Documentation of Ownership or contract. | | X | | | See 2016 Town of Brunswick Tax Bill as proof of ownership |
| Drafts of legal documents appropriate to the application, including: deeds, easements, conservation easements, deed restrictions or covenants, home/property owners association declarations and bylaws, and such other agreements or documents as are necessary to show the manner in which conservation land will be owned, maintained, and protected. | | X | | | See 2016 Town of Brunswick Tax Bill as proof of ownership |

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| Draft performance guarantee or conditional agreement. | | | X | | | No connection to town infrastructure required with this application |
| Disclosure of any required permits from the Department of Environmental Protection, Marine Resources, US Army Corps of Engineers, Department of Inland Fisheries and Wildlife, or other agencies, as applicable; or, if a permit has already been granted, a copy of that permit. | | | | | X | Permit By Rule Application to be submitted to the DEP |
| Any additional studies required by the Planning Board which are deemed necessary in accordance with this Ordinance. | | | X | | | No additional studies required by the Planning Board with this application |
| Storm water management program for the proposed project prepared by a professional engineer. | | | | | X | To be submitted by Sitelines, PA Engineers. |
| A storm water management checklist prepared by the Cumberland County Soil and Water Conservation District, made available at the Brunswick Department of Planning and Development. | | | | | X | To be submitted by Sitelines, PA Engineers. |
| An erosion and sedimentation control checklist prepared by the Cumberland County Soil and Water Conservation District. | | X | | | | See erosion control notes on the site plan |
| A statement from the Brunswick-Topsham Water District of conditions under which water will be provided. | | | X | | | To be reviewed by Town as part of review process |
| A statement from the Brunswick-Topsham Water District of its review and comments on the proposed use if the project involves development within the Aquifer Protection Zone. | | | X | | | To be reviewed by Town as part of review process |
| A Statement from the Fire Chief recommending the number, size, and location of hydrants, available pressure levels, road layout and street and project name, and any other fire protection measures to be taken. | | | X | | | To be reviewed by Town as part of review process |
| A statement from the Superintendent of the Brunswick Sewer District of the conditions under which the Sewer District will provide sewerage disposal service and approval of the sanitary sewers proposed within the development. | | | X | | | To be reviewed by Town as part of review process |
| Where a septic system is to be used, evidence of soil suitability. | | | | | X | See HHE-200 Form |
| All applicable materials necessary for the reviewing entity to review the proposal in accordance with the Criteria of Section 411. | | X | | | | See application materials and site plan |
| A plan of all buildings with new construction or expansion of an existing facility, including type, size, and footprint, floor layout, setback, elevation of first floor slab, storage, and loading areas. | | X | | | | See site plan and building elevations |

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| An elevation view of all sides of each building proposed indicating height, color, bulk, surface treatment, and signage. | | X | | | | See building elevations |
| A circulation plan describing all pedestrian and vehicle traffic flow on surrounding road systems. | | | X | | | Proposal does not include change in road circulation systems. |
| The size and proposed location of water supply and sewage disposal systems and provision for future expansion of those systems. | | X | | | | See site plan and HHE-200 form |
| A site landscaping plan indicating grade change, vegetation to be preserved, new plantings used to stabilize areas of cut and fill, screening, the size, location and purpose and type of vegetation. | | X | | | | See site plan |

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

| | | | |
|--|--|---|--------------------------------------|
| PROPERTY LOCATION | | >> CAUTION: LPI APPROVAL REQUIRED << | |
| City, Town, or Plantation | <u>Brunswick</u> | Town/City | Permit # _____ |
| Street or Road | <u>456 Old Portland Rd</u> | Date Permit Issued | Fee: \$ _____ Double Fee Charged () |
| Subdivision, Lot # | | | L.P.I. # _____ |
| OWNER/APPLICANT INFORMATION | | Local Plumbing Inspector Signature _____ | |
| Name (last, first, MI) | <u>Stone, Scott</u> <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Applicant | Owner <input type="checkbox"/> Town <input type="checkbox"/> State | |
| Mailing Address of Owner/Applicant | <u>903 Sligo Road North Yarmouth, Me</u> | The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules. | |
| Daytime Tel. # | <u>207-653-8073 07097</u> | Municipal Tax Map # _____ Lot # _____ | |
| OWNER OR APPLICANT STATEMENT | | CAUTION: INSPECTION REQUIRED | |
| I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit. | | I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved | |
| Signature of Owner or Applicant _____ Date _____ | | Local Plumbing Inspector Signature _____ (2nd) date approved _____ | |

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| PERMIT INFORMATION | | |
| TYPE OF APPLICATION | THIS APPLICATION REQUIRES | DISPOSAL SYSTEM COMPONENTS |
| <input type="checkbox"/> 1. First Time System <input checked="" type="checkbox"/> 2. Replacement System Year installed: <u>2</u> <input checked="" type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. 25% Expansion <input type="checkbox"/> b. 25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion | <input type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input checked="" type="checkbox"/> 3. Replacement System Variance <input checked="" type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit | <input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered treatment tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components |
| SIZE OF PROPERTY | DISPOSAL SYSTEM TO SERVE | TYPE OF WATER SUPPLY |
| <u>2</u> ± 0 SQ. FT. ACRES | <input checked="" type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: <u>2</u> <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ (specify) _____ Current Use <input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped | <input type="checkbox"/> 1. Public <input type="checkbox"/> 2. Other <input type="checkbox"/> 3. Other <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other |
| SHORELAND ZONING | | |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | |

| | | | |
|---|---|---|--|
| DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3) | | | |
| TREATMENT TANK | DISPOSAL FIELD TYPE & SIZE | GARBAGE DISPOSAL UNIT | DESIGN FLOW |
| <input checked="" type="checkbox"/> 1. Concrete <input checked="" type="checkbox"/> a. Regular <input type="checkbox"/> b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: <u>1000</u> GAL. | <input checked="" type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. cluster array <input type="checkbox"/> c. Linear <input type="checkbox"/> b. regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: <u>600</u> sq. ft. <input type="checkbox"/> lin. ft. | <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. Increase in tank capacity <input type="checkbox"/> d. Filter on Tank Outlet | <u>180</u> gallons per day BASED ON: <input checked="" type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities |
| SOIL DATA & DESIGN CLASS | DISPOSAL FIELD SIZING | EFFLUENT/EJECTOR PUMP | LATITUDE AND LONGITUDE |
| PROFILE <u>7</u> CONDITION <u>C</u> at Observation Hole # <u>A</u> Depth <u>16"</u> of Most Limiting Soil Factor | <input type="checkbox"/> 1. Medium---2.6 sq. ft. / gpd <input checked="" type="checkbox"/> 2. Medium---Large 3.3 sq. ft. / gpd <input type="checkbox"/> 3. Large---4.1 sq. ft. / gpd <input type="checkbox"/> 4. Extra Large---5.0 sq. ft. / gpd | <input type="checkbox"/> 1. Not Required <input checked="" type="checkbox"/> 2. May Be Required <input type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: <u>75-100</u> gallons | at center of disposal area Lat. <u>N43</u> d <u>54</u> m <u>19.7</u> s Lon. <u>W67</u> d <u>02</u> m <u>31.0</u> s if g.p.s, state margin of error: <u>±</u> |

| | |
|--|---|
| SITE EVALUATOR STATEMENT | |
| I certify that on <u>2/22/2016</u> (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241). | |
| Site Evaluator Signature <u>Daniel P. Colby</u> | SE # <u>786</u> Date <u>5/18/2016</u> |
| Site Evaluator Name Printed <u>Daniel P. Colby</u> | Telephone Number <u>207-882-9742</u> E-mail Address <u>kempsoilsurvey@yahoo</u> |

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

Bruswick

456 Old Portland Road

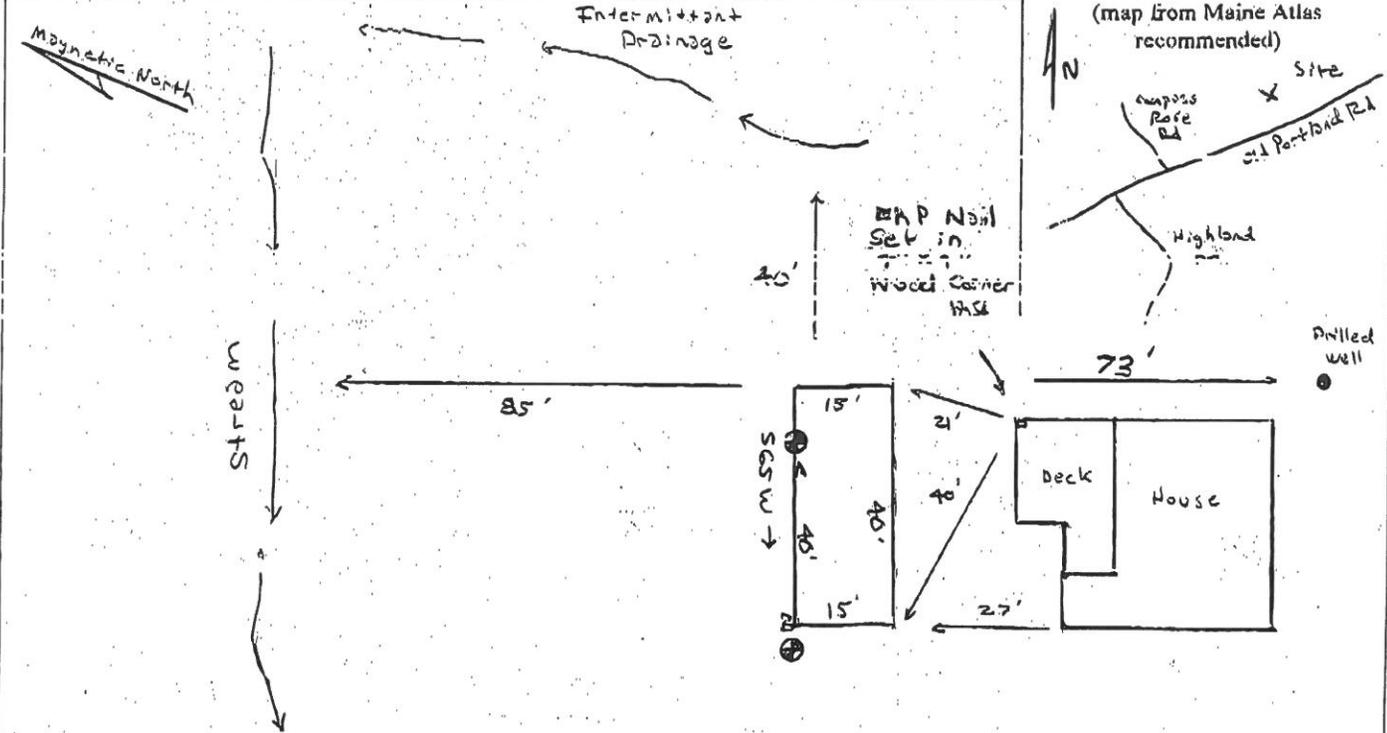
Scott Stone

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 A Test Pit Boring
 1" Depth of Organic Horizon Above Mineral Soil

| Depth Below Mineral Soil Surface (inches) | Texture | Consistency | Color | Mottling |
|---|-------------------|-------------|------------|----------|
| 0 | Loom | Friable | Dark Brown | |
| 10 | Coarse Sandy Loom | | Tan | |
| 20 | Silt Loom | | olive | Evident |
| 30 | | Firm | | |
| 40 | | | | |
| 50 | | | | |

| | | | |
|---|------------------|---------------------------|--|
| Soil Classification Profile <u>ZC</u> Condition | Slope <u>4</u> % | Limiting Factor <u>16</u> | <input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth |
|---|------------------|---------------------------|--|

Observation Hole B Test Pit Boring
 1" Depth of Organic Horizon Above Mineral Soil

| Depth Below Mineral Soil Surface (inches) | Texture | Consistency | Color | Mottling |
|---|------------|-------------|------------|----------|
| 0 | Loom | Friable | Dark Brown | |
| 10 | Sandy Loom | | Tan | |
| 20 | | | | Evident |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |

| | | | |
|---|------------------|---------------------------|--|
| Soil Classification Profile <u>ZC</u> Condition | Slope <u>5</u> % | Limiting Factor <u>24</u> | <input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth |
|---|------------------|---------------------------|--|

David [Signature]

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5/18/2016

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SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5812 FAX (207) 287-4177

Town, City, Plantation
Brunswick

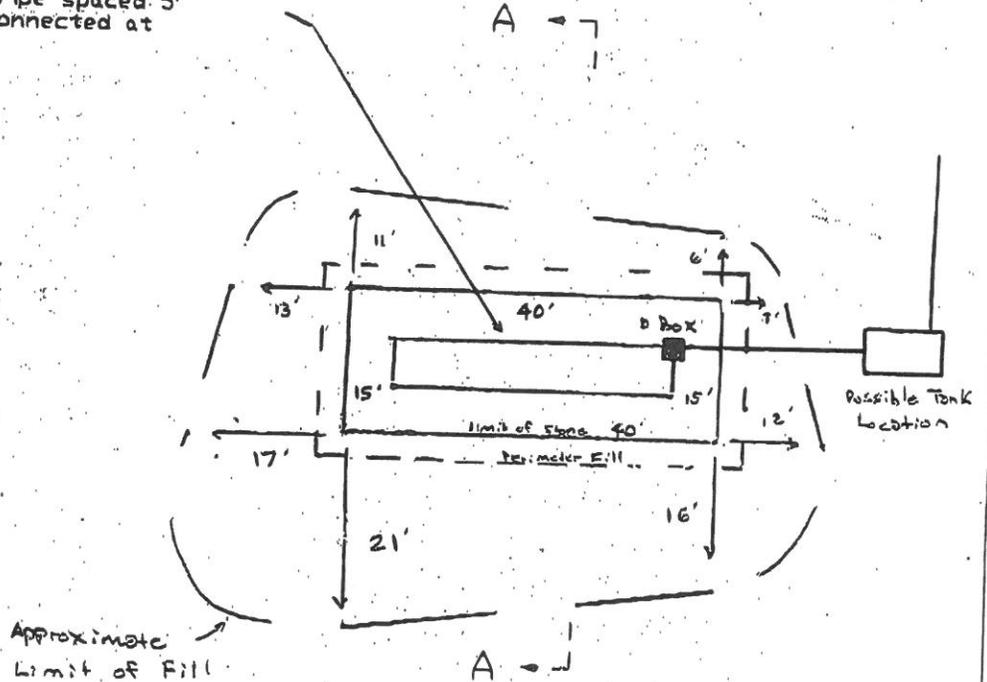
Street, Road, Subdivision
456 Old Portland Road

Owner's Name
Scott Stone

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20' FT.

2 - 30' lengths of 4' Diameter Perforated Pipe spaced 5' apart and connected at the ends.



FILL REQUIREMENTS

Depth of Fill (Upslope) 12" - 27"
Depth of Fill (Downslope) 23" - 36"

CONSTRUCTION ELEVATIONS

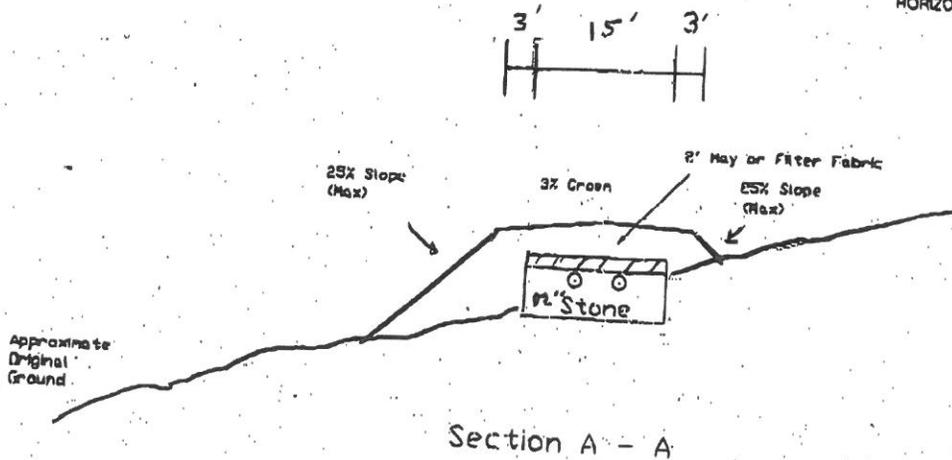
Finished Grade Elevation -18"
Top of Distribution Pipe or Proprietary Device -31"
Bottom of Disposal Area -42"

ELEVATION REFERENCE POINT

Location & Description: Nail set in Cherry Tree 9" Above Ground
Reference Elevation: 0'0"

DISPOSAL AREA CROSS SECTION

SCALE:
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 20'



David [Signature]
Site Evaluator Signature

286
SE

5/18/2016
Date

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form shall be attached to an application (HHE-200) for the proposed replacement system which requires a variance to the Rules. The LPI shall review the Replacement System Variance Request an HHE-200 and may approve the Request if all of the following requirements can be met, and the variance(s) requested fall within the limits of LPI's authority:

1. The proposed design meets the definition of a Replacement System as defined in the Rules (Sec. 2006)
2. There will be no change in use of the structure except as authorized for one-time exempted expansions outside the shoreland zone of major waterbodies/courses.
3. The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.
4. The BOD5 plus S.S. content of the wastewater is no greater than that of normal domestic effluent.

| | | |
|--|-------------------------------|--------------------------|
| GENERAL INFORMATION | | Town of <u>Brunswick</u> |
| Permit No. _____ | Date Permit Issued _____ | |
| Property Owner's Name: <u>Scott Stone</u> | Tel. No.: <u>207-653-8073</u> | |
| System's Location: <u>456 Old Portland Road Brunswick, Me.</u> | | |
| Property Owner's Address: <u>903 Sligo Road</u> | | |
| (if different from above) <u>North Yarmouth, Me. 04097</u> | | |

SPECIFIC INSTRUCTIONS TO THE:

LOCAL PLUMBING INSPECTOR (LPI):

If any of the variances exceed your approval authority and/or do not meet all of the requirements listed under the Limitations Section above, then you are to send this Replacement System Variance Request, along with the Application, to the Department for review and approval consideration before issuing a Permit. (See reverse side for Comments Section and your signature.)

SITE EVALUATOR:

If after completing the Application, you find that a variance for the proposed replacement system is needed, complete the Replacement Variance Request with your signature on reverse side of form.

PROPERTY OWNER:

If has been determined by the Site Evaluator that a variance to the Rules is required for the proposed replacement system. This variance request is due to physical limitations of the site and/or soil conditions. Both the Site Evaluator and the LPI have considered the site/soil restrictions and have concluded that a replacement system in total compliance with the Rules is not possible.

PROPERTY OWNER

I understand that the proposed system requires a variance to the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner, and I will promptly notify the Local Plumbing Inspector and make any corrections required by the Rules. By signing the variance request form, I acknowledge permission for representatives of the Department to enter onto the property to perform such duties as may be necessary to evaluate the variance request.

SIGNATURE OF OWNER

DATE

LOCAL PLUMBING INSPECTOR

I, _____, the undersigned, have visited the above property and have determined to the best of my knowledge that it cannot be installed in compliance with the Rules. As a result of my review of the Replacement Variance Request, the Application, and my on-site investigation, I (check and complete either a or b):

a. (approve, disapprove) the variance request based on my authority to grant this variance. Note: If the LPI does not give his approval, he shall list his reasons for denial in Comments Section below and return to the applicant. --OR--

b. find that one or more of the requested Variances exceeds my approval authority as LPI. I (recommend, do not recommend) the Department's approval of the variances. Note: If the LPI does not recommend the Department's approval, the reasons shall be stated in Comments Section below as to why the proposed replacement system is not being recommended.

Comments: _____

LPI SIGNATURE

DATE

HHE-204 Rev 10/02

FORMS

Replacement System Variance Request

| VARIANCE CATEGORY | LIMIT OF LPI'S APPROVAL AUTHORITY | | | | | | VARIANCE REQUESTED TO: | |
|---|-----------------------------------|-------------------------|------------------------|---------------------------|-------------------------|-----------------------|------------------------|--------------|
| | | | | | | | | |
| SOILS | | | | | | | | |
| Soil Profile | Ground Water Table | | | | | | to 7" | inches |
| Soil Condition | Restrictive Layer | | | | | | to 7" | inches |
| from HHE-200 | Bedrock | | | | | | to 12" | inches |
| SETBACK DISTANCES (in feet) | Disposal Fields | | | Septic Tanks | | | Disposal Fields | Septic Tanks |
| From | Less than 1000 gpd | 1000 to 2000 gpd | Over 2000 gpd | Less than 1000 gpd | 1000 to 2000 gpd | Over 2000 gpd | To | To |
| Wells with water usage of 2000 or more gpd or public water supply wells | 300 ft [a] | 300 ft [a] | 300 ft [a] | 100 ft [a] | 100 ft [a] | 100 ft [a] | | |
| Owner's wells | 100 down to 60 ft | 200 down to 100 ft | 300 down to 150 ft | 100 down to 50 ft [b] | 100 down to 50 ft | 100 down to 50 ft | 73' | 60' |
| Neighbor's wells | 100 down to 60 ft [b] | 200 down to 120 ft [b] | 300 down to 180 ft [b] | 100 down to 50 ft [b] | 100 down to 75 ft [b] | 100 down to 75 ft [b] | | |
| Water supply line | 10 ft [a] | 20 ft [a] | 25 ft [a] | 10 ft [a] | 10 ft [a] | 10 ft [a] | | |
| Water course, major - for replacements only, see Table 400.4 for major expansions | 100 down to 60 ft | 200 down to 120 ft | 300 down to 180 ft | 100 down to 50 ft | 100 down to 50 ft | 100 down to 50 ft | 85' | |
| Water course, minor | 50 down to 25 ft | 100 down to 50 ft | 150 down to 75 ft | 50 down to 25 ft | 50 down to 25 ft | 50 down to 25 ft | 40' | |
| Drainage ditches | 25 down to 12 ft | 50 down to 25 ft | 75 down to 35 ft | 25 down to 12 ft | 25 down to 12 ft | 25 down to 12 ft | | |
| Edge of fill extension -- Coastal wetlands, special freshwater wetlands, great ponds, rivers, streams | 25 ft [d] | 25 ft [d] | 25 ft [d] | 25 ft [d] | 25 ft [d] | 25 ft [d] | | |
| Slopes greater than 3:1 | 10 ft | 18 ft | 25 ft | N/A | N/A | N/A | | |
| No full basement [e.g. slab, frost wall, columns] | 15 down to 7 ft | 30 down to 15 ft | 40 down to 20 ft | 8 down to 5 ft | 14 down to 7 ft | 20 down to 10 ft | | |
| Full basement (below grade foundation) | 20 down to 10 ft | 30 down to 15 ft | 40 down to 20 ft | 8 down to 5 ft | 14 down to 7 ft | 20 down to 10 ft | | |
| Property lines | 10 down to 5 ft [c] | 18 down to 9 ft [c] | 20 down to 10 ft [c] | 10 down to 4 ft [c] | 15 down to 7 ft [c] | 20 down to 10 ft [c] | | |
| Burial sites or graveyards, measured from the down toe of the fill extension | 25 ft | 25 ft | 25 ft | 25 ft | 25 ft | 25 ft | | |
| OTHER | | | | | | | | |
| 1. Fill extension Grade - to 3:1 | | | | | | | | |
| 2. | | | | | | | | |
| 3. | | | | | | | | |

- Footnotes: [a.] Single-family well setbacks may be reduced as prescribed in Section 701.2.
 [b.] This distance may be reduced to 25 feet, if the septic or holding tank is tested in the plumbing inspector's presence and shown to be watertight or of monolithic construction.
 [c.] Additional setbacks may be needed to prevent fill material extensions from encroaching onto abutting property.
 [d.] Additional setbacks may be required by local Shoreland zoning.
 [e.] Natural Resource Protection Act requires a 25 feet setback, on slopes of less than 20%, from the edge of soil disturbance and 100 feet on slopes greater than 20%. See Chapter 15.
 [f.] May not be any closer to neighbors well than the existing disposal field or septic tank unless written permission is granted by the neighbor. This setback may be reduced for single family houses with Department approval. See Section 702.3.
 [g.] The fill extension shall reach the existing ground before the 3:1 slope or within 100 feet of the disposal field.
 [h.] See Section 1402.10 for special procedures when these minimum setbacks cannot be achieved.



 SITE EVALUATOR'S SIGNATURE

5/18/2016

 DATE

FOR USE BY THE DEPARTMENT ONLY

The Department has reviewed the variance(s) and (does does not) give its approval. Any additional requirements, recommendations, or reasons for the Variance denial, are given in the attached letter.

 SIGNATURE OF THE DEPARTMENT

 DATE

Colby & Associates Daniel P. Colby

313 Bradford Road ♦ Wiscasset, Maine 04578
Phone (207)-882-9742 ♦ Fax (207)-882-9742

General Notes

1) Property Information as supplied by owner, applicant, or representative. Therefore such information shall be verified as correct by the owner or applicant prior to signing the application. Property lines not shown herein are considered to be more than 50' from the disposal area.

rocks greater than 3" in size. The top 4" in cover shall be established of good vegetative cover and seeded or covered with a layer of 3" to 6" wood chips. If wood chips are to be used they shall be maintained to prevent erosion.

3) Work to be done in accordance with the rules.

4) No wells were apparent within 100' of the disposal area. Owner to verify before signing this application.

5) All work on disposal area to be performed under dry conditions.

6) Minimum separation distances required (unless reduced by variance)

Any well to disposal area..... 100'

Any well to septic tank..... 100'

Septic tank to foundation..... 8'

Septic Field to Full Foundation..... 20'

Septic Field to Slab or Frost Wall..... 15'

Other separation distances as per rules.

7) Fill shall be placed in 8" compacted lifts.

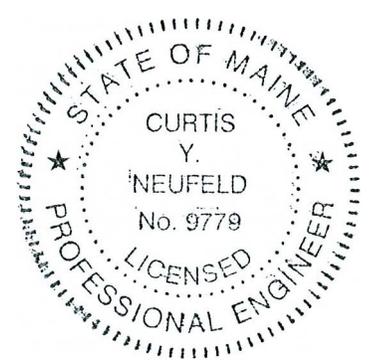
8) Remove vegetation and scarify original soil under entire disposal area and fill extensions before placing fill. Bottom 4" of fill shall be mixed with original ground to improve infiltration.

9) This Site Evaluation has been done in compliance with the Maine State Plumbing Code. The approval and or design may be subject to more restrictive local ordinances. The Local Plumbing inspector should be contacted for final review and approval.

10) Any questions should be directed to Daniel P. Colby at the above address.

**Stone Cold Storage Site Expansion
456 Old Portland Road, Brunswick, Maine**

STORMWATER MANAGEMENT PLAN



Introduction

Stone Cold Storage proposes to expand their existing facilities by adding a 4,800 s.f. building to the northeast of the existing 3,200 s.f. building. Additionally, the existing gravel truck maneuvering area will be paved as part of the project.

The site drains to Mill Stream, which runs to the north of the parcel. The site has been used as a storage facility since 2008 and the area to be paved has been gravel surface since prior to that. The net increase in impervious area will be minimal. The project is not located within the direct watershed of an Urban Impaired Stream (UIS) as designated by the Maine Department of Environmental Protection (DEP). As the project will result in less than 1 acre of new impervious area and less than an acre of disturbance, there are no state permits required.

This study is intended to assess the changes in the stormwater runoff rates resulting from the proposed development on the Applicant's lot.

Parcel Description

The parcel is currently used by the applicant as a cold storage facility. There is an existing 3,200 s.f. warehouse building, 11,325 s.f. gravel area and shed, and a 1,266 s.f. footprint residential style building located on the parcel. The parcel is located at a high point on the north side Old Portland Road. The terrain on the south side of the road is higher in elevation; however, the slope is blocked by railroad tracks and Old Portland Road such that no off-site area other than the roadway drains onto or across the parcel. The parcel generally slopes to the north where runoff drains to Mill Stream in a distributed fashion.

Project Description

The project includes construction of a new 4,800 s.f. storage building perpendicular to the existing building. A part of building will be constructed over areas that are currently hard packed gravel surfaces. As part of the project most of the remaining gravel services will be paved. A trench drain will be installed parallel to the new building to collect runoff from the paved areas. The trench drain will convey water to the east and north of the building where it will discharge to a riprap apron. The roof of the new building will have a shallow pitch to the north. Runoff from the roof will fall onto a gravel drip edge and subsequently drain to the north via sheet flow.

Study Methodology

Topographical data was provided to Sitelines, PA by Terrence J. DeWan & Associates. 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 (USDA) Web Soil Survey Database. The Applicant's parcel includes the soil classifications listed below. Soils units found in the development area are primarily Buxton.

SOILS TYPES IN LOCAL STUDY AREA

| Soils Series | Symbol(s) | Hydrologic Group (HSG) ** |
|--------------|-----------|---------------------------|
| Buxton | BuB | C |
| Buxton | BuC2 | D |
| Scantic | Sn | D |

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

These soils have low permeability and will not significantly attenuate the rates of runoff from the relatively small parcel. Since the area to be altered is primarily the vehicle maneuvering area, that is the only area analyzed.

Erosion and Sediment Control

The Contractor will be responsible for maintaining the erosion and sediment control BMPs throughout construction. After the site is stabilized and accepted by the Owner, he will be responsible for maintaining the permanent BMPs. Disturbed area will be minimized by impacting only the amount of land required for the development.

Major site work activities and their sequence follow:

1. Install stabilized construction entrance.
2. Set sediment barrier and erosion control measures around the perimeter of the limits of work.
3. Clear and grub work site as needed to execute plans using caution not to over expose the site. Topsoil salvaged shall be stockpiled and protected against erosion.
4. Install storm drainage and infrastructure, including access.
5. Construct building foundation and paved areas.
6. Remove any fine sediment deposition from paved areas.
7. Loam, seed, and mulch disturbed areas.
8. Construct subsurface sand filter. (Protect from heavy equipment)
9. Monitor site for signs of erosion monthly and after major storm events.
10. Removal of temporary erosion control measures. Ninety (90) days post construction or upon satisfactory establishment of vegetation has been obtained.
11. Inspect site semi-annually for any sign of erosion or area requiring additional seeding.

The contractor shall monitor the disturbed area for signs of erosion or sediment transport off-site and take corrective action immediately. Inspections shall be logged using the form supplied in the stormwater facilities maintenance plan and kept on file. Completed logs shall be maintained by the Applicant after construction.

General Standard

Not including the existing buildings, the proposed project will result in approximately 10,800 s.f. of paved area and a new 4,800 s.f. footprint building (15,600 s.f. total). The site currently has approximately 11,325 s.f. of gravel area, so the project will have an increase of approximately 4,275 s.f. The paved area will be collected by the trench drain and conveyed to a riprap outfall northeasterly of the building. The trench drain will provide an opportunity for capturing coarse sediment. The trench drain will discharge to an outfall stabilized with a riprap apron. The riprap apron is located over 50 feet from the wetland area associated with Mill Stream. The overland flow between the outfall and the wetland area will provide some opportunity for finer sediment to be deposited. This configuration will be an improvement over the current situation where gravels from the parking lot may washout over a considerably larger area.

A HydroCAD model has been prepared to demonstrate the trench drain and 12" outfall have the capacity to handle the design storms. The results of the HydroCAD model are included for review.

Flooding Standards

The property is located 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 10 of 35 (Community Panel 230042-0010 B, Effective January 3, 1986). An excerpt of the applicable FIRM is included as an Attachment to this section.

Conclusion

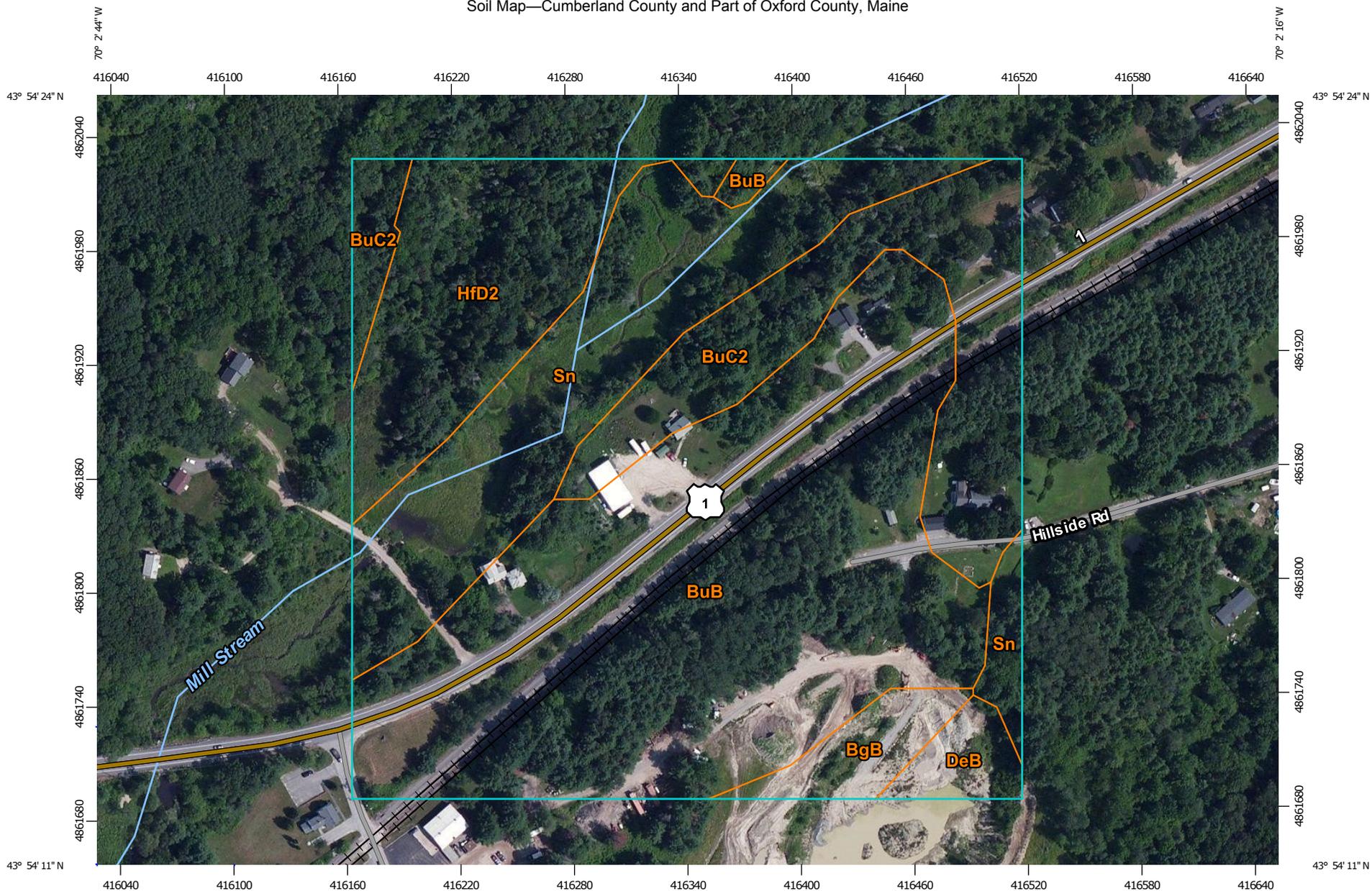
The construction of a new 4,800 s.f. storage building and paving of the existing gravels areas at the Stone Cold Storage business will not have an adverse impact on the parcel or receiving drainageways. Through the implementation of erosion and sedimentation control measures and best management practices, the construction will not result in undue sediment transport.

Attachment 1 – Soils Data

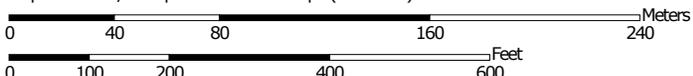
Attachment 2 – FIRM excerpt

Attachment 3 – HydroCAD Model

Soil Map—Cumberland County and Part of Oxford County, Maine



Map Scale: 1:2,860 if printed on A landscape (11" x 8.5") sheet.



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



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Cumberland County and Part of Oxford County, Maine

Survey Area Data: Version 11, Sep 17, 2015

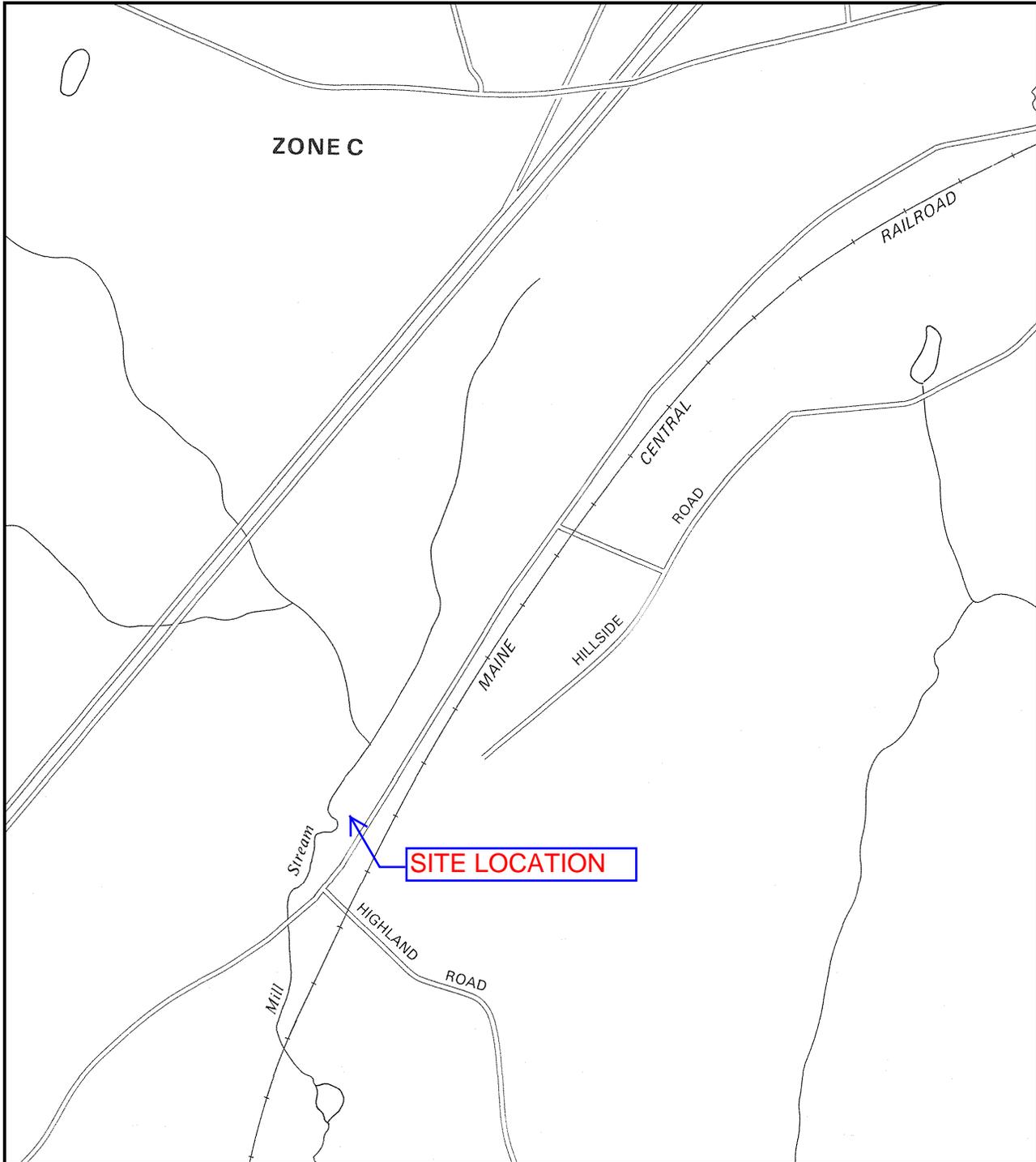
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 20, 2010—Jul 18, 2010

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

Map Unit Legend

| Cumberland County and Part of Oxford County, Maine (ME005) | | | |
|--|--|--------------|----------------|
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
| BgB | Belgrade very fine sandy loam, 0 to 8 percent slopes | 0.9 | 2.9% |
| BuB | Buxton silt loam, 3 to 8 percent slopes | 13.5 | 45.4% |
| BuC2 | Buxton silt loam, 8 to 15 percent slopes, eroded | 4.9 | 16.6% |
| DeB | Deerfield loamy sand, 3 to 8 percent slopes | 0.6 | 2.1% |
| HfD2 | Hartland very fine sandy loam, 15 to 25 percent slopes, eroded | 3.9 | 13.2% |
| Sn | Scantic silt loam, 0 to 3 percent slopes | 5.9 | 19.8% |
| Totals for Area of Interest | | 29.6 | 100.0% |



ZONE C

RAILROAD

CENTRAL
ROAD

MAINE
HILLSIDE
ROAD

Stream

SITE LOCATION

HIGHLAND
ROAD

Mill



APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP**

TOWN OF
BRUNSWICK, MAINE
CUMBERLAND COUNTY

PANEL 10 OF 35
(SEE MAP INDEX FOR PANELS NOT PRINTED)

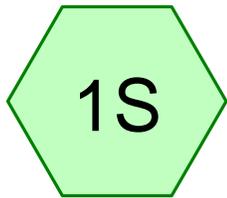
COMMUNITY-PANEL NUMBER
230042 0010 B

EFFECTIVE DATE:
JANUARY 3, 1986

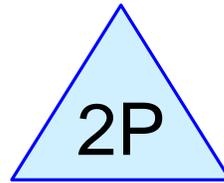


Federal Emergency Management Agency

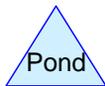
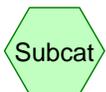
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



Paved Area



Trench Drain



3094-Post

Prepared by Sitelines PA

HydroCAD® 7.10 s/n 001100 © 2005 HydroCAD Software Solutions LLC

Submitted 5-20-16

Type III 24-hr 2-Year Rainfall=3.00"

Page 2

5/20/2016

Subcatchment 1S: Paved Area

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.46 cfs @ 12.07 hrs, Volume= 0.108 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.00"

| Area (ac) | CN | Description |
|-----------|----|-----------------------|
| 0.500 | 98 | Paved parking & roofs |

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

Pond 2P: Trench Drain

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.500 ac, Inflow Depth > 2.59" for 2-Year event
 Inflow = 1.46 cfs @ 12.07 hrs, Volume= 0.108 af
 Outflow = 1.45 cfs @ 12.08 hrs, Volume= 0.108 af, Atten= 1%, Lag= 0.7 min
 Primary = 1.45 cfs @ 12.08 hrs, Volume= 0.108 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 8.64' @ 12.08 hrs Surf.Area= 100 sf Storage= 64 cf
 Plug-Flow detention time= 2.5 min calculated for 0.108 af (100% of inflow)
 Center-of-Mass det. time= 1.6 min (740.1 - 738.5)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1 | 8.00' | 300 cf | 1.00'W x 100.00'L x 3.00'H Prismatic |

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|--|
| #1 | Primary | 8.00' | 12.0" x 50.0' long Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 6.00' S= 0.0400 '/ Cc= 0.900 n= 0.012 |

Primary OutFlow Max=1.41 cfs @ 12.08 hrs HW=8.63' (Free Discharge)
 ↑**1=Culvert** (Inlet Controls 1.41 cfs @ 2.7 fps)

3094-Post

Prepared by Sitelines PA

HydroCAD® 7.10 s/n 001100 © 2005 HydroCAD Software Solutions LLC

Submitted 5-20-16

Type III 24-hr 10-Year Rainfall=4.60"

Page 3

5/20/2016

Subcatchment 1S: Paved Area

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.26 cfs @ 12.07 hrs, Volume= 0.169 af, Depth> 4.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

| Area (ac) | CN | Description |
|-----------|----|-----------------------|
| 0.500 | 98 | Paved parking & roofs |

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

Pond 2P: Trench Drain

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.500 ac, Inflow Depth > 4.05" for 10-Year event
 Inflow = 2.26 cfs @ 12.07 hrs, Volume= 0.169 af
 Outflow = 2.25 cfs @ 12.08 hrs, Volume= 0.169 af, Atten= 1%, Lag= 0.7 min
 Primary = 2.25 cfs @ 12.08 hrs, Volume= 0.169 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 8.85' @ 12.08 hrs Surf.Area= 100 sf Storage= 85 cf
 Plug-Flow detention time= 2.1 min calculated for 0.169 af (100% of inflow)
 Center-of-Mass det. time= 1.3 min (736.2 - 734.9)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1 | 8.00' | 300 cf | 1.00'W x 100.00'L x 3.00'H Prismatic |

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|--|
| #1 | Primary | 8.00' | 12.0" x 50.0' long Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 6.00' S= 0.0400 '/ Cc= 0.900 n= 0.012 |

Primary OutFlow Max=2.17 cfs @ 12.08 hrs HW=8.83' (Free Discharge)↑**1=Culvert** (Inlet Controls 2.17 cfs @ 3.1 fps)

3094-Post

Prepared by Sitelines PA

HydroCAD® 7.10 s/n 001100 © 2005 HydroCAD Software Solutions LLC

Submitted 5-20-16

Type III 24-hr 25-Year Rainfall=5.50"

Page 4

5/20/2016

Subcatchment 1S: Paved Area

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.71 cfs @ 12.07 hrs, Volume= 0.203 af, Depth> 4.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.50"

| Area (ac) | CN | Description |
|-----------|----|-----------------------|
| 0.500 | 98 | Paved parking & roofs |

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

Pond 2P: Trench Drain

[82] Warning: Early inflow requires earlier time span

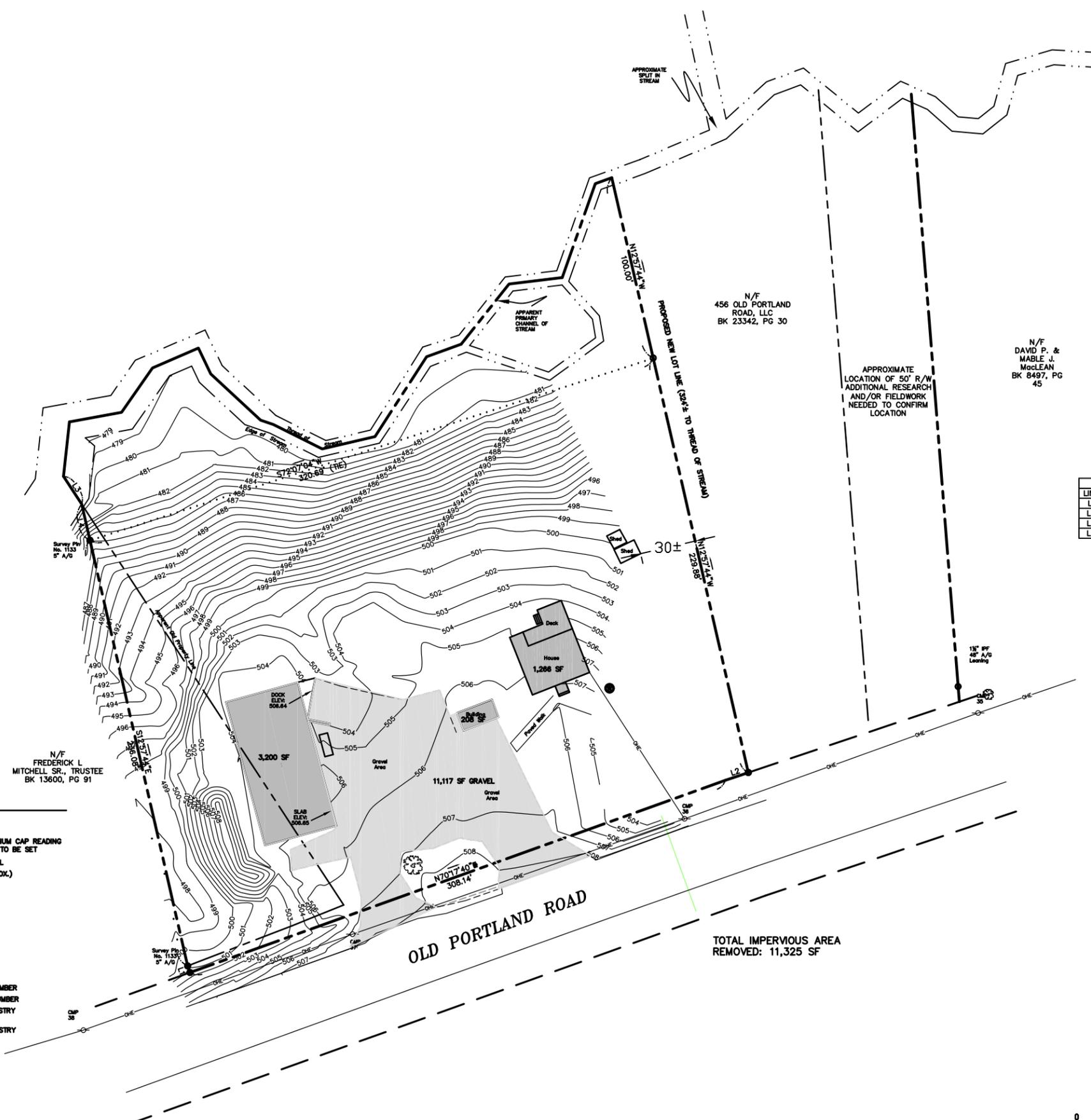
Inflow Area = 0.500 ac, Inflow Depth > 4.87" for 25-Year event
 Inflow = 2.71 cfs @ 12.07 hrs, Volume= 0.203 af
 Outflow = 2.68 cfs @ 12.08 hrs, Volume= 0.203 af, Atten= 1%, Lag= 0.7 min
 Primary = 2.68 cfs @ 12.08 hrs, Volume= 0.203 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 8.99' @ 12.08 hrs Surf.Area= 100 sf Storage= 99 cf
 Plug-Flow detention time= 2.0 min calculated for 0.203 af (100% of inflow)
 Center-of-Mass det. time= 1.2 min (735.1 - 733.9)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1 | 8.00' | 300 cf | 1.00'W x 100.00'L x 3.00'H Prismatic |

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|--|
| #1 | Primary | 8.00' | 12.0" x 50.0' long Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 6.00' S= 0.0400 '/ Cc= 0.900 n= 0.012 |

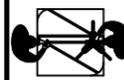
Primary OutFlow Max=2.60 cfs @ 12.08 hrs HW=8.97' (Free Discharge)
 ↑**1=Culvert** (Inlet Controls 2.60 cfs @ 3.3 fps)

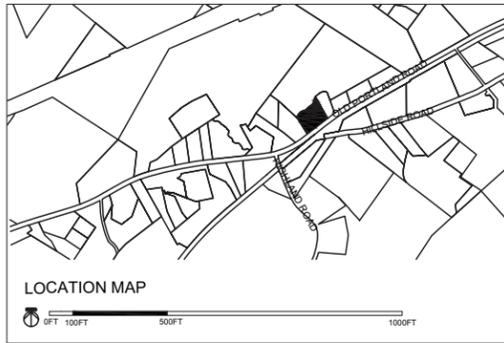


| LINE TABLE | | |
|------------|---------------|----------|
| LINE | BEARING | DISTANCE |
| L1 | S 19°42'20" E | 3.77' |
| L2 | N 71°29'23" E | 13.12' |
| L3 | S 33°14'23" E | 17.99' |
| L4 | S 12°57'44" E | 20.00' |

| LEGEND | |
|---------|--|
| ● | MONUMENT FOUND |
| ○ | IRON MARKER FOUND |
| ○ | 5/8" REBAR TOPPED WITH AN ALUMINUM CAP READING "BRUCE W. MARTINSON - PLS 2137" TO BE SET |
| --- | BOUNDARY LINE OF SURVEYED PARCEL |
| - - - | BOUNDARY LINE OF ADJUTERS (APPROX.) |
| --- | ROAD RIGHT OF WAY LINE (APPROX.) |
| --- | COMPUTATIONAL TIE LINE |
| ○-○-○-○ | STONE WALL (APPROX.) |
| --- | EDGE OF TRAVELED WAY |
| --- | UTILITY LINE |
| ○-13 | UTILITY POLE WITH NUMBER |
| ○ | IRON PIPE FOUND |
| ○ | IRON ROD FOUND |
| ○ | DRILL HOLE |
| ○ | ARBITRARY TRAVERSE POINT WITH NUMBER |
| ○ | ARBITRARY COMPUTATIONAL POINT NUMBER |
| ○ | DEED BOOK & PAGE IN COUNTY REGISTRY OF DEEDS |
| ○ | PLAN BOOK & PAGE IN COUNTY REGISTRY OF DEEDS |
| --- | RIGHT OF WAY |
| --- | NOW OR FORMERLY HELD BY |
| --- | ACRES |
| ± | MORE OR LESS |
| ○ | SEWER MANHOLE |
| ☆ | LIGHT POLE |
| ■ | CATCH BASIN |
| ■ | WATER SHUT OFF |
| ■ | HYDRANT |
| ■ | SIGN |
| ■ | WATER VALVE |
| ○ | ELEVATION TEMPORARY BENCH MARK |
| ○ | TEST PIT |



| | | |
|--|------------------------|--------|
| EXISTING CONDITIONS | | |
| STONE COLD STORAGE FACILITY 458 OLD PORTLAND ROAD, BRUNSWICK, ME 04011 | | |
|  SITELINES, PA ENGINEERS • PLANNERS • SURVEYORS LANDSCAPE ARCHITECTS 8 CUMBERLAND STREET, BRUNSWICK, ME 04011 207.725.1200 www.sitelinespa.com | | |
| FIELD WK: | SCALE: 1"=30' | SHEET: |
| DRN BY: | JOB #: 3094 | |
| CH'D BY: | MAP/LOT: | |
| DATE: 05-20-16 | FILE: 3094SV - CARLSON | |



BUILDING FOOTPRINT + IMPERVIOUS AREA CALCULATIONS

| | |
|---|-------------------------------|
| EXISTING RESIDENTIAL BUILDING: | 1280 SF |
| EXISTING STORAGE BUILDING: | 3200 SF |
| EXISTING CONCRETE SLAB: | 100 SF (CURRENT LOADING DOCK) |
| PROPOSED STORAGE BUILDING: | 4800 SF |
| PROPOSED CONCRETE SLAB: | 100 SF |
| TOTAL BUILDING FOOTPRINT: | 9,480 SF |
| PAVED DRIVEWAY: | 9,615 SF |
| EXISTING CONCRETE WALK: | 193 SF |
| TOTAL IMPERVIOUS SURFACE: | 19,288 SF |
| MU5 zone allows 25% impervious surface coverage | |
| Allowable impervious area: 22,752sf (91,009 x 0.25 = 22,752 sf) | |
| LOT SIZE: | 91,009 SF |
| ZONING DISTRICT: | MU5 |
| FRONT YARD SETBACK: | 25 FT |
| SIDE/REAR YARD SETBACK: | 30 FT |

**Stone Cold Storage | Old Portland Road, Brunswick
EROSION AND SEDIMENTATION CONTROL PLAN**

Temporary erosion and sediment control measures include the use of siltation berm, stabilized construction entrance, erosion control blanket, and permanent stabilization with vegetation. The applicant and applicant's contractor shall be responsible for the repair/replacement/maintenance of all erosion control measures until all disturbed areas are stabilized to the satisfaction of the Town and consulting landscape architect.

EROSION CONTROL NOTES:
It is anticipated that construction may begin as soon as possible (Summer 2016), following receipt of necessary permits.

BMPs: All soil erosion and sediment control shall be done in strict accordance with the "Maine Erosion and Sediment Control BMPs, Maine Department of Environmental Protection, 2015, or as currently revised.

Pre-Construction: Prior to beginning construction, a stone construction entrance, and the temporary silt berm shall be installed. If existing gravel driveway is sufficiently stable, no additional stone is needed for construction entrance.

Silt Berm: recommended material for all silt berm installation is shredded bark mulch, 36" wide at base. Inspect weekly for continuous berm at edge of work area. Silt berm shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs will be made immediately. Sediment deposits shall be periodically removed from the upstream side of the silt barriers. This sediment will be spread and stabilized in areas of the site not subject to erosion. Silt berm will be replaced as necessary to provide proper filtering action.

Vegetation Removal: Removal of sod, trees, and other vegetation and soil disturbance will be only as permitted by Site Plan standards, and according to approved plans. Grubbings, non-native invasive species removed from the site, and any usable topsoil shall be stripped and removed from the project site and disposed of in an approved manner.

Grading Operations: General temporary diversion berms and drainage swales shall be constructed as necessary. The site shall be brought to approximate finish grades and stabilized without extended delays. Stabilization includes the application of erosion control blanket or mulch to all surfaces designated to be revegetated. Silt fence and other erosion and sediment control measures shall be installed and/or adjusted to suit construction immediately after a cut or fill slope has been formed. After initial disturbance/exposure the following erosion control measures will be undertaken:

- Fill slopes, perimeter disturbance, and completed cuts: shall be rough graded, and covered with a heavy application of mulch prior to any significant rainfall event and/or at least weekly whether finished or not.
- Uncompleted cuts: shall be rough graded to drain to other erosion control measures prior to any significant rainfall event.
- Building areas and areas receiving surfacing: shall be graded to direct runoff to other erosion control measure at all times.
- Refer to the Construction Sequence for additional erosion and sedimentation control specifications.
- Areas which are to be built upon or surfaced, or areas to be vegetated which have not been stabilized prior to the end of seeding season, shall receive a thick layer of hay mulch (2 tons/acre) to protect the surface during spring runoff conditions. A suitable binder such as Curasol or Terratack shall be used to secure the hay mulch.

Loam and Seeding: Immediately following final grading all graded or disturbed areas not to be built on or surfaced otherwise shall be covered with a minimum depth of 4" topsoil and seeded to establish permanent vegetative cover. Seeding recommendations:

- Dates: 4/1-9/16, inclusive
- Seed mix: Fescue 30%, Bluegrass 60%, Ryegrass 0%
- Fertilizer: Nitrogen 10%, Phosph. 10%, Potash 10%
- Application rates:
 - Seed 45 lbs/acre
 - Fertilizer 800 lbs/acre
 - Mulch: 2 tons/acre
 - Lime: 3 tons/acre
- If germination is unsuccessful (less than 75% catch) within 30 days of seeding or if there is unsatisfactory growth in the next year, the applicant shall reseed the area in accordance with the above specifications.

Erosion Control Blanket: Recommended erosion control blanket for all blanket installation is North American Green, C350 Three Phase Erosion Control / Turf Reinforcement Matting, or eq. Mulching or installation of erosion control blanket shall be done in conjunction with ALL seeding. Immediately after seedbed preparation, liming, fertilization and seeding, hay or wood fiber cellulose shall be spread uniformly. The mulch may be anchored in place by uniformly applying an acceptable mulch binder.

Winter Conditions: Silt fence: for frozen ground or the presence of large roots or stones, in lieu of providing the 4x4 trench the bottom 8"-12" of silt fence fabric may be laid on existing grade and backfilled with stone anchoring material, as shown on the drawings.

CONSTRUCTION SEQUENCE

General:
The project will be accessed from Old Portland Road.

- Approximate Sequence of Operations:**
- Silt berms installed prior to any site work commencing.
 - Removal of one tree, two sheds, and small building (10'x20')
 - Installation of new septic system with connection to existing house.
 - Removal of old septic system.
 - Remainder of vegetation cleared and removed as needed.
 - Clean and prepare site for foundation work, add perimeter drainage, install erosion control outfalls at pipe outlets.
 - Pour foundation, frame structure and roof, install siding and loading dock doors, complete finish work. Anticipated substantial completion Fall 2016.
 - Install underground utilities and refrigeration units.
 - Regrade gravel driveway and install trench drain.
 - Final grading of disturbed areas, loam and seed.
 - Complete bituminous paving.
 - Erosion and sedimentation control measure will be maintained until all areas are satisfactorily re-vegetated and stabilized. At that time, accumulated sediments will be spread in areas not prone to erosion, loamed and seeded, and the devices will be removed and disposed of properly.
 - No construction debris, brush or yard waste may be discarded or placed within the 75' stream buffer zone.
 - Water will be applied to the seeded areas as necessary depending on prevailing weather conditions, to establish a stable turf within the same growing season.



N/F
456 OLD PORTLAND
ROAD, LLC
BK 23342, PG 30

N/F
FREDERICK L
MITCHELL SR., TRUSTEE
BK 13600, PG 91

NEW PAVED
AREA: 10,800 SF

TOTAL NEW
IMPERVIOUS
AREA: 15,600 SF



NOTES:
10.26.15 Sketch plan for initial discussion

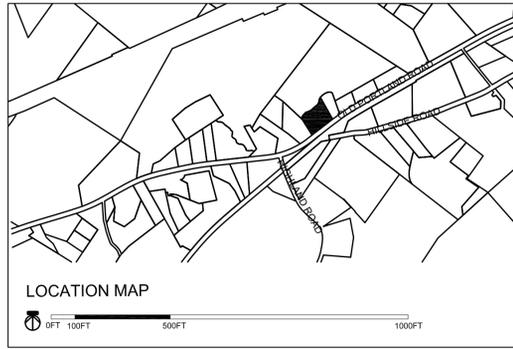


STONE COLD STORAGE
456 OLD PORTLAND ROAD, BRUNSWICK, ME

SITE PLAN

05.17.2016

S-1



BUILDING FOOTPRINT + IMPERVIOUS AREA CALCULATIONS

| | |
|---|-------------------------------|
| EXISTING RESIDENTIAL BUILDING: | 1280 SF |
| EXISTING STORAGE BUILDING: | 3200 SF |
| EXISTING CONCRETE SLAB: | 100 SF (CURRENT LOADING DOCK) |
| PROPOSED STORAGE BUILDING: | 4800 SF |
| PROPOSED CONCRETE SLAB: | 120 SF |
| TOTAL BUILDING FOOTPRINT: | 9,500 SF |
| PAVED DRIVEWAY: | 9,436 SF |
| EXISTING CONCRETE WALK: | 193 SF |
| TOTAL IMPERVIOUS SURFACE: | 19,129 SF |
| MUS zone allows 25% impervious surface coverage | |
| Allowable impervious area: 22,752sf (91,009 x 0.25 = 22,752 sf) | |

LOT SIZE: 91,009 SF
ZONING DISTRICT: MUS
FRONT YARD SETBACK: 25 FT
SIDE/REAR YARD SETBACK: 30 FT

N/F
 456 OLD PORTLAND ROAD, LLC
 BK 23342, PG 30

**Stone Cold Storage | Old Portland Road, Brunswick
 EROSION AND SEDIMENTATION CONTROL PLAN**

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Vegetation Removal: Removal of sod, trees, and other vegetation and soil disturbance will be only as permitted by Site Plan standards, and according to approved plans. Grubbings, non-native invasive species removed from the site, and any usable topsoil shall be stripped and removed from the project site and disposed of in an approved manner.

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- Water will be applied to the seeded areas as necessary depending on prevailing weather conditions, to establish a stable turf within the same growing season.



NOTES:
 10/26/15 Sketch plan for initial discussion
 05/18/16 Site plan submitted with application to Town



STONE COLD STORAGE
 456 OLD PORTLAND ROAD, BRUNSWICK, ME

SITE PLAN

05.31.2016

S-1

