



# **SITE PLAN APPLICATION**

**To**  
**Town of Waterboro**  
**For**  
**Brooks Dance Center**  
**Waterboro, ME 04087**

Prepared for  
**Abbott Investments, LLC**  
**29 Hamilton Road**  
**Lyman, ME 04002**

**July 2015**



July 27, 2015  
15185

Glenn Charette, Code Enforcement Officer  
Town of Waterboro  
24 Townhouse Road  
East Waterboro, ME 04030

**Re: Site Plan Submittal – Brooks Dance Center**  
**Waterboro, Maine**

Dear Mr. Charette:

On behalf of Abbott Investment, LLC., we have assembled the following site plan submittal for staff and Planning Board approval. Abbott Investment, LLC proposes to construct a commercial building for a dance studio, associated vehicle parking and loading, landscaping, and stormwater management area.

The site which is 2.23 acres sits along Main Street (Route 202) and is approximately 0.5 miles north from the intersection of Straw Mill Brooke Road and Main Street. The project site currently consists of an existing gravel area with the remainder of the parcel consisting of wooded area.

The developer proposes to construct a 6,000 square foot building to be used as a dance studio along with twenty-four (10' x 20') additional parking spaces and one handicapped (10' x 20') parking space and added sidewalks. An additional area southwest of the building will be used for a proposed underdrained soil filter that will provide the required treatment for the proposed development. The proposed development is expected to create an impervious area of 25,473 square feet and a disturbed area of approximately 1.00 acre; therefore, the project will be required to meet the MDEP Chapter 500 Basic and General Standards as well as the Town of Waterboro stormwater management criteria.

**Site Plan Criteria and Standards**

**Zoning Standards:** The proposed use meets the definitions and requirements explained in the zoning ordinance.

**Emergency Vehicle Access:** The proposed use will not create any fire safety hazards. Adequate access for emergency vehicles is provided to the site and the building. An existing fire hydrant is located on Main Street approximately one-quarter mile north of the proposed site entrance.

**Exterior Lighting:** The project proposes to utilize bollard lighting for the site lighting as well as cutoff wall packs on the building (bollard details are included in the site plan package). The proposed development will not create any hazards to motorists traveling on Main Street and is adequate enough to provide safe access to the building after dark.

**Buffers and On-Site Landscaping:** Wooded buffers will be retained along the project's frontage on Main Street with adequate protection to neighboring properties from any detrimental features of the development.

**Nuisances:** The proposed development will not create any nuisances, noise, vibrations, fumes, odor, glare or other causes, or have any effect on the peaceful enjoyment of abutting properties.

**Vehicular Loading and Unloading:** The proposed parking for the project will not create any hazards to safety. The development only provides off street parking for the dance center and will not create any significant burdens on public facilities. In addition, a loading zone and dumpster area have been included on the project site plan.

**Proposed Buildings and Paved Areas:** The location and design of the proposed building and parking area does not have any detrimental effect on any adjacent properties. The proposed building is only one story with little disturbance of the existing wooded areas.

**Flood Hazard Protection:** The proposed design will not result in any significant flood hazards or damage. There are no known special flood hazard areas associated with this parcel as indicated on the Flood Insurance Rate Maps for the Town of Waterboro, Maine, York County, Community Panel Number 2301990020C, having an effective date of February 01, 1985. The parcel does not fall within an identified flood zone. In addition, the project has been designed to meet the stormwater requirements of both the Maine Department of Environmental Protection and the Town of Waterboro.

**Waste Disposal:** The proposed development provides adequate provision for wastewater and solid waste disposal. A dumpster enclosure has been provided on site adjacent to the building and parking area. Wastewater from the proposed building will be collected in a proposed septic tank with effluent septic field proposed for east of the proposed parking area.

**Erosion and Sedimentation:** Proper erosion and sedimentation control features have been provided on site. A sediment filter barrier will be placed at the toe of any proposed grading to prevent erosion. The entrance will be provided with a stabilized construction entrance to prevent tracking of sediment onto the public road.

**Stormwater Runoff:** An underdrained soil filter detention basin has been designed to treat the stormwater runoff. The basins provide both stormwater quality and quantity control for the project. The basin has been designed to meet the Basic and General Standards for the MDEP Chapter 500 Standards as well as the stormwater requirements of the Town.

**Water Supply:** A 1.5" copper water service is provided for the proposed building from the existing water main. As mentioned above, the existing fire hydrant is provided on Main Street to meet the demands for fire protection.

**Hazardous Waste Material:** No hazardous waste, other than household cleaning products, will be stored or used on-site.

**Wildlife Impacts:** The proposed development will be in an area that has previously been cleared and is not currently wildlife habitat; the project will not have any impacts on any significant wildlife habitat. There are no scenic vistas visible from the site.

**Groundwater:** The project will not create a significant wastewater flow; the project will not increase any nitrate nitrogen concentrations on the surface or in the groundwater in excess of the State of Maine Drinking Water Standards.

#### **Submission**

Included in this submission are the following items.

1. Ten (10) copies of the cover letter with a narrative for the project and the description of how the proposed project meets the Site Plan Criteria and Standards.
2. Ten (10) copies of the fully executed and signed application and checklist for Site Plan Review.
3. Ten (10) copies of the Boundary Survey.
4. Ten (10) copies of the Site Plans for the proposed project.
5. Ten (10) copies of the site location map.
6. Ten (10) copies of the right, interest and title for the property.
7. Ten (10) copies of the Tax Map and Abutters List.
8. Ten (10) copies of the Performance Guarantee Cost Estimate.
9. Ten (10) copies of the MDOT Permit.
10. Ten (10) copies of the Proposed Building Floor Plan/Elevations.

Mr. Charette  
15185

-4-

July 27, 2015

11. Ten (10) copies of the Septic System Design.
12. Ten (10) copies of the Stormwater Management Plan.
13. One (1) application fee, check in the amount of \$900.00 (Site Plan Fee: \$300.00 + \$600.00 (building 2,000 to 9,999 sq. ft. footprint of structures)).

Please review the attached package and schedule this project for the earliest possible Planning Board hearing. If you have any questions relative to this package, do not hesitate to contact me. Thank you for your time and consideration of this application.

Sincerely,

SEBAGO TECHNICS, INC.



Robert A. McSorley, P.E.  
Senior Project Manager

RAM:ram/djs

cc: Doug Foglio, Foglio, Inc.  
David J. Abbott, Abbott Investments, LLC

# Site Plan Application

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## 1. Application Forms

- Site Plan Application
- Site Plan Checklist

**TOWN OF WATERBORO  
APPLICATION FOR SITE PLAN REVIEW**

Applicant (must be owner, lessee, or hold an option on property): \_\_\_\_\_  
Abbott Investments, LLC c/o David J. Abbott

Address: 29 Hamilton Road  
Lyman, ME 04002

Name and Address of Owner of property: Douglas C. Foglio, Sr.  
P.O. Box 308, Waterboro, ME 04087

Size of Lot 97,308 S.F., 2.23 Ac. Zone GP Map # 4 Lot # 30A

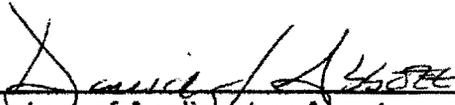
Size of Proposed Building: 100' x 60', 6,000 S.F.

Proposed Use Commercial, Dance Studio

Ten (10) copies of 24" x 36" plans drawn at a scale not greater than 1" to 100' of the site plan shall be submitted to the Codes Enforcement Office (where possible, electronic copy in PDF format is requested).

The plan must be drawn to scale and must include the following details:

1. Boundaries of the site and abutting streets with widths;
2. Dimensions of the building(s) showing the number of stories, accesses and use;
3. Layout and location of off-street parking and loading, access drives and vehicular maneuvering areas;
4. Location and size of all signs, gasoline pumps, and similar free standing structures;
5. Location, direction, and type of outdoor lighting with tear sheet/specifications;
6. Location and type of screening and/or buffers with tear sheet/specifications;
7. Landscape plan with schedule of plant species;
8. Location of all utilities;
9. Topography of a contour interval not greater than 2' showing the effects upon adjacent property;
10. All existing structures and buildings on adjacent/contiguous lots shall be plotted to scale; and,
11. The location of existing or proposed subsurface disposal systems.

  
Signature of Applicant or Agent

7-20-15  
Date

**SITE PLAN REVIEW  
MASTER CHECKLIST  
TOWN OF WATERBORO**

Site Plan Name: Brooks Dance Center Location: Main Street Map 4 Lot 30A

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.

Six (6) copies of 24" x 36" plans (electronic copy in pdf format is also requested, if possible) shall be drawn to scale of not greater than 1" to 100' and showing the following features, both existing and proposed:

ITEM SUBMITTED	ITEM REVIEWED	SITE PLAN DETAILS
<input checked="" type="checkbox"/>		Name of project, names and addresses of owners of record; tax map and lot number.
<input checked="" type="checkbox"/>		North arrow, date of plat, scale; name, address and seal of person preparing the plan with an appropriate signature block
<input checked="" type="checkbox"/>		Vicinity sketch and zoning district(s)
<input checked="" type="checkbox"/>		Boundaries of the site and abutting streets with widths, including length of lot lines
<input checked="" type="checkbox"/>		Footprint of building - showing the number of stories, dimensions of structure(s), accesses and use, including decks and outbuildings
<input checked="" type="checkbox"/>		Layout and location of off-street parking and loading, access drives and vehicular maneuvering areas
<input checked="" type="checkbox"/>		Location and size of all signs, gasoline pumps, and similar free standing structures
<input checked="" type="checkbox"/>		Waste/dumpster locations and snow storage areas
<input checked="" type="checkbox"/>		Location, direction and type of outdoor lighting
<input checked="" type="checkbox"/>		Location and type of screening and/or buffers and other landscaping
<input checked="" type="checkbox"/>		Location of all utilities
<input checked="" type="checkbox"/>		Topography of a contour interval not greater than 2 ft. showing the effects upon adjacent property

ITEM SUBMITTED	ITEM REVIEWED	SITE PLAN DETAILS
N/A		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.
<input checked="" type="checkbox"/>		Meets definitions and requirements set forth in the Zoning Ordinance
<input checked="" type="checkbox"/>		Provides adequate access to the site for emergency vehicles; access without parked cars in way
<input checked="" type="checkbox"/>		Provides adequate dry hydrants and access to the hydrants and Fire Department sprinkler connection and pressure hydrants and/or cisterns, as applicable
<input checked="" type="checkbox"/>		Proposed exterior lighting creates no hazard to motorists on adjacent streets or occupants of adjacent properties
<input checked="" type="checkbox"/>		Provide a detailed buffer zone and on-site landscaping for protection of neighboring properties
<input checked="" type="checkbox"/>		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.
<input checked="" type="checkbox"/>		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.
<input checked="" type="checkbox"/>		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.
<input checked="" type="checkbox"/>		The design of the site will not result in significant flood hazards or flood damage and is in conformance with applicable flood hazard requirements.
<input checked="" type="checkbox"/>		The site contains an adequate storm water management plan.
<input checked="" type="checkbox"/>		Adequate provisions are made for the disposal of wastewater and solid waste.
<input checked="" type="checkbox"/>		Adequate provisions for drainage on site.
<input checked="" type="checkbox"/>		The proposed water supply meets the demands of the use and/or for fire protection.
<input checked="" type="checkbox"/>		Snow removal and adequate storage, so it will not obstruct parking or civilian/emergency vehicle traffic.
<input checked="" type="checkbox"/>		Provisions for the storage of hazardous waste as defined by State law and Waterboro Hazardous Waste Ordinance. Hazardous materials proposed will be identified.
<input checked="" type="checkbox"/>		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.
N/A		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

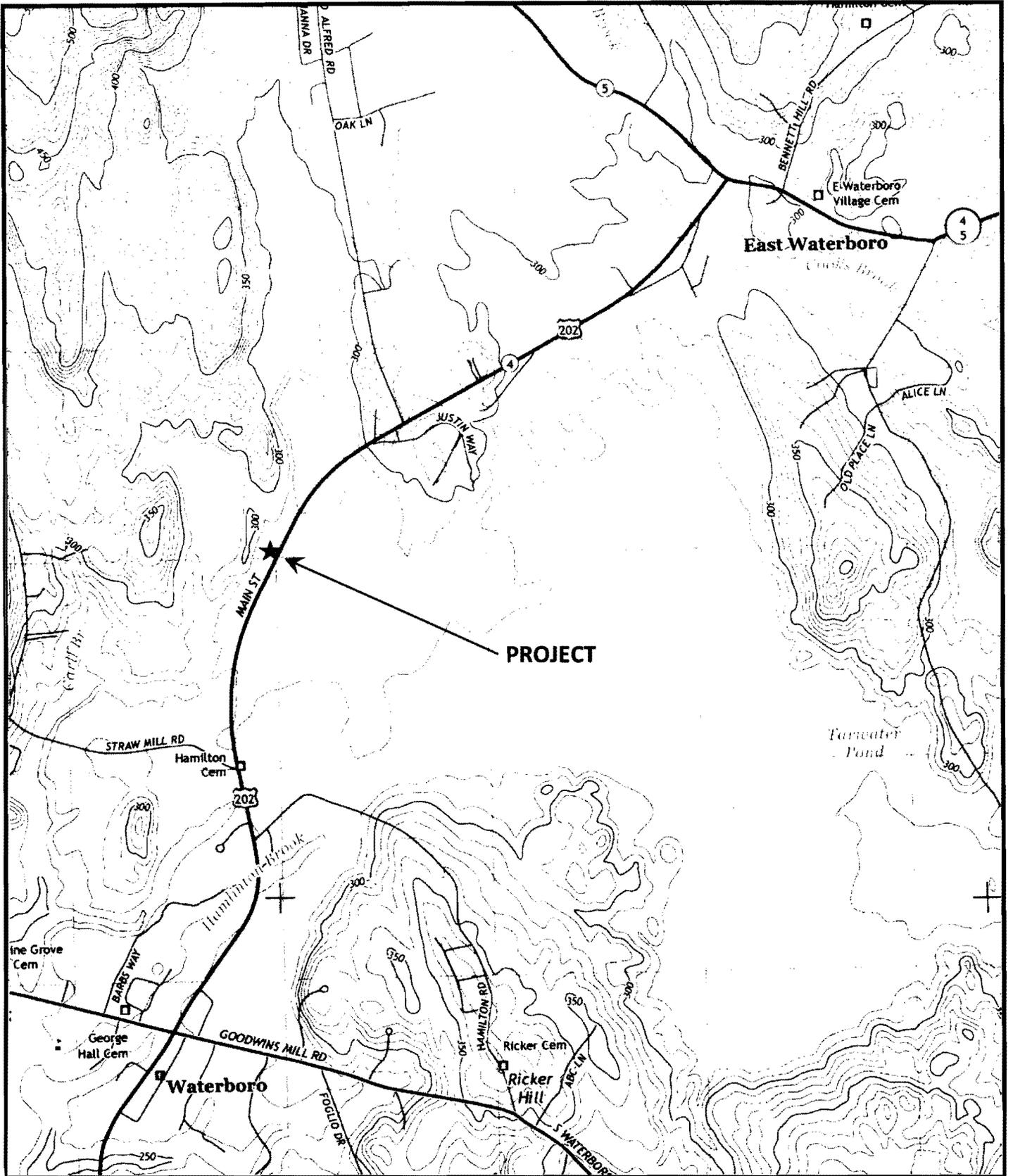
ITEM SUBMITTED	ITEM REVIEWED	SITE PLAN DETAILS
		contaminants in excess of primary drinking water standards and the project is to be served by on-site groundwater supplies.
<input checked="" type="checkbox"/>		Performance guarantee as per Sections 12.04 - 12.07 of the Zoning Ordinance (see process below)
<input checked="" type="checkbox"/>		Sprinklered or not with additional infrastructure
<input type="checkbox"/>		Site walk date to be determined by Planning Board (if necessary)
<b>STATE AND FEDERAL REVIEWS</b>		
<input type="checkbox"/> Letter Received		MDOT scoping session/traffic impact report MDOT Permit attach
<input type="checkbox"/> Letter Received		MDEP Site Location Review and/or MDEP Chapter 500 Stormwater Management Permit complete Submitted
<input type="checkbox"/> Letter Received		State Fire Marshall or Local Fire Marshall Submitted
<b>LOCAL DEPARTMENT REVIEWS</b>		
<input type="checkbox"/> Letter Received		Waterboro Water District (consultation)
<input type="checkbox"/> Letter Received		Waterboro Fire Department
<input type="checkbox"/> Letter Received		Waterboro Road Review Committee
<input type="checkbox"/> Letter Received		Waterboro Code Enforcement Officer
<input type="checkbox"/> Letter Received		Waterboro Town Planner
<b>PERFORMANCE GUARANTEE PROCESS (if required)</b>		
<input type="checkbox"/> Letter Received		Calculated infrastructure costs (from applicant's engineer)
<input type="checkbox"/> Letter Received		Municipal review and peer review of infrastructure costs
<input type="checkbox"/> Letter Received		Anticipated build out schedule
<input type="checkbox"/> Performance Guarantee		If the scope and magnitude of the project require a performance guarantee, then Article 12, Sections 12.04-12.07 shall be defined and completed before final approval. If a waiver of performance guarantee is desired by the applicant, then the 'Waiver Request Form' must be submitted with the site plan application prior to Planning Board

SITE PLAN DETAILS

ITEM SUBMITTED	ITEM REVIEWED	
		review.

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## 2. Location Map



 <p> <a href="http://WWW.SEAGOTECHNICS.COM">WWW.SEAGOTECHNICS.COM</a>            75 John Roberts Rd. - Suite 1A    250 Goddard Rd. - Suite B            South Portland, ME 04106    Lewiston, ME 04240            (207) 200-2100    (207) 783-5656         </p>	<b>SITE LOCATION MAP OF BROOKS DANCE STUDIO</b>		SCALE: 1"=2000'
	<b>LOCATION:</b> MAIN STREET WATERBORO, ME		DATE: 7/14/15
<b>FOR:</b> ABBOTT INVESTMENTS, LLC		SHEET: 1 OF 1	

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### **3. Tax Map/ List of Abutters**



15185 List of Abutters 7-14-15

Map/Block/Lot #	Name and Address
4-48	Michael L. Hammond 2 Stevens Court Exeter, NH 03833
4-48A	Andrew M. & Trisha M. McLaskey 644 Main Street Waterboro, ME 04087
4-48B	Barbara E & Russell J. Giles PO Box 486 Waterboro, ME 04087
4-48B-001	Barbara E & Russell J. Giles PO Box 486 Waterboro, ME 04087
4-48C	William Calvert 632 Main Street Waterboro, ME 04087
4-48D	Michael L. Hammond 2 Stevens Court Exeter, NH 03833
4-48E	John H. & Gloria L. Ellingwood PO Box 353 Waterboro, ME 04087
4-48F	William M. & Elaine M. Calvert 632 Main Street Waterboro, ME 04087
4-48G	Brain Gagnon PO Box 37 Waterboro, ME 04087

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## **4. Right, Title and Interest (Deed)**

REAL ESTATE PURCHASE AND SALE AGREEMENT

This agreement is made as of May 28, 2015, by and between Abbott Investments, LLC of 29 Hamilton Road, Lyman, ME(PURCHASER) and Douglas Foglio Sr. of Waterboro, ME(SELLER).

PURCHASE AND SALE OF PROPERTY

SELLER hereby agrees to sell to PURCHASER and Purchaser hereby agrees to purchase from SELLER, upon the terms and conditions hereinafter set forth, a certain parcel of real estate located in Waterboro, ME. The parcel of real estate is described as a portion of land shown on a plan entitled "Boundary and Topographic Survey of the Shaker Lot 9 for Douglas Foglio Sr." on file at Sebago Technics, Inc. dated January 31, 2002. A sketch of the parcel and boundary description is attached hereto.

PURCHASE PRICE

The purchase price shall be [REDACTED], contingent upon the approval (by the Town of Waterboro) of a commercial building proposed for Brooks Dance Center. Payment will be made, in full, by purchaser within 30 days of receiving final approvals from the Town of Waterboro.

CONVEYANCE OF TITLE

Against the payment of the purchase price, SELLER shall on the date of closing execute and deliver to PURCHASER warranty covenants for the parcel described above, free and clear of all encumbrances, except utility easements which may serve the premises, rights-of-way to the remaining property of Douglas Foglio Sr., zoning and building restrictions and taxes assessed but not yet due.

BROKERAGE COMMISSIONS.

Each party represents and certifies to each other that no broker has been retained in regard to this transaction.

Witness:

[Signature]

SELLER:

[Signature]  
Douglas Foglio Sr.

Witness:

[Signature]

PURCHASER:

[Signature]  
David Abbott

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## **5. Performance Guarantee Cost Estimate**

**Brooks Dance Center**  
**Performance Guarantee - Public Improvements**  
**Estimate of Probable Cost**



Item	Quantity	Units	Unit Price	Total
3" Type A Gravel	12.31	CY	\$ 40.00	\$ 492.59
15" Type D Gravel	61.57	CY	\$ 30.00	\$ 1,847.22
1.5" Asphalt Pavement 9.5 mm	12.19	TN	\$ 100.00	\$ 1,219.17
2.5" Asphalt Pavement 19 mm	20.32	TN	\$ 100.00	\$ 2,031.94
1.5" Copper Water Service	29.00	LF	\$ 20.00	\$ 580.00
1.5" Tap Connection	1.00	EA	\$ 850.00	\$ 850.00
Restoration/Grading/Seed & Mulch	1.00	LS	\$ 1,500.00	\$ 1,500.00
			<b>Subtotal</b>	\$ 8,520.93
			25% Contingency	\$ 2,130.23
			<b>Total</b>	\$ 10,651.16

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## 6. Agency Letters



July 22, 2015  
15185

Earle G. Shettleworth, Jr.  
Maine Historic Preservation Commission  
55 Capitol Street  
65 State House Station  
Augusta, ME 04039-0065

**Re: Site Plan Submittal – Brooks Dance Center**  
**Main Street; Waterboro, Maine**

Dear Mr. Shettleworth:

On behalf of our client, David Abbott, we are currently in the process of filling a Site Plan Application to the Town of Waterboro. Our client proposes a 6,000 square foot building with customer and employee parking on Routes 202 and 4, Main Street.

We request that the Maine Historical Preservation Commission review its files for any known historical sites, structures or archeological sites that have been identified with the vicinity of the proposed project. The abutting properties on site do not include any buildings older than 50 years old, so no photos are required. The response obtained from the Commission is required for the site plan approval process with the Town and approvals from other jurisdictional agencies.

I have included a copy of a location map and a reduced size site plan for the project site. If you have any questions regarding this project, please do not hesitate to contact me.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink, appearing to read "R. McSorley", written over a white background.

Robert A. McSorley, P.E.  
Senior Project Manager

RAM/llg  
Enc.

cc: David Abbott

**Rare and Exemplary Botanical Features within 4 miles of  
Project: #15185, Brooks Dance Center, Waterboro, Maine**

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
	<null>	S4	GNR	2009-06-23	2	Forested wetland
<b>Red Maple Swamp</b>						
	<null>	S5	G3G5	1996-10-01	8	Forested wetland
<b>Scarlet Oak</b>						
	E	S1	G5	1916-08	3	Hardwood to mixed forest (forest, upland)
	E	S1	G5	1916-08	4	Hardwood to mixed forest (forest, upland)
<b>Sedge Meadow</b>						
	<null>	S4	GNR	2011	5	Open wetland, not coastal nor rivershore (non-forested, wetland),Coastal non-tidal wetland (non-forested, wetland)
	<null>	S4	GNR	1996-10-01	1	Open wetland, not coastal nor rivershore (non-forested, wetland),Coastal non-tidal wetland (non-forested, wetland)
	<null>	S4	GNR	2011	3	Open wetland, not coastal nor rivershore (non-forested, wetland),Coastal non-tidal wetland (non-forested, wetland)
<b>Slippery Elm</b>						
	PE	SH	G5	1898-07	4	Hardwood to mixed forest (forest, upland)
<b>Small Whorled Pogonia</b>						
	E	S2	G2	2013-06-19	25	Hardwood to mixed forest (forest, upland)
<b>Smooth Winterberry Holly</b>						
	SC	S3	G5	1916-08-10	10	Forested wetland
<b>Spicebush</b>						
	SC	S3	G5	1955-05-04	15	Forested wetland
<b>Spotted Pondweed</b>						
	T	S1	G5	2003-09-30	6	Open water (non-forested, wetland)
<b>Spotted Wintergreen</b>						
	E	S2	G5	2011-06-22	29	Conifer forest (forest, upland),Hardwood to mixed forest (forest,

**Rare and Exemplary Botanical Features within 4 miles of  
Project: #15185, Brooks Dance Center, Waterboro, Maine**

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Streamshore Ecosystem	<null>	S4	GNR	2009-08-19	5	upland) Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
Sweet Pepper-bush	SC	S2	G5	1936-07	7	Hardwood to mixed forest (forest, upland),Forested wetland
	SC	S2	G5	1997-08-18	19	Hardwood to mixed forest (forest, upland),Forested wetland
Upright Bindweed	T	S2	G4G5	2014-06-23	16	Dry barrens (partly forested, upland),Old field/roadside (non-forested, wetland or upland)
	T	S2	G4G5	2008-06-26	7	Dry barrens (partly forested, upland),Old field/roadside (non-forested, wetland or upland)
White-topped Aster	E	S1	G5	1916-08-10	4	Dry barrens (partly forested, upland)
Wild Indigo	E	S1	G5	1960-06-21	2	Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	E	S1	G5	1998-08-27	1	Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)

## STATE RARITY RANKS

- S1** Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2** Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3** Rare in Maine (20-100 occurrences).
- S4** Apparently secure in Maine.
- S5** Demonstrably secure in Maine.
- SU** Under consideration for assigning rarity status; more information needed on threats or distribution.
- SNR** Not yet ranked.
- SNA** Rank not applicable.
- S#?** Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

**Note:** **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

## GLOBAL RARITY RANKS

- G1** Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- G2** Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- G3** Globally rare (20-100 occurrences).
- G4** Apparently secure globally.
- G5** Demonstrably secure globally.
- GNR** Not yet ranked.

**Note:** **Global Ranks** are determined by NatureServe.

## STATE LEGAL STATUS

**Note:** State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

- E** ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
- T** THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

## NON-LEGAL STATUS

- SC** SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
- PE** Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

## ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

**Note:** **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!  
<http://www.maine.gov/dacf/mnap>

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## 7. Site Lighting

# Aluminum Bollard (DB30) Specification Sheet

Project Name:	Location:	MFG: Philips Hadco
Fixture Type:	Catalog No.:	Qty:



## Ordering Guide

Example: DB30 I A0 12L E

Product Code	DB30	Aluminum Bollard	
<b>Finish</b>	I	Gray	
	A	Black	
	H	Bronze	
<b>Optics</b>	A0	Symmetric	
<b>Wattage</b>	12L	9.5W LED	*1
	100I	100W INC	*1
	26F	26W CFL	*2
	32F	32W CFL	*2
	42F	42W CFL	*2
	50H	50W MH	
	70H	70W MH	
	100H	100W MH	
	35S	35W HPS	*3
	50S	50W HPS	
	70S	70W HPS	
100S	100W HPS		
<b>Voltage</b>	E	120V	
	F	208V	
	G	240V	
	H	277V	
	K	347V	

\*1 Available in 120V (E) only.

\*2 Not available in 347V (K).

\*3 Available in 120V (E) and 27V (H) only.

## Specifications

### HOUSING:

356 HM high-strength, low-copper, proprietary cast aluminum alloy. Dome roof with die-cast aluminum louvers. Easy access to lamp. 5" dia. extruded aluminum with a wall thickness of 0.125". All non-ferrous fasteners prevent corrosion and ensure longer life.

### FINISH:

Thermoset polyester powdercoat is electrostatically applied after a five-stage conversion cleaning process and bonded by heat fusion thermosetting. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B117 specifications. For larger projects where a custom color is required, contact the factory for more information.

### OPTICAL ASSEMBLY:

Symmetric. Die-cast aluminum louvers with underside painted with highly reflective white powdercoat. Tempered glass globe.

### LAMPING:

LED 4Kv medium base porcelain socket A19.

MH and HPS Medium base: E17.

Incandescent Medium Base A19.

26W CFL (GX24Q-3).

32W CFL (GX24Q-3).

42W CFL (GX24Q-4).

### ELECTRICAL ASSEMBLY:

LED is 2700K warm white, delivers 800 lumens, and is dimmable. Lamp life is rated at 25,000 hours. 120 volt only. 4Kv rated medium base porcelain socket.

Key-slotted Ballast Assembly is mounted to an aluminum plate, which is mounted inside the base. Quick disconnects for easy installation and removal.

4kv rated medium base porcelain socket. Nickel-plated screw shell with center contact.

26W Fluorescent socket is a GX24Q-3 base.

32W Fluorescent socket is a GX24Q-3 base.

42W Fluorescent socket is a GX24Q-4 base.

### BALLAST:

ISO 9001:2008 Registered

Page 1 of 2



Note: Philips reserves the right to modify the above details to reflect changes in the cost of materials and/or production and/or design without prior notice.  
100 Craftway Drive, Littlestown, PA 17340 | P: +1-717-359-7131 | F: +1-717-359-9289 | <http://www.hadco.com> | Copyright 2013 Philips  
HW2

# Aluminum Bollard (DB30) Specification Sheet

Project Name:	Location:	MFG: Philips Hadco
Fixture Type:	Catalog No.:	Qty:

All HID ballasts are core and coil and regulated with power factors better than 90% (HPF). Ballast provides +/- 5% lamp power regulation with +/- 10% input voltage regulation. Ballasts are factory pre-wired and tested. Metal halide ballasts are capable of starting at -20° F or -30° C and HPS at -40°F or -40°C. NOTE: All ballasts are EISA / Title 20 / Title 24 compliant where applicable. Fluorescent ballast is electronic. Ballast is capable of starting at 0° F or -18° C. Ballast is factory wired and tested.

## INSTALLATION & MOUNTING:

Tube is mounted to the base plate with three (3) 5/16-18 flat head allen key stainless steel tamper-resistant screws.

## WARRANTY:

Three-year limited warranty.

## CERTIFICATIONS:

ETL listed to U.S. safety standards for wet locations. cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 Standards.

## Height :

30" (74cm)

## Width:

6" (15cm)

## Bolt Circle:

3" (8 cm)

## Anchor Rods:

Internal (3) 3/8" dia. x 8" long (1 cm x 20cm)

## Base Diameter:

5" (13cm)

## Max. Weight:

Powdercoat: 15 lbs

## Max. Weight:

CraftStone: 19 lbs

---

## 8. Maine DOT Permit



# Maine Department of Transportation Driveway/Entrance Permit

Permit Number: 8618

Location: Route: 0004X, Main St

Owner: Douglas Foglio

Municipality: Waterboro

Address: PO Box 308  
Waterboro, ME 04087

County: York

Tax Map: 4; Lot Number: 30A

Telephone: (207)247-4461

Culvert Size: "

Culvert Type: N/R

Culvert Length: '

Date of Permit: 01-OCT-08

Approved Entrance Width: 40'

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, an Entrance to [a] Commercial Industrial at a point 2996' N from Straw Mill Brook Rd, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This permittee acknowledges and agrees to comply with the Standard Conditions of Approval attached hereto and to any Specific Conditions of Approval shown here.

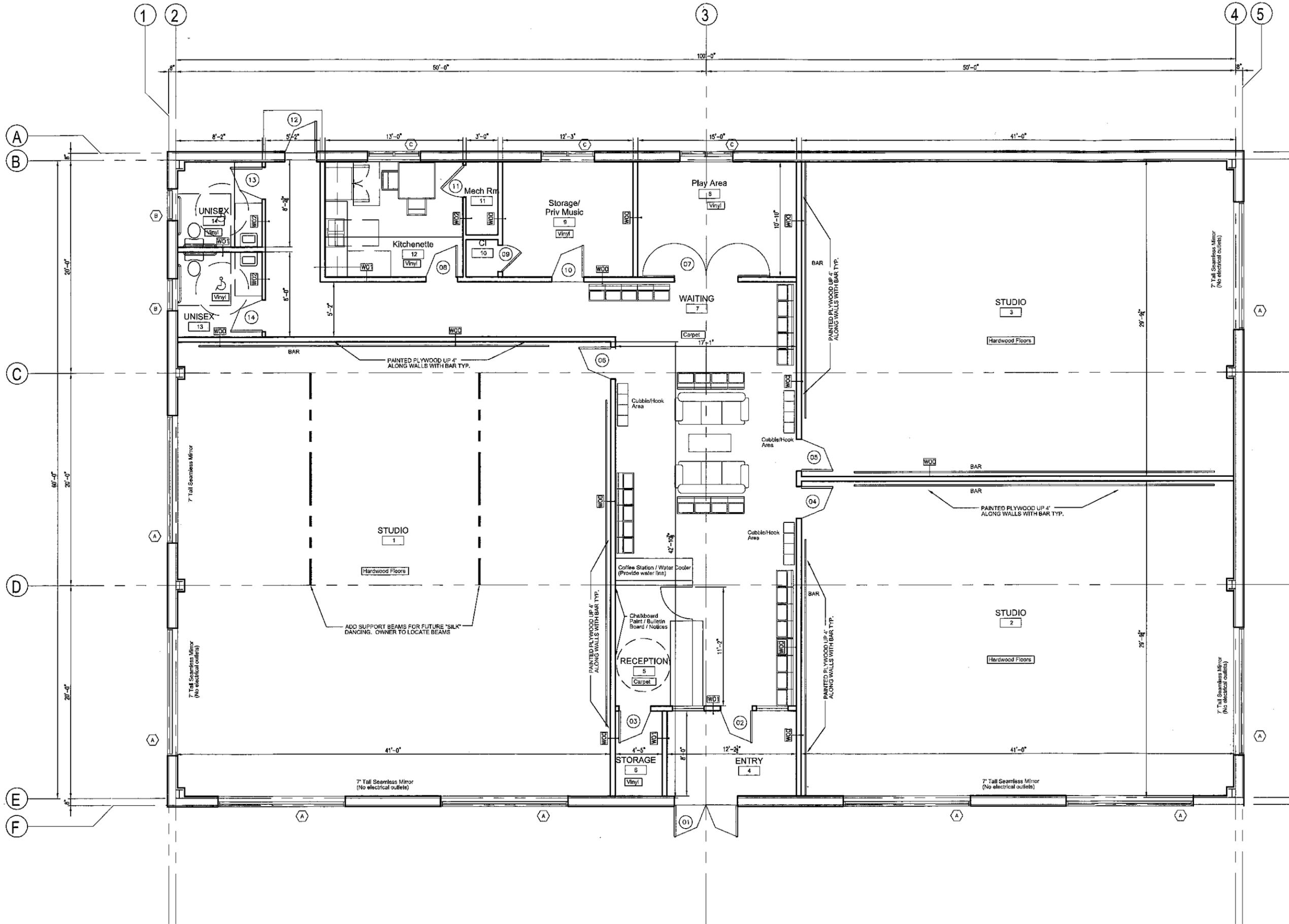
Approved Special Condition(s):

- \* In the town of Waterboro on the westerly side of Rte 4/202, approximately 2996' northerly of Straw Mill Brook Rd.
- \* THE ENTRANCE INCLUDING ALL RADII MUST BE PAVED FROM THE EDGE OF PAVEMENT OF THE HIGHWAY TO THE HIGHWAY RIGHT OF WAY OR TO THE LENGTH OF THE DESIGN VEHICLE, WHICHEVER IS GREATER.

Approved by: Dan Willette Date: 10/1/08

---

## 9. Floor Plan/Elevations



**KW Architects**  
 Kristi Kenney, RA  
 PO Box 404  
 Wells, Maine 04090  
 (207) 332-9199



**Brooks Dance**

REVISIONS:


Scale:

1/4" = 1'-0"

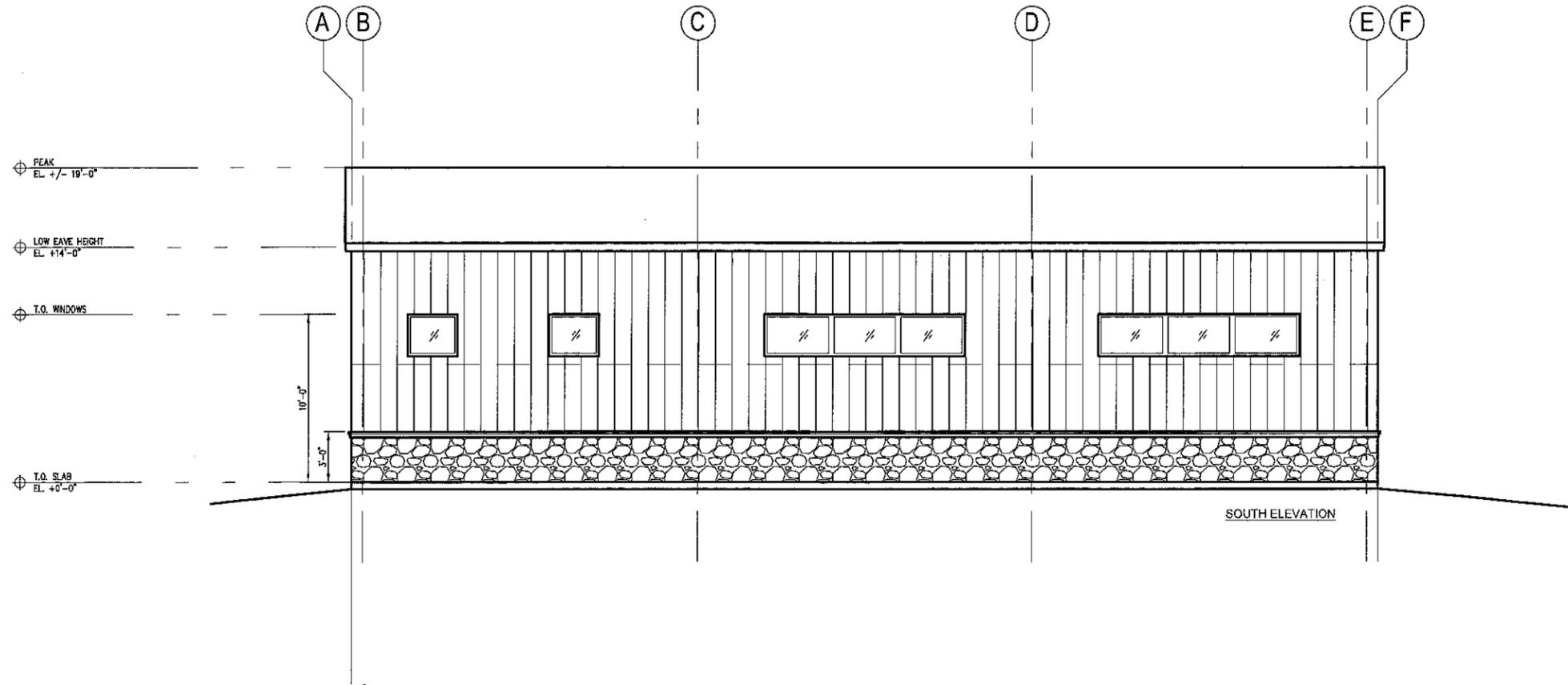
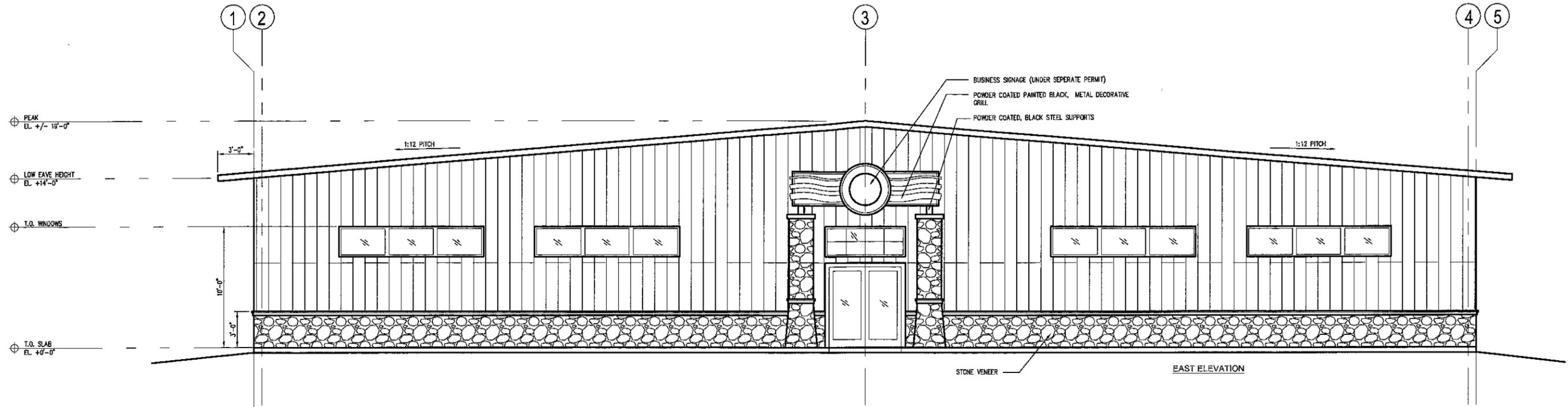
Date:  
07-07-15

Title:

SCHEMATIC FLOOR PLAN

**A1**

Fire Marshal Permit Drawings



KW Architects  
 Kristi Kenney, RA  
 PO Box 404  
 Wells, Maine 04090  
 (207) 332-9199



Brooks Dance



REVISIONS:


NO - COPYRIGHT INFRINGEMENT OR REUSE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION OF KW ARCHITECTS IS PROHIBITED.

Scale:  
 1/4" = 1'-0"

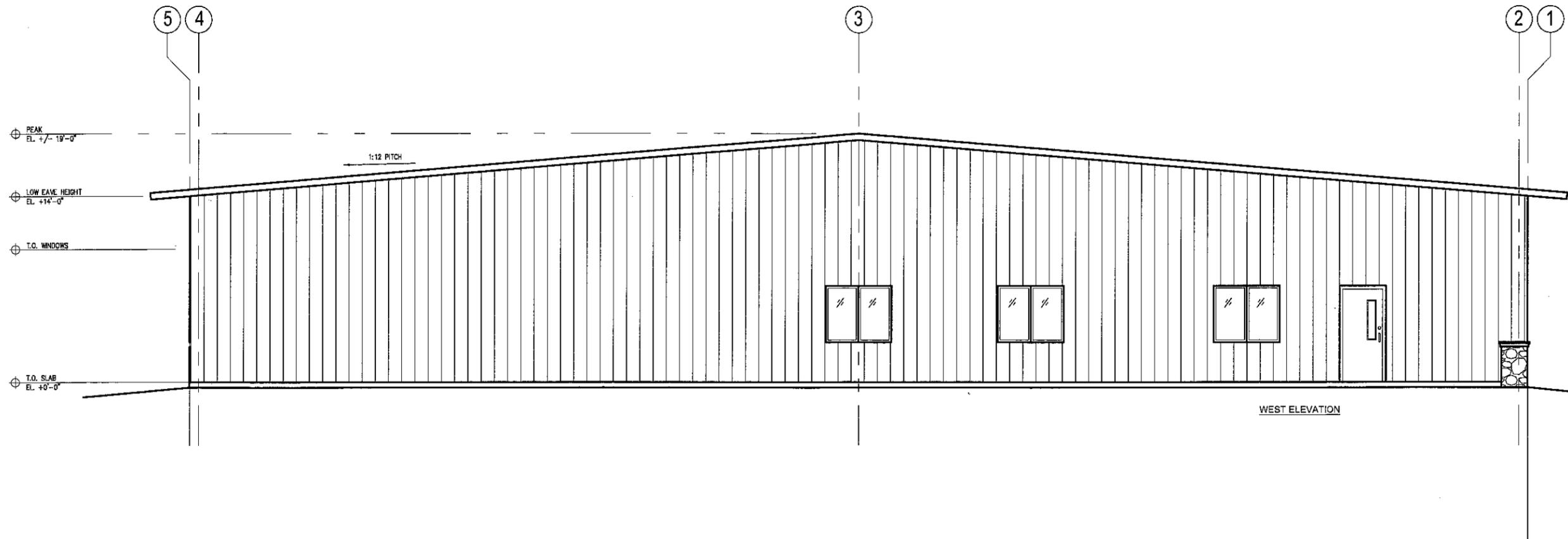
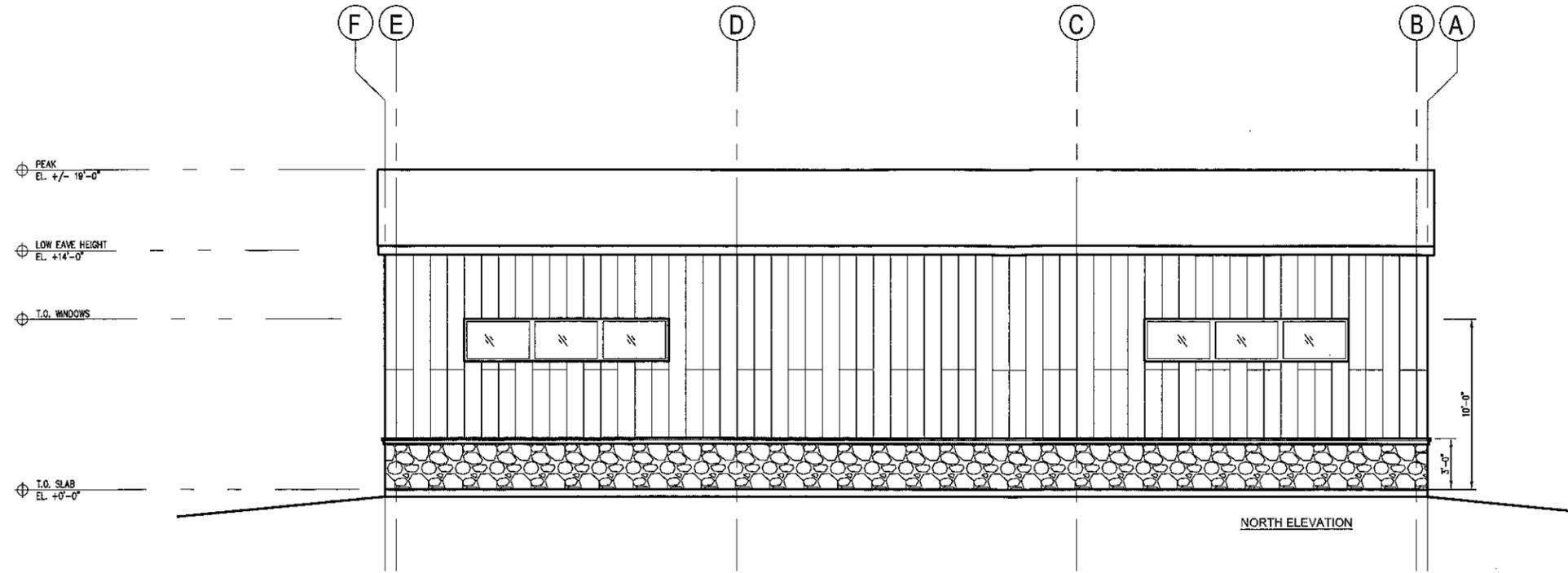
Date:  
 07-07-15

Title:

ELEVATIONS

A3

Fire Marshal Permit Drawings



KW Architects  
 Kristi Kenney, RA  
 PO Box 404  
 Wells, Maine 04090  
 (207) 332-9199



Brooks Dance



REVISIONS:

Scale:  
 1/4" = 1'-0"

Date:  
 07-07-15

Title:  
 ELEVATIONS

A4

Fire Marshal Permit Drawings

---

## 10. Septic System Design

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

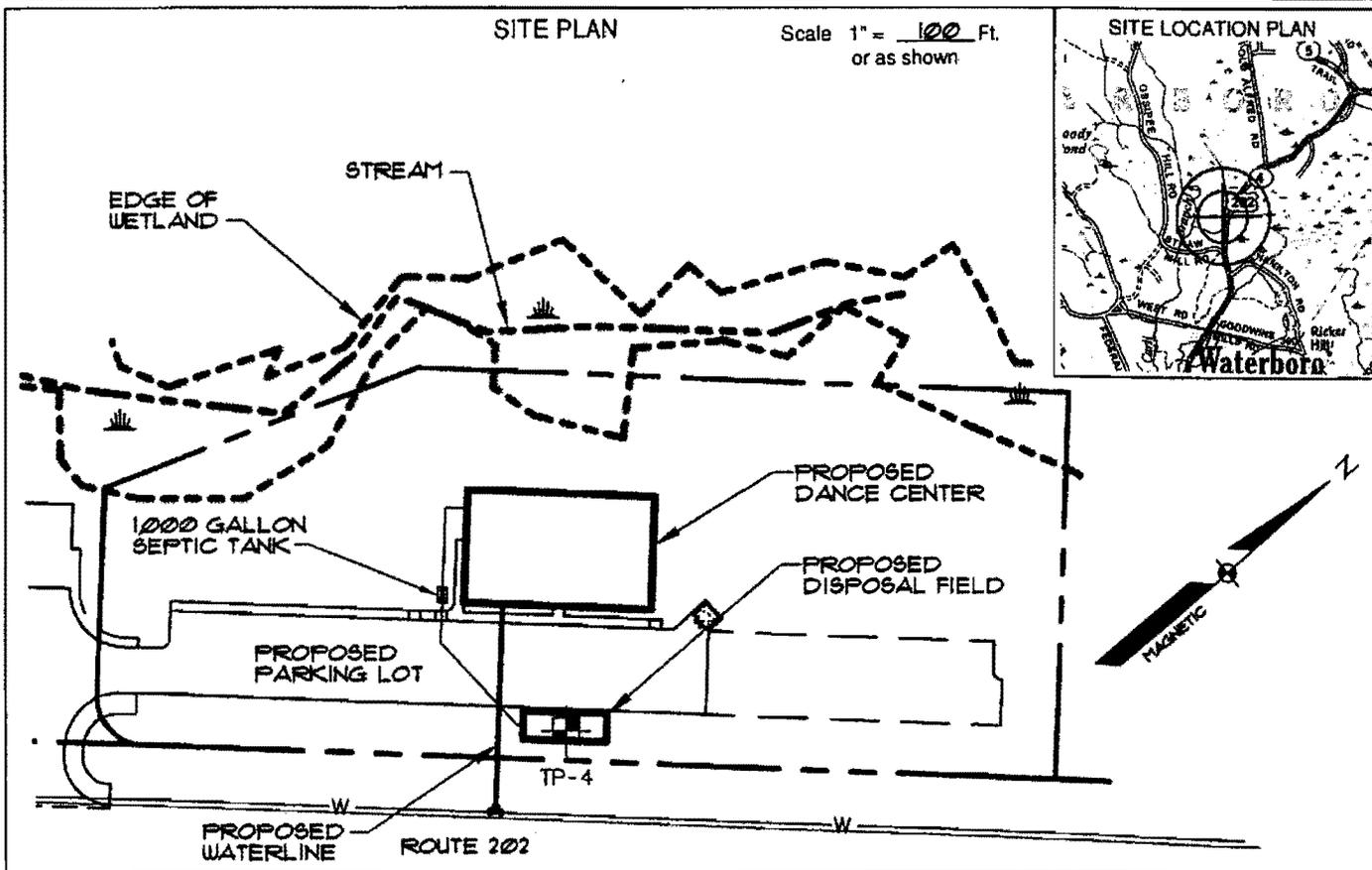
<b>PROPERTY LOCATION</b>		<b>&gt;&gt; CAUTION: LPI APPROVAL REQUIRED &lt;&lt;</b>	
City, Town, or Plantation	Waterboro	Town/City _____	Permit # _____
Street or Road	Route 202	Date Permit Issued ___/___/___	Fee: \$ _____ Double Fee Charged [ ]
Subdivision, Lot #		L.P.I. # _____	
<b>OWNER/APPLICANT INFORMATION</b>		Local Plumbing Inspector Signature _____	
Name (last, first, MI) <b>Abbott Investments, LLC</b>		<input type="checkbox"/> Owner <input type="checkbox"/> Town <input type="checkbox"/> State	
Mailing Address of Owner/Applicant 28 Hamilton Road Lyman, ME 04002		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. #	(207) 241-5278	Municipal Tax Map # _____ Lot # _____	
<b>OWNER OR APPLICANT STATEMENT</b>		<b>CAUTION: INSPECTION REQUIRED</b>	
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.	
Signature of Owner or Applicant _____ Date _____		Local Plumbing Inspector Signature _____ (2nd) date approved _____	

PERMIT INFORMATION			
<b>TYPE OF APPLICATION</b> <input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input 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	<b>THIS APPLICATION REQUIRES</b> <input checked="" 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 type="checkbox"/> 3. Replacement System Variance <input 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	<b>DISPOSAL SYSTEM COMPONENTS</b> <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	<b>DISPOSAL SYSTEM TO SERVE</b> <input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input checked="" type="checkbox"/> 3. Other: <u>Dance Center</u> (specify) Current Use <input type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input checked="" type="checkbox"/> Undeveloped
<b>SIZE OF PROPERTY</b> 223 <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES	<b>TYPE OF WATER SUPPLY</b> <input type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input checked="" type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other		
<b>SHORELAND ZONING</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
<b>TREATMENT TANK</b> <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.	<b>DISPOSAL FIELD TYPE &amp; SIZE</b> <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>675</u> sq. ft. <input type="checkbox"/> lin. ft.	<b>GARBAGE DISPOSAL UNIT</b> <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	<b>DESIGN FLOW</b> <u>236</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 40 participants @ 5 gpd = 200 gpd 3 employees at 12 gpd = 36 <input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER METER DATA
<b>SOIL DATA &amp; DESIGN CLASS</b> PROFILE <u>5</u> CONDITION <u>C</u> at Observation Hole # <u>TP-4</u> Depth <u>28</u> " of Most Limiting Soil Factor	<b>DISPOSAL FIELD SIZING</b> <input checked="" type="checkbox"/> 1. Medium---2.6 sq. ft. / gpd <input 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	<b>EFFLUENT/EJECTOR PUMP</b> <input type="checkbox"/> 1. Not Required <input type="checkbox"/> 2. May Be Required <input checked="" type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ gallons	<b>LATITUDE AND LONGITUDE</b> at center of disposal area Lat. <u>43</u> d <u>33</u> m <u>212</u> s Lon. <u>-70</u> d <u>42</u> m <u>32.7</u> s

SITE EVALUATOR STATEMENT			
I certify that on <u>9/5/08</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	355 SE #	7-20-15 Date	 www.sebagotech.com
Gary M. Fullerton Site Evaluator Name Printed	(207) 200-2063 Telephone Number	gfullerton@sebagotech.com E-mail Address	
Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.			

<b>SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION</b>		Maine Dept. of Health & Human Services Division of Environmental Health, 11 SHS (207) 287-5672 Fax: (207) 287-4172
Town, City, Plantation <b>Waterboro</b>	Street, Road, Subdivision <b>Route 202</b>	Owner or Applicant Name <b>Abbott Investments, LLC</b>



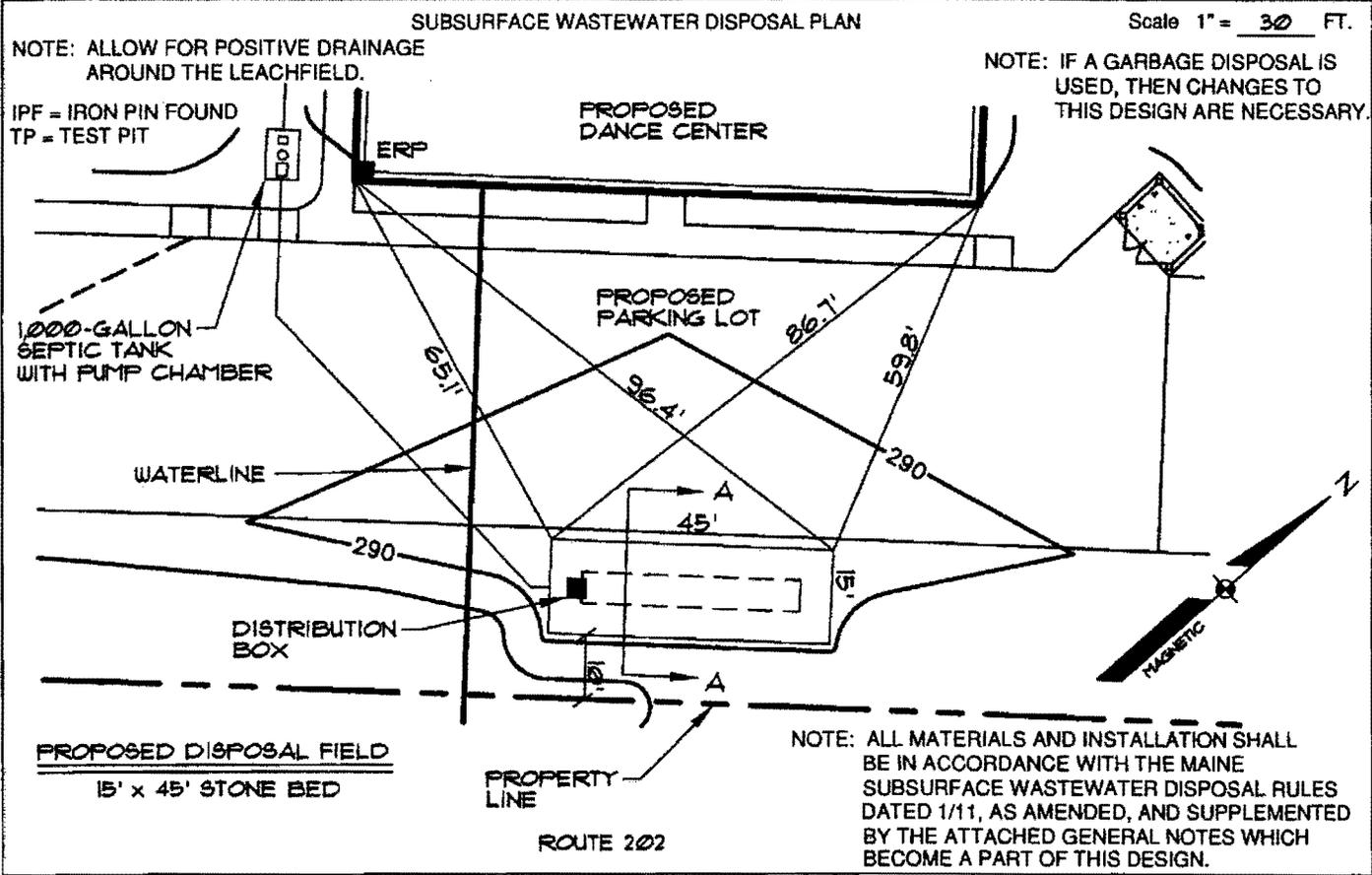
SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)																																																																															
<p>Observation Hole <u>TP-4</u> <input checked="" type="checkbox"/> Test pit <input type="checkbox"/> Boring</p> <p><u>1-2</u> " Depth of Organic Horizon Above Mineral Soil</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH BELOW MINERAL SOIL SURFACE (inches)</th> <th>Texture</th> <th>Consistency</th> <th>Color</th> <th>Mottling</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>SANDY LOAM</td> <td></td> <td>DARK BROWN</td> <td></td> </tr> <tr> <td>10</td> <td>LOAMY SAND</td> <td>FRIABLE</td> <td>BROWN</td> <td></td> </tr> <tr> <td>20</td> <td>FINE SAND</td> <td></td> <td>YELLOWISH BROWN</td> <td></td> </tr> <tr> <td>30</td> <td>MEDIUM SAND</td> <td></td> <td>PALE BROWN</td> <td>COMMON &amp; DISTINCT</td> </tr> <tr> <td>40</td> <td colspan="4" style="text-align: center;">LIMIT OF EXCAVATION = 40"</td> </tr> <tr> <td>50</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 25%;">Soil Classification <u>5</u> Profile <u>C</u> Condition</td> <td style="width: 15%;">Slope <u>0-3</u> %</td> <td style="width: 15%;">Limiting Factor <u>28</u> "</td> <td style="width: 45%;"> <input checked="" type="checkbox"/> Ground Water  <input type="checkbox"/> Restrictive Layer  <input type="checkbox"/> Bedrock  <input type="checkbox"/> Pit Depth                 </td> </tr> </table>	DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling	0	SANDY LOAM		DARK BROWN		10	LOAMY SAND	FRIABLE	BROWN		20	FINE SAND		YELLOWISH BROWN		30	MEDIUM SAND		PALE BROWN	COMMON & DISTINCT	40	LIMIT OF EXCAVATION = 40"				50					Soil Classification <u>5</u> Profile <u>C</u> Condition	Slope <u>0-3</u> %	Limiting Factor <u>28</u> "	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth	<p>Observation Hole _____ <input type="checkbox"/> Test pit <input type="checkbox"/> Boring</p> <p>_____ " Depth of Organic Horizon Above Mineral Soil</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH BELOW MINERAL SOIL SURFACE (inches)</th> <th>Texture</th> <th>Consistency</th> <th>Color</th> <th>Mottling</th> </tr> </thead> <tbody> <tr><td>0</td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td></tr> <tr><td>20</td><td></td><td></td><td></td><td></td></tr> <tr><td>30</td><td></td><td></td><td></td><td></td></tr> <tr><td>40</td><td></td><td></td><td></td><td></td></tr> <tr><td>50</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 25%;">Soil Classification Profile _____ Condition _____</td> <td style="width: 15%;">Slope _____ %</td> <td style="width: 15%;">Limiting Factor _____ "</td> <td style="width: 45%;"> <input type="checkbox"/> Ground Water  <input type="checkbox"/> Restrictive Layer  <input type="checkbox"/> Bedrock  <input type="checkbox"/> Pit Depth                 </td> </tr> </table>	DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling	0					10					20					30					40					50					Soil Classification Profile _____ Condition _____	Slope _____ %	Limiting Factor _____ "	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
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[Signature]

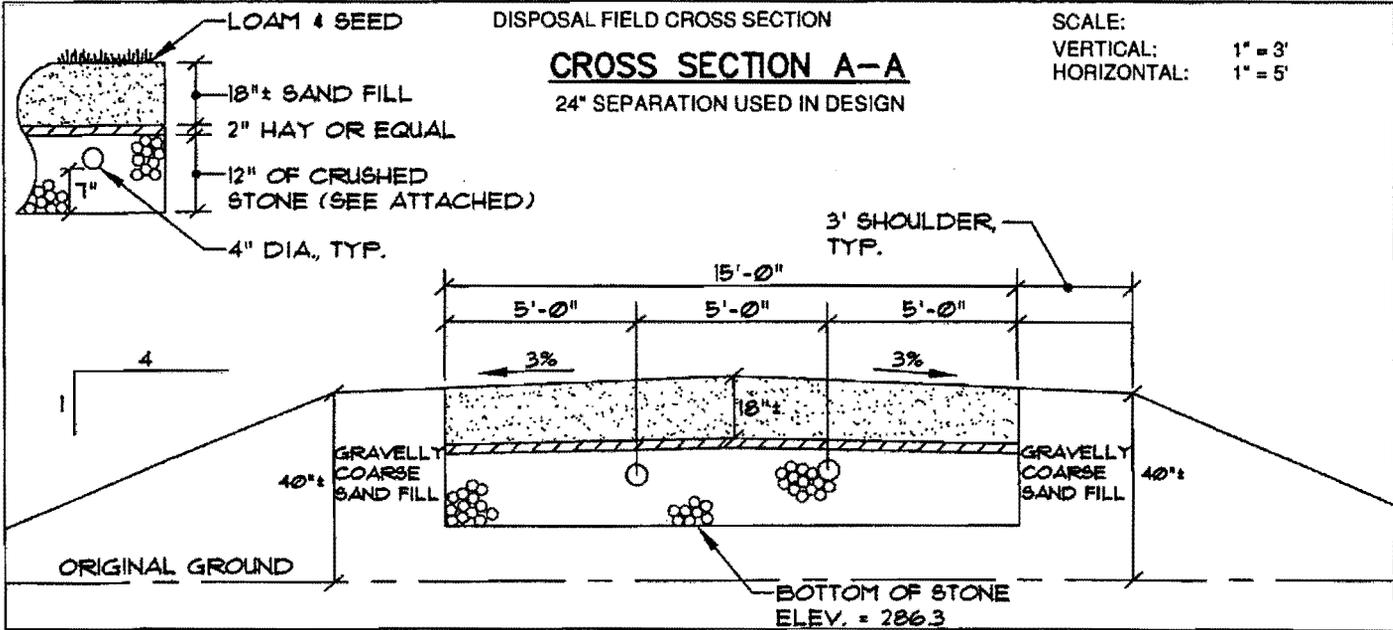
Site Evaluator Signature

355 SE # \_\_\_\_\_ Date 7-20-15

<b>SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION</b>		Maine Dept. of Health & Human Services Division of Environmental Health, 11 SHS (207) 287-5872 Fax: (207) 287-4172
Town, City, Plantation <b>Waterboro</b>	Street, Road, Subdivision <b>Route 202</b>	Owner or Applicant Name <b>Abbott Investments, LLC</b>



BACKFILL REQUIREMENTS		CONSTRUCTION ELEVATIONS		ELEVATION REFERENCE POINT	
Depth of Fill (Upslope)	40"±	Finished Grade Elevation	290.0	Location & Description FFE, south	
Depth of Fill (Downslope)	40"±	Top of Distribution Pipe or Proprietary Device	287.3	corner of building	
		Bottom of Disposal Area (Bottom of Stone)	286.3	Reference Elevation	290.5



 Site Evaluator Signature	355 SE #	7-20-15 Date	Page 3 of 3 HHE-200 Rev. 02/11
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SEBAGO TECHNICS, INC.

**General Notes**  
**(attachment to form HHE-200)**  
**<1,000 gpd Septic System**

1. The nature of the site evaluation profession is one of interpretation of soil and site conditions. We, in the field, attempt to both provide a satisfactory service to the client, and comply by the rules by which we are bound - The Maine Subsurface Wastewater Disposal Rules. If at any time you, the client, are not satisfied with the service provided or the results found, it is your right to hire another site evaluator for a second opinion.
2. Property information is supplied by the owner, applicant or representative. Such information presented herein shall be verified as correct by the owner or applicant prior to signing this application.
3. All work shall be in accordance with the Maine Subsurface Wastewater Disposal Rules dated 1/18/11, as amended.
4. All work on the disposal field should be performed under dry conditions.
5. No vehicular or equipment traffic to be allowed on disposal area unless H-20 load is specified. Disposal field shall be constructed from outside the corner stakes located in the field. The downslope area is also to be protected in the same manner.
6. Backfill, if required, is to be gravelly coarse sand texture and to be free of foreign debris (per Table 11A of the Maine Subsurface Wastewater Disposal Rules). If backfill is coarser than original soil, then mix a minimum of 4" of backfill material into original soil.
7. No neighboring wells are apparent (unless so indicated) within 100' of disposal area. Owner or applicant shall verify this prior to signing the application.
8. The disposal field stone shall be clean, uniform in size and free of fines, dust, ashes, or clay. It shall have a nominal size of ¾" or 1½" (per Table 11B of the Maine Subsurface Wastewater Disposal Rules).
9. Minimum separation distances required (unless reduced by variance or special circumstance).
  - a) wells with water usage of 2000 or more gpd or public water supply wells:

Disposal Fields:	300'
Treatment Tanks:	150'
  - b) potable water supply to disposal field: 100'
  - c) potable water supply to treatment tank: 50'
  - d) treatment tank or disposal field to lake, river, stream or brook: 100' for major watercourse,  
50' for minor watercourse
  - e) house to treatment tank: 8'
  - f) house to disposal field: 20'
  - For all other separation distances, use separations for less than 1,000 gpd per Maine Subsurface Wastewater Disposal Rules Table 7B for first-time systems and Table 8A for replacement systems.
10. Location of septic system near a wetland may require a separate permit. As such, the owner, prior to construction of the septic system, shall hire a professional to evaluate proximity of adjacent wetlands and prepare necessary permit applications.
11. Garbage disposals are not recommended and, if installed, are done so at the owner's risk. The additional waste load requires increased maintenance frequency and may cause premature failure of disposal field.
12. Pump stations, when required, shall be installed watertight to prevent infiltration of ground and/or surface water.
13. Force mains and pressure lines shall be flushed of any foreign material and pumps shall be checked for proper on/off cycle before being put into service.
14. Force mains, pump stations, and/or gravity piping subject to freezing shall be installed below frost line or adequately insulated.

---

## **11. Stormwater Management Plan**



# **STORMWATER MANAGEMENT PLAN**

**Brooks Dance Center  
Main Street  
Waterboro, Maine 04087**

Prepared for

**Abbott Investments, LLC  
Lyman, ME 04002**

July 2015

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D. Inspection, Maintenance and Housekeeping Plan	

## EXECUTIVE SUMMARY

Abbott Investments, LLC proposes to develop Lot 30A on the Town of Waterboro Tax Map 4. The parcel is 2.23 acres in size and is situated on Route 202, also known as Main Street. The development proposes to construct a commercial building for a dance studio, associated vehicle parking and loading, landscaping, and stormwater management area. The anticipated full build-out of the development will result in an impervious area of 25,473 square feet and a disturbed area of approximately 1.00 acre.

The development portion of the site is mostly cleared as a result of a prior proposed project with a gravel access road into the south end of the property from State Route 202; the remaining portion of the project site is mostly wooded. The project's watershed is tributary to Shaker Pond, which is currently listed as a Lake Most at Risk from New Development, via on-site wetlands and Carll Brook, which is not listed as an urban Impaired Stream. As the Shaker Pond is not considered a severely blooming lake and the project is less than 3 acres of impervious with less than 5 acres of developed land, the project is only required to meet the MDEP Chapter 500 Basic and General standards as well as the Town of Waterboro stormwater management criteria.

The proposed erosion controls and the proposed stormwater management system have been designed to meet these requirements.

# STORMWATER MANAGEMENT PLAN

## Brooks Dance Center Waterboro, Maine

### I. Introduction

This Stormwater Management Plan has been prepared to address the potential impacts associated with this project due to the proposed modification in stormwater runoff characteristics. The stormwater management controls that are outlined in this plan have been designed to best suit the proposed development and to comply with applicable regulatory requirements.

### II. Existing Conditions

#### A. Land Cover

The project site currently consists of an existing gravel area with the remainder of the parcel consisting of wooded area. The site is located approximately 0.5 mile north of Straw Mill Brooke Road.

#### B. Site Topography

Elevations on the site vary between elevations 282± to 290±. The slopes of the remainder of the site vary from approximately 0% to 7%.

#### C. Surface Water Features

A stream is located in back of and offsite from the subject property. Wetlands associated with the stream channel were delineated and are shown on the plans but no wetland fill is proposed. The 75 stream setback is indicated on the plans as part of the property building setbacks. There is a large wetlands complex to the west of the property which has an associated Shoreland Zone. This 250-foot Shoreland Zone line is not on the property but is delineated on the plan for reference.

#### D. Soils

Soil characteristics were obtained from the Soil Conservation Service (SCS) Medium Intensity Soil Survey of York County. Soils identified on the site (or within close proximity) are identified as being mainly Naumberg which is classified as Hydrologic Soil Group D. A small portion of the site is indicated to be Croghan which is classified as Hydrologic Soil Group A; however, it is located with known wetlands. Wetlands were field delineated in the vicinity of the project by Sebago Technics, Inc. staff and have been classified as HSG-D in our analysis.

E. Historic Flooding

There are no known special flood hazard areas associated with this parcel as indicated on the Flood Insurance Rate Maps for the Town of Waterboro, Maine, York County, Community Panel Number 2301990020C, having an effective date of February 01, 1985. The parcel does not fall within an identified flood zone.

III. Proposed Development

Abbott Investments, LLC proposes to construct a 6,000 square foot building with associated vehicle parking and unloading; stormwater management; landscape; and access drive areas. Approximately 25,473 square feet of impervious area and approximately 1.00 acres of clearing are required for the development.

IV. Downstream Ponds and Waterbodies

Stormwater from the site eventually enters Carll Brook, which is not defined as an Urban Impaired Stream by the MDEP AND THEN Shaker Pond, which is defined as a Lake Most at Risk from New Development.

V. Regulatory Requirements

A. Town of Waterboro, Maine

In accordance with the Waterboro Code of Ordinances, developments shall be designed to compare the post-development conditions rate of runoff to the pre-developed condition rate for the 2-year, 10-year and 25-year, 24 hour events.

B. Maine Department of Environmental Protection (MDEP)

MDEP Chapter 500 Rules describe stormwater management requirements for new development projects. These rules describe performance standards divided into five major categories: Basic Standards, General Standards, Phosphorous Standards, Urban Impaired Stream Standards, and Flooding Standards. The following sections describe how this project will address these stormwater management performance standards.

Basic Standards: A project must meet basic standards if it disturbs an area greater than one (1) acre. As this development will disturb approximately more than 1.00 acre, it is required to meet these basic standards. These standards include various erosion and sedimentation controls, inspection and maintenance procedures, and general housekeeping requirements. These performance standards have been addressed on the plan entitled "Erosion and Sedimentation Control Plan" and the report entitled "Inspection, Maintenance, and Housekeeping Plan" Please refer to these plans for more detailed information.

General Standards: A project is subject to the general standards if it results in the creation of one (1) or more acres of impervious area or developed areas greater than five (5) acres. This project will be required to meet the general standards. These

standards require that a minimum of 95% of all impervious areas and at least 80% of all developed areas are designed to be tributary to stormwater BMPs. Standard BMPs have been defined by the MDEP and are described thoroughly in their publication Stormwater Management for Maine: Best Management Practices Manual as revised in January of 2006. Section VI - Stormwater Management BMPs of this Stormwater Management Plan describes the BMPs to be utilized on this project and specific design information for each BMP.

Phosphorous Standards: Stormwater from this project is tributary to Shaker Pond which is listed as a Lake Most at Risk from New Development; however, this lake is not considered a severely blooming lake, so this project is not subject to the phosphorus standards.

Urban Impaired Stream Standards: Stormwater from this project is tributary to an Urban Impaired Stream watershed, so this project is not subject to the Urban Impaired Stream standards.

Flooding Standards: The MDEP requires that projects creating impervious areas greater than three (3) acres, or developed areas greater than twenty (20) acres address various flooding standards. This project is not subject to flooding standards.

Because the project disturbs more than one (1) acre and will create more than 20,000 sf of impervious area, it is required to meet the Basic and General Standards of the MDEP. Because Shaker Pond is not considered a severely blooming lake, the project is not required to address the Phosphorus Standards.

## **VI. Stormwater Management BMPs**

One under drained soil filter detention basin will be constructed in accordance with the criteria in the current edition of the MDEP publication, "Stormwater Management for Maine".

### **A. Underdrained Soil Filter Basin Design**

One underdrained soil filter detention basin has been designed to treat the stormwater runoff. The basin provides both stormwater quality and quantity control for the project. The under drained filtration basin has been designed so that it treats the volume of at least 1.0" of runoff from tributary impervious areas and 0.4" of runoff from non-impervious developed areas tributary to the basin. The basin has been designed with an outlet control structure to convey runoff in excess of the water quality volume.

### **B. Temporary Buffer Area**

A small area of the proposed impervious area for the site will drain to a wooded area that will be preserved as a temporary buffer area. As it is expected that this site will have additional phases, the temporary buffer area will be replaced by another BMP system or become permanent with a future phase of development.

VIII. Peak Flow Analysis

This section has been prepared to discuss the proposed modifications to peak flow rates as a result of the development.

A. Modeling Technique

In order to evaluate drainage characteristics in pre and post-development conditions, a quantitative analysis was performed to determine peak rates of runoff for the 2, 10 and 25-year storm events. Runoff calculations were performed following the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds, Technical Release #55" and HydroCAD Stormwater Modeling System software. A 24-hour, SCS Type III storm distribution was used for analysis.

- The rate for filtration for flow through the under drained soil filters have been changed to 2.41 ft/hr, the typical value allowed by MDEP.
- The 24-hour rainfall values utilized in the hydrologic model are as follows:

<b>Storm Frequency Precipitation (In./24 hr)</b>	
2-year	3.0
10-year	4.6
25-year	5.4

B. Drainage Characteristics (Pre and Post-Development Watershed Delineation)

Pre-Development Watershed

The "Pre-development Watershed Map" depicts the site's associated watershed areas delineated prior to development (pre-development). As shown on the aforementioned map, the site is completely tributary to one study point (SP1). Generally, stormwater drains from Route 202 and across the parcel to the wetland and stream area towards the back of the property.

Subcatchment 1 includes the entire watershed delineation for the pre-development. Stormwater runoff flows overland via sheet flow and shallow concentrated flow and leaves the site along the north end of the parcel into the existing wetlands.

Post-Development Watershed

The post-development watershed includes the same study points as the pre-development watershed.

Subcatchment 11 includes the offsite areas of Main Street (SR 202) that are conveyed via a culvert to the rear of the property, areas on the western portion of the site that will be disturbed and revert back to meadow and the proposed grass parking area.

Stormwater runoff flows overland via sheet flow and shallow concentrated flow and leaves the site along the north end of the parcel into the existing wetlands.

Subcatchment 12 includes all of the proposed building area for the dance center, a small section of sidewalk and the drip edge treatment system. Stormwater runoff flows directly into the proposed drip edge that outlets into Study Point 1 via the foundation drain system to the existing wetland.

Subcatchment 13 includes the majority of the proposed parking area as well as the site entrance. Stormwater runoff flows directly into the proposed pond located to the west of the proposed 6,000 square foot building.

C. Comparison

The watershed areas and times of concentration of the post-development watersheds vary from the existing conditions based on the proposed site development and grading. Table-2 summarizes the results of the hydrologic analysis of the project under pre-development and post-development conditions.

<b>Table 2 - Stormwater Runoff Summary Table Pre-Development vs. Post-Development</b>										
Study Point	Total Watershed Area (Ac)		Avg. Weighted Curve No. (Cn)		2-Year		10-Year		25-Year	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SP1	3.57	3.57	80.0	82.0	2.76	2.42	5.73	5.11	7.30	6.52

The results of the modeling indicates that the project will meet the pre vs post discharge criteria for the 2-year, 10-year and 25-year storm events.

VIII. Water Quality Analysis

The project will have one under drained soil filter detention basin to achieve the required quality treatment.

The underdrained soil filter must detain a runoff volume equal to 1.0-inch times the subcatchment's impervious area and 0.4-inch times the subcatchment's tributary landscaped areas. In addition the surface area must be a minimum of 5% of the contributing impervious areas and 2% of the contributing pervious areas of the with the total filter sizing not exceeding 3,000 square feet.

The attached treatment summary table quantifies the total impervious and developed areas for the proposed development and indicates the BMP measures proposed for treating the impervious areas. The conclusion is a tabulation of the effective treatment percentages for the proposed development. The results of this tabulation indicate the following:

- The post-development condition of the site will include approximately 25,473 square feet of new impervious area and a total of approximately 43,718 square feet of new developed area.
- The general standards require treatment for 95% of the new impervious areas. As such, the site is required to provide treatment for a minimum for 24,199 square feet. Treatment is provided for 25,473 square feet, equal to 100.0% of the impervious area.
- The general standards require treatment for 80% of the new developed areas. As such, the site is required to provide treatment for a minimum for 34,974 square feet. Treatment is provided for 39,918 square feet, equal to 91.3% of the developed area.

An Erosion & Sedimentation Control Plan will be implemented as an integral part of the stormwater management plan addressing erosion and sediment control during construction and the post-construction stabilization of the site. Temporary erosion control measures to be installed during construction will include the placement of sedimentation barriers (siltation fence) along down gradient areas, together with specific requirements for the use of riprap, erosion control blanket, and temporary/permanent re-vegetation measures. These construction requirements have been developed following Best Management Practice guidelines and have been placed directly on the design plans for construction reference.

**IX. Conclusions**

Erosion and sedimentation controls, inspection and maintenance procedures and general housekeeping requirements have been outlined to prevent unreasonable impacts on the site and to the surrounding environment. By utilizing Best Management practices, stormwater quality treatment has been provided for at least 100% of the total impervious area and at least 93.1% of the total developed area.

With the incorporation of the above referenced erosion control, treatment and detention measures, the project has been designed in conformance with the stormwater requirements of Town of Waterboro Zoning Ordinance and the Maine Department of Environmental Protection Chapter 500 Stormwater Law. Accordingly, it is anticipated that stormwater runoff from the proposed development will not cause a significant adverse effect to off-site receiving channels or downstream properties.

Prepared by,

SEBAGO TECHNICS, INC.



Robert A. McSorley, P.E.  
Senior Project Manager

July 27, 2015

RAM/

# BROOKS DANCE CENTER

MAIN STREET  
WATERBORO, MAINE 04030

**APPLICANT:**  
ABBOTT  
INVESTMENT, LLC.  
28 HAMILTON ROAD  
WATERBORO, MAINE 04002  
207-247-5278

**OWNER:**  
DOUGLAS C. FOGLIO, SR.  
P.O. BOX 308  
WATERBORO, MAINE 04087

**ENGINEER/SURVEYOR:**

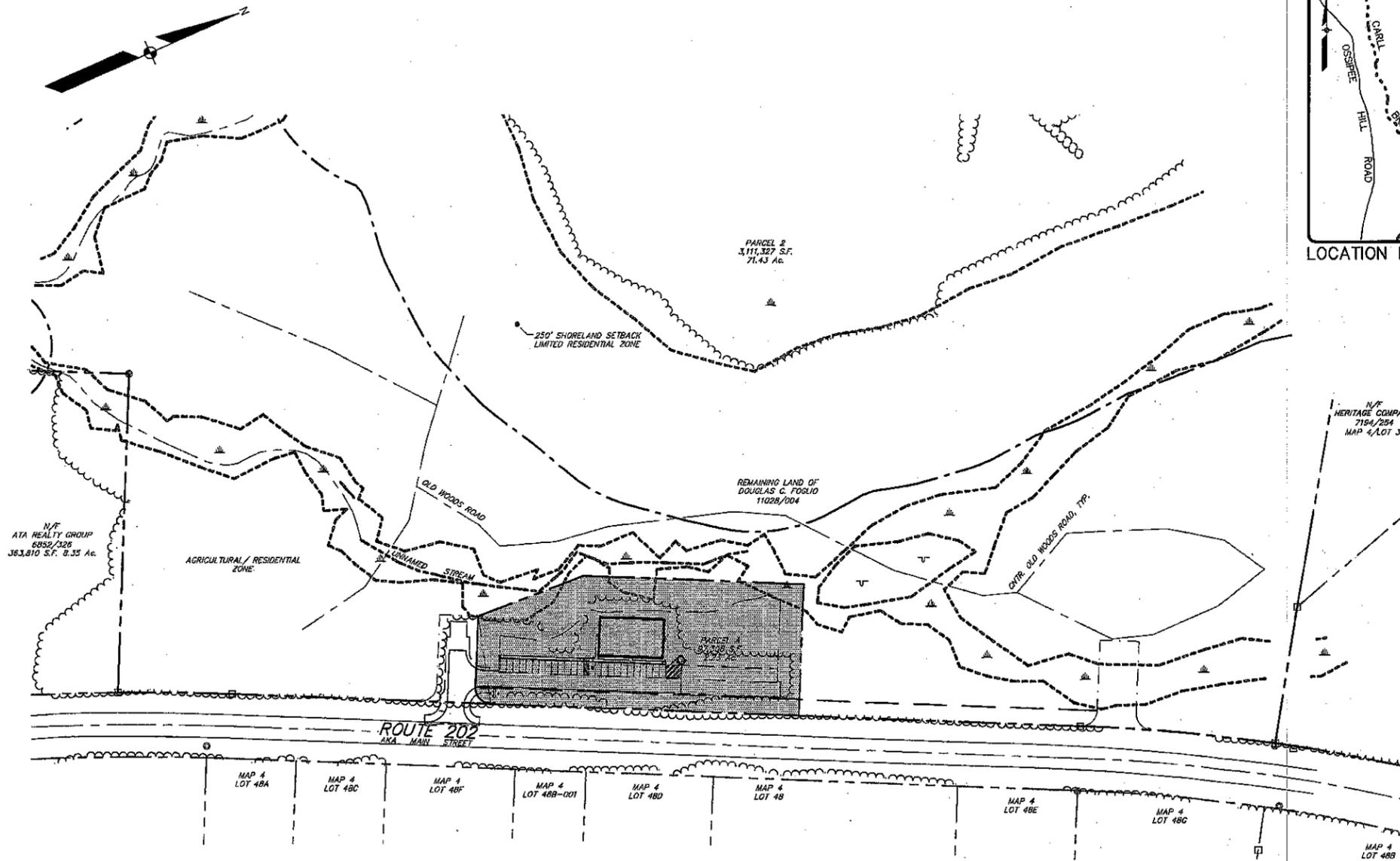
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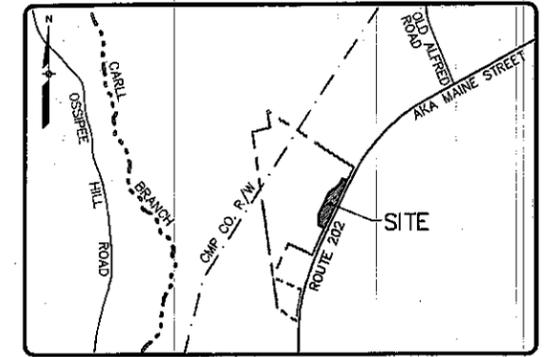
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Tel. 207-783-5656

**LIST OF ABUTTERS:**

KEY	ABUTTER	BOOK/PAGE
LOT 30A	DOUGLAS C. FOGLIO, SR.	11028/4
LOT 4B	MICHAEL L. HAMMOND	13258/323
LOT 4BB	BARBARA & RUSSELL GILES	9088/285
LOT 4BD	MICHAEL L. HAMMOND	13278/245
LOT 4BF	WILLIAM & ELAINE CALVENT	8993/02



SCALE: 1" = 100'



**SHEET INDEX**

SHEET	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	SITE PLAN
4	GRADING AND UTILITY PLAN
5	LANDSCAPE PLAN
6	DETAILS
7	DETAILS









# EROSION CONTROL MEASURES

## PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ACHIEVED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

## CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN 14-DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100' OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

## EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

### 1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. ALSO, AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 15%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).

### TYPES OF MULCH:

**HAY OR STRAW:** SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).  
**EROSION CONTROL MIX:** SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.  
**EROSION CONTROL BLANKET:** SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

### 2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

### 3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1. OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4. OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

### 4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

**SILT FENCE:** SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

**HAY BALES:** SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN INTACT WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETERIORATION. ALL ENDINGS SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

**EROSION CONTROL MIX:** SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

**CONTINUOUS CONTAINED BERM:** SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

### 5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 85%-90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

**STONE CHECK DAMS:** SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

**HAY BALE CHECK DAMS:** WE DO NOT RECOMMEND THE USE OF HAY BALES AS CHECK DAMS.

**MANUFACTURED CHECK DAMS:** MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

### 6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

**HAY BALE DROP INLET PROTECTION:** WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

**CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET):** SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

**MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET):** MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

### 7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PAVED ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP OR WASHED TO FURTHER MINIMIZE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS.

### 8. DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE.

### 9. TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS NETWORK SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/2003 OR LATER. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

### 10. PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOANED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

## SEEDBED PREPARATION:

- FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- SOIL TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOIL TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P2O5-K2O OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.

- WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

## APPLICATION OF SEED:

- SEEDING:** SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDEP SEED MIX 2 IS DISPLAYED)

SEED TYPE	APPLICATION RATE
CREeping RED FESCUE	0.45 LBS./1,000 S.F. (20 LBS./ACRE)
REDFEST	0.05 LBS./1,000 S.F. ( 2 LBS./ACRE)
TALL FESCUE	1.50 LBS./1,000 S.F. ( 75 LBS./ACRE)
TOTAL:	0.97 LBS./1,000 S.F. ( 42 LBS./ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/2003 OR LATER.

- HYDROSEEDING:** SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

- MULCHING:** SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

## SODDING:

FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS AT EXPOSED AESTHETIC VALVES. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR. HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

## TRENCH DEWATERING AND TEMPORARY STREAM DIVERSION:

WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LIQUID POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

## STANDARDS FOR TIMELY STABILIZATION:

**STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES --** THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (6.7H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS --** BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD --** THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY NOVEMBER 15. PROPER INSTALLATION INCLUDES THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO PROMOTE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 3:1 (CH:1V).
- STABILIZE THE SLOPE WITH WOOD WASTE COMPOST --** THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 3:1 (CH:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SLOPE WITH STONE RIPRAP --** THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

**STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS --** BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION --** BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C) OF THIS STANDARD.
- STABILIZE THE SOIL WITH SOD --** THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- STABILIZE THE SOIL WITH MULCH --** BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

## CONSTRUCTION SCHEDULE:

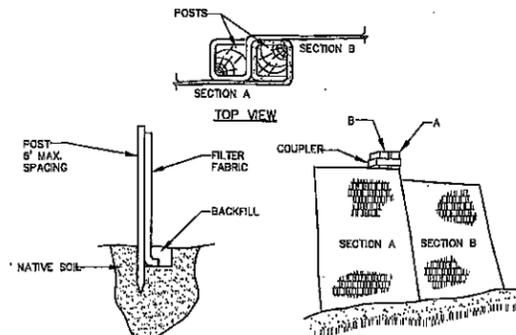
SITE IMPROVEMENTS WILL MOST LIKELY BEGIN IN SUMMER/FALL 2015 DEPENDING UPON FINAL PROJECT APPROVAL. THE FOLLOWING SCHEDULE IS ANTICIPATED FOR THE CONSTRUCTION OF THE ROADWAY IMPROVEMENTS.

SCHEDULE	2 MONTHS
1. ESTIMATED CONSTRUCTION TIME:	2 MONTHS
+2. EROSION CONTROL MEASURES PLACED:	WEEK 1
3. SITE CLEARING AND GRUBBING:	WEEK 2
4. CONSTRUCTION OF ROAD SUBBASE FOR ACCESS:	WEEK 3 - WEEK 4
5. STORMWATER MANAGEMENT AREA CONSTRUCTION:	WEEK 5
6. UTILITY IMPROVEMENTS AND ROADWAY CONSTRUCTION:	WEEK 6 - WEEK 8
7. MULCH SPREAD FOR WINTER EROSION CONTROL:	OCTOBER OF CONSTRUCTION YEAR
8. START FINAL SEEDING ON PREPARED AREAS (DURING GROWING SEASON):	WEEK 8
9. BIWEEKLY MONITORING OF VEGETATIVE GROWTH:	WEEK 10
+10. RE-SEEDING OF AREAS, IF NEEDED:	WEEK 10
+11. REMOVAL OF EROSION CONTROL DEVICES:	UPON FINAL PROJECT COMPLETION

++ DATES ARE SUBJECT TO CHANGE AT THE DISCRETION OF THE ENGINEER, DEPENDING ON CONSTRUCTION PROGRESS.

## INSPECTIONS/MONITORING:

- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, OR AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN.
- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMI-MONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 85%-90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

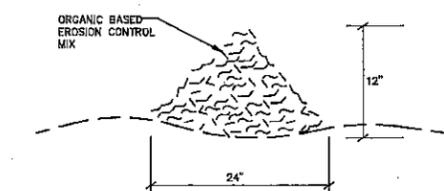


## INSTALLATION:

- EXCAVATE A 6" X 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
- UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
- DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
- LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
- JOIN SECTION AS SHOWN ABOVE.
- BARRIER SHALL BE MIRAF SILT FENCE OR EQUAL.

## EROSION CONTROL MIX BERM

NOT TO SCALE



## COMPOSITION:

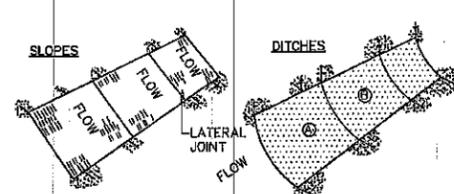
EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

## INSTALLATION:

- THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.
- EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH-OUTS UNDER THE BARRIER.
- THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.
- EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: HELD AND AREAS AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

## EROSION CONTROL MIX BERM

NOT TO SCALE

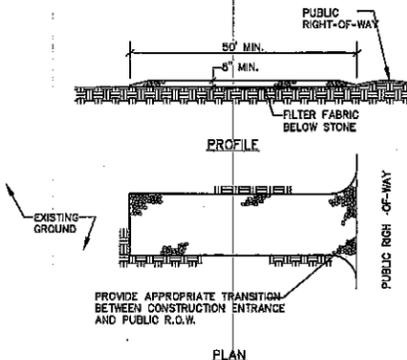


## NOTES:

- BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
- FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED, OVERLAP B OVER A.
- LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
- STAPLE OUTSIDE LATERAL EDGE 2" ON CENTER.
- WIRE STAPLES TO BE MIN OF #11 WIRE 6" LONG AND 1-1/2" WIDE.
- USE NORTH AMERICAN GREEN DS 150 OR APPROVED EQUAL.

## EROSION CONTROL BLANKET

NOT TO SCALE

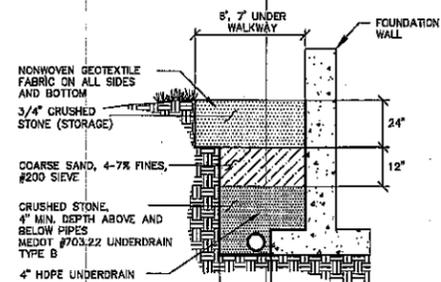


## NOTES:

- STONE SIZE - AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
- LENGTH - AS SHOWN ON PLANS, MIN. 50 FEET.
- THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
- WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOTHING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DRIPPED, WASHED OR TRACKED OUTSIDE PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

## STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



## CONSTRUCTION OVERSIGHT NOTES FOR DRIP EDGE STRIP:

- INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONSIST OF WEEKLY VISITS TO THE SITE, WASH OR TRAP SEDIMENT. ALL SEDIMENT SPILLED, DRIPPED, WASHED OR TRACKED OUTSIDE PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

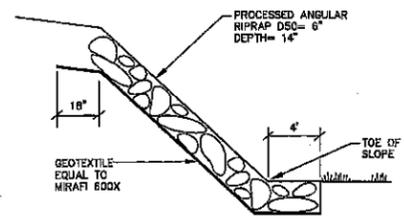
## DRIP EDGE INFILTRATION STRIP DETAIL

NOT TO SCALE

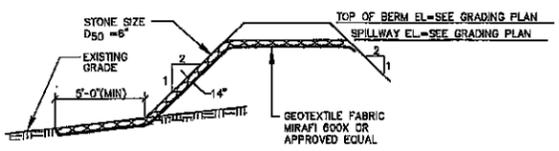
DESIGNED: [ ] CHECKED: [ ]  
 RAM RAM  
 A RAM 7/27/15 TOWN AND MDEP SUBMISSIONS  
 THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICAL INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICAL INC.  
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DETAILS OF:  
**BROOKS DANCE CENTER**

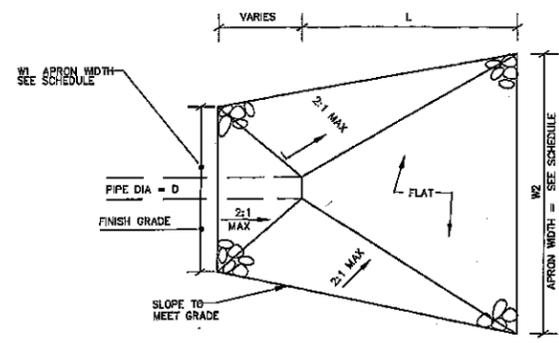


**SIDE SLOPE RIPRAP**  
NOT TO SCALE

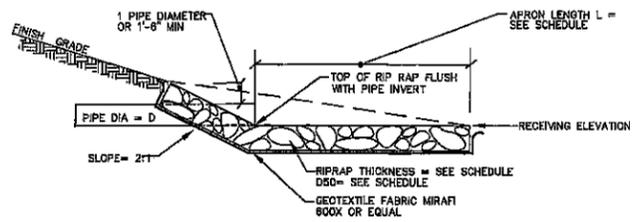


- EMBANKMENT CONSTRUCTION**
- CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION.
  - PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
  - INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS.
  - LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

**SPILLWAY SECTION**  
NOT TO SCALE



**PLAN VIEW**



**SECTION VIEW**

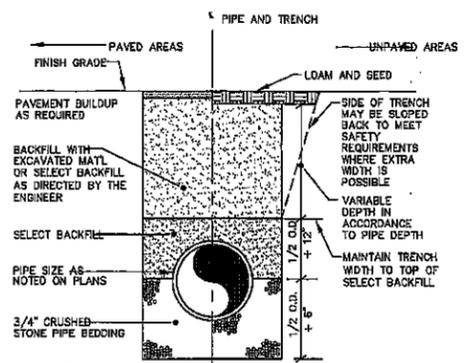
**NOTES**

- RIPRAP TO BE PROCESSED ANGULAR ROCK
- RIPRAP GRADATION SHALL BE A WELL GRADED MIX FROM ABOUT 1.5 TIMES D SIZE TO 25 PERCENT OF THE D SIZE
- THE RIPRAP STONES SHALL BE CAREFULLY PLACED FROM THE TOE OF THE SLOPE UPWARD AND NOT BE ALLOWED TO DROP MORE THAN 12" ONTO THE GEOTEXTILE
- THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH, UNIFORMLY SLOPED SURFACE

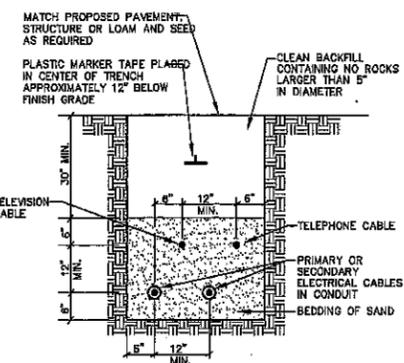
**TYPICAL RIPRAP APRON SCHEDULE**

CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH - W1 (FT.)	WIDTH - W2 (FT.)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18
36	28	9	32	11	25
42	33	11	37	12	27
48	38	12	43	16	36

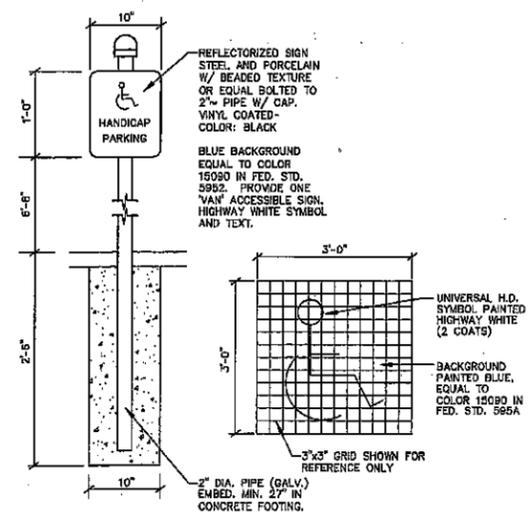
**RIPRAP APRON**  
NOT TO SCALE



**TYPICAL TRENCH SECTION**  
NOT TO SCALE



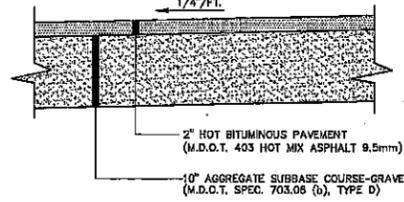
**TYPICAL UNDERGROUND CABLE INSTALLATION**  
NOT TO SCALE



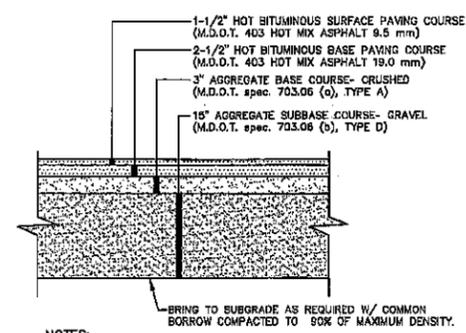
**HANDICAP SIGNS**  
NOT TO SCALE

- CONSTRUCTION NOTES FOR UNDERDRAINED SOIL FILTER:**
- THE AREA OF THE BASIN MAY BE EXCAVATED IN PREPARATION OF THE INSTALLATION OF THE UNDERDRAIN AND CAN BE USED FOR A SEDIMENT TRAP FROM THE SITE DURING CONSTRUCTION, AS LONG AS THE BASIN IS MULCHED AND STABILIZED TO PREVENT EROSION.
  - THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION. OTHERWISE, THE RUNOFF FROM THE CONTRIBUTING AREA MUST BE DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
  - IF VEGETATION IS NOT ESTABLISHED WITHIN THE FIRST YEAR, THE CONTRACTOR MAY INSTALL A 2-3 INCH LAYER OF SANDY LOAM TOPSOIL (WITH LESS THAN 2% CLAY) ON THE SURFACE OF THE GRASS FILTER AND RESEED/MULCH.
  - INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE DEP. AT A MINIMUM, THE DESIGN ENGINEER SHALL INSPECT THE CONSTRUCTION AT THE FOLLOWING PHASES:
    - AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
    - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
    - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDING.
    - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND
    - ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN SHALL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.
  - THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF THE FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
    - SUBMIT SAMPLES OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE GRABS FROM THE STOCKPILE OR FIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
    - PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES, 1998A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED BY HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
    - PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D998.

- UNDERDRAINED FILTER NOTES:**
- THE SOIL BED SHALL CONSIST OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH 20% TO 25% BY VOLUME OF A MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH. THE RESULTING MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE 200 SIEVE AND SHALL HAVE A CLAY CONTENT OF LESS THAN 2%. THE SAND USED IN THE MIXTURE SHALL MEET THE FOLLOWING SPECIFICATIONS:
    - SIEVE 3/8" - 100 PERCENT PASSING
    - SIEVE #4 - 85-100 PERCENT PASSING
    - SIEVE #8 - 80-100 PERCENT PASSING
    - SIEVE #16 - 50-85 PERCENT PASSING
    - SIEVE #30 - 25-60 PERCENT PASSING
    - SIEVE #60 - 10-30 PERCENT PASSING
    - SIEVE #100 - 2-10 PERCENT PASSING
    - SIEVE #200 - 0-5 PERCENT PASSING
  - COMPACTION OF THE SOIL BED MATERIAL SHALL BE AVOIDED. IF COMPACTION OCCURS, ROTOTILL AGAIN PRIOR TO SEEDING OR SOODING.

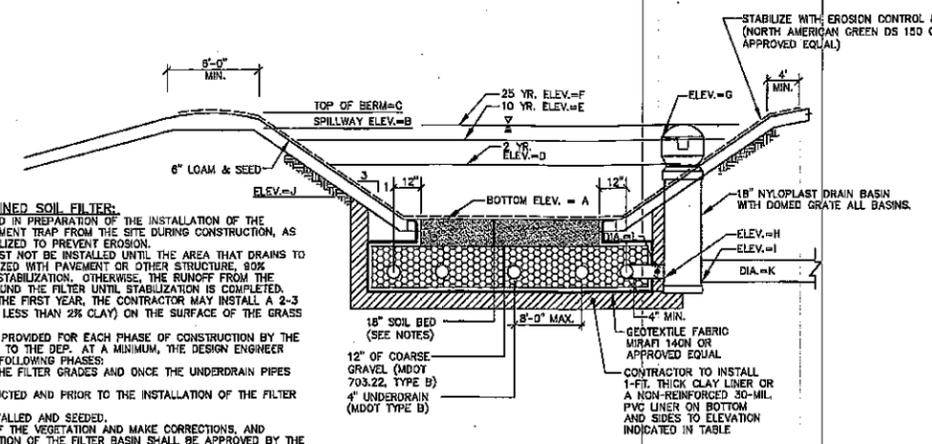


**BITUMINOUS SIDEWALK**  
NOT TO SCALE



- NOTES:**
- COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
  - CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
  - CONTRACTOR MAY REPLACE BITUMINOUS PAVING SECTION WITH TWO (2) 1.5" LIFTS OF 12.5mm SUPERPAVE MIX. SUBMIT PAVEMENT MIX DESIGN PRIOR TO CONSTRUCTION.

**TYP. PAVED PARKING LOT SECTION**  
NOT TO SCALE



- EMBANKMENT CONSTRUCTION NOTES:**
- CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATIONS
  - PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM
  - INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
  - LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

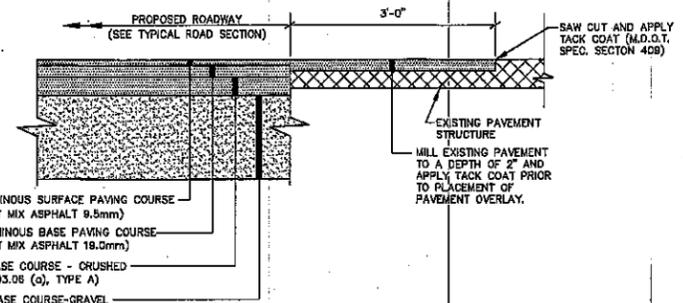
**POND DIMENSIONS**

UNDERDRAIN GRASS FILTER	ELEVATION IN FEET												DIA. (IN.)
	A	B	C	D	E	F	G	H	I	J	K	L	
USF-1	284.25	286.25	287.25	285.32	285.08	286.25	286.45	282.08	282.08	4"	4"	4"	4"

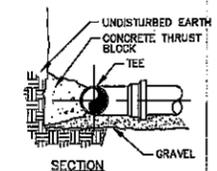
**SOIL BORING SUMMARY TABLE**

BORING NO.	EXIST. GRADE (FT.)	DEPTH (FT.)	EXIST. SHWT (NO.)	ELEV. (FT.)	PROPOSED BMP STRUCTURE	UNDERDRAIN INVERT ELEV. (FT.)
1	284.89	13	2	263.80	263.80	262.08

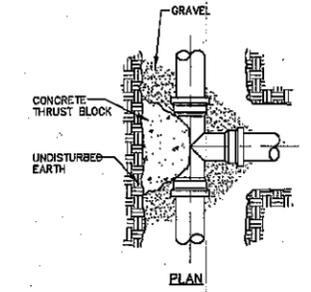
**UNDERDRAINED SOIL FILTER BASIN**  
NOT TO SCALE



**TYPICAL PAVEMENT JOINT**  
NOT TO SCALE



**SECTION**

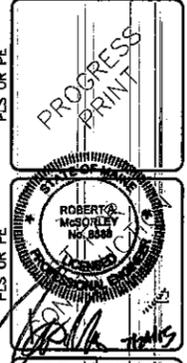


**PLAN**

**CONCRETE THRUST BLOCK SIZE REQUIREMENTS**

FITTINGS	SQ. FT. OF BEARING ON UNDISTURBED SOIL		
	90° BENDS	45° BENDS	TEES AND PLUGS
PIPE SIZE 6"	4.0	2.0	3.0
8"	8.0	4.0	5.0
12"	15	10	10

**TEE & BEND DETAIL**  
NOT TO SCALE



DESIGNED: [ ] CHECKED: [ ]

RAM: [ ] RAM: [ ]

DATE: [ ] STATUS: [ ]

PROJECT NO. 15185

SCALE: NTS

SHEET 7 OF 7

**SEBAGO TECHNICS**

WWW.SEBOGOTECHNICS.COM

75 John Roberts Rd., Suite 1A  
South Portland, ME 04086  
Tel: 207-260-2100

**DETAILS OF: BROOKS DANCE CENTER**

MAIN STREET  
WATERBURY, MAINE 04030

**FOR: ABBOTT INVESTMENT, LLC.**

28 HAMILTON ROAD  
WATERBURY, MAINE 04002

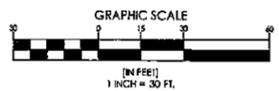
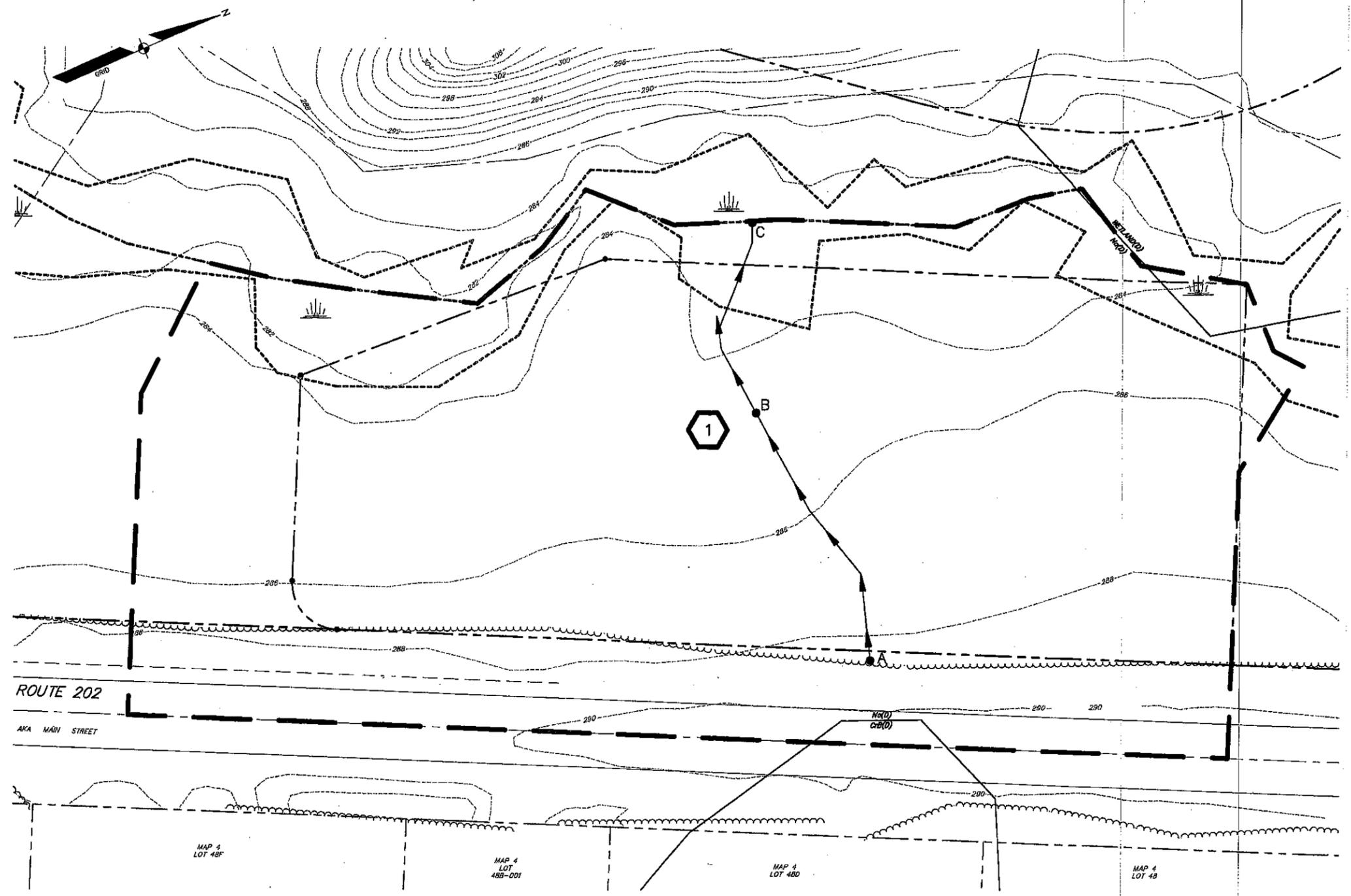
PROJECT NO. 15185

SCALE: NTS

SHEET 7 OF 7

**LEGEND**

-  WATERSHED BOUNDARY
-  TIME OF CONCENTRATION
-  REACH
-  WATERSHED LABEL
-  REACH
-  DETENTION POND
-  SOILS BOUNDARY



PLS OR PE

PROGRESS PRINT

DESIGNED	CHECKED
RLM	RAM

A. RAM 7/27/15 TOWN AND MDEP SUBMISSIONS

REV BY: DATE: STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

75 J.W. Roberts Rd. 250 Seaside Rd.  
 South Portland, ME 04106 South Portland, ME 04240  
 Tel. 207-260-2100 Tel. 207-783-8656

**PRE-DEVELOPMENT WATERSHED PLAN**

OF: **BROOKS DANCE CENTER**

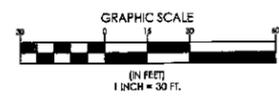
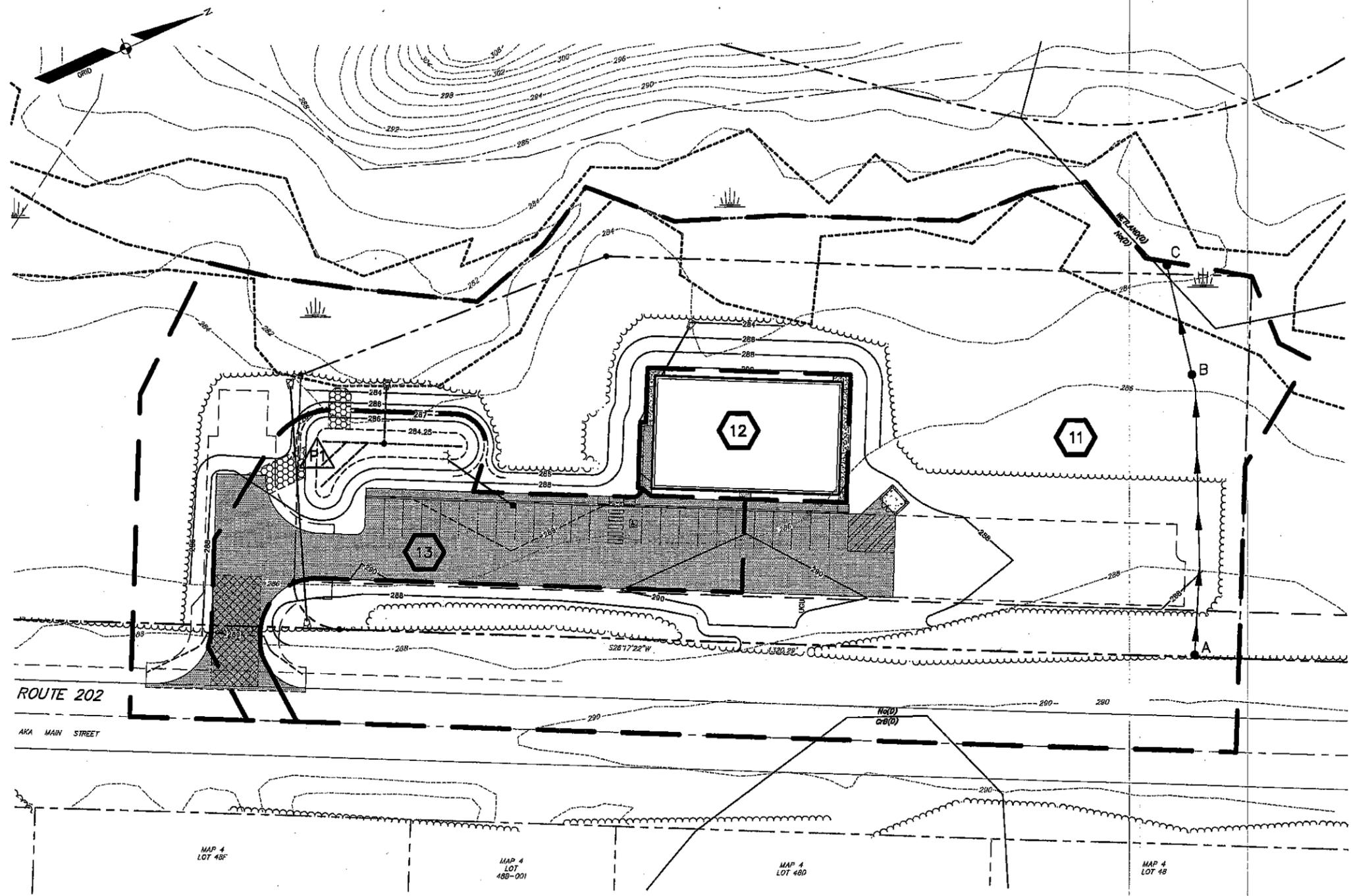
FOR: **ABBOTT INVESTMENT, LLC**

PROJECT NO. 15185      SCALE: 1" = 30'

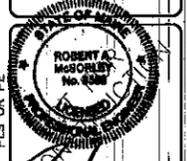
SHEET 1 OF 2

**LEGEND**

-  WATERSHED BOUNDARY
-  TIME OF CONCENTRATION
-  REACH
-  WATERSHED LABEL
-  REACH
-  DETENTION POND
-  SOILS BOUNDARY



Sub-catchment ID	Description	Area Requiring Treatment			Impervious Area (S.F.)	Developed Area (S.F.)	TREATMENT
		Impervious (S.F.)	Landscaping (S.F.)	Total (S.F.)			
11	Northern and western portions of site	4035	13195	17230	13430	Buffer	
12	Building	7108	0	7108	7108	Drip edge	
13	Entrance Drive and Parking lot	14330	6050	19380	19380	USF-1	
<b>TOTAL IMPERVIOUS AREA (requiring treatment)</b>		<b>25,473</b>	<b>13,195</b>	<b>38,668</b>	<b>43,718</b>		
<b>96% of IMPERVIOUS AREA REQUIRING TREATMENT</b>		<b>24,459</b>			<b>34,974</b>		
<b>TOTAL IMPERVIOUS AREA RECEIVING TREATMENT</b>		<b>25,473</b>			<b>39,918</b>		
<b>% OF IMPERVIOUS AREA RECEIVING TREATMENT</b>				<b>100.0%</b>	<b>91.3%</b>		



PLS OR PE  
PROGRESS PRINT

DESIGNED RLM	CHECKED RAM
A: RAM 7/27/15 TOWN AND MOEP SUBMISSIONS REV: BY: DATE: STATUS: <small>THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICALS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICALS, INC.</small>	



WWW.SEBAGOTECHNICALS.COM  
75 John Roberts Rd., South Portland, ME 04106  
250 Colliers Rd., Scarborough, ME 04105  
Tel: 207-260-2100

**POST-DEVELOPMENT WATERSHED PLAN**  
OF  
**BROOKS DANCE CENTER**  
MAIN STREET  
WATERBORO, MAINE 04036

FOR:  
**ABBOTT INVESTMENT, LLC**  
WATERBORO, MAINE 04030

PROJECT NO. 15185	SCALE 1" = 30'
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**SHEET 2 OF 2**

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# **Attachment A**

**STORWATER QUALITY CALCULATIONS**



75 John Roberts Road, Suite 1A

South Portland, Maine 04106

(207) 200-2100 FAX (207) 856-2206

JOB 15185 - Brooks Dance Center

SHEET NO. 1 OF 1

CALCULATED BY RLM DATE 7/9/2015

CHECKED BY RAM DATE 7/24/2015

FILE NAME 15185.ud1.xls

PRNT DATE 7/24/2015

Treatment Calculations:									
Pond 1:	Area to Pond =	0.340	acres	Impervious					
		0.116	acres	Landscaped					
0.34	acres x 1 inch	→	1234	ft <sup>3</sup>					
0.12	acres x 0.4 inches	→	168	ft <sup>3</sup>					
			1403	ft <sup>3</sup>					
Treatment Volume Needed =			1403	ft <sup>3</sup>					
Elevation	Surf. Area	Inc. Store	Cum. Store	Filter Size:					
284.25	1,408	0	0	0.34	ac x 5% =	0.017	acres		
286.00	2,787	3,671	3,671	0.12	ac x 2% =	0.0023	acres		
286.25	2,976	720	4,391			0.0193	acres		
						= 842	ft <sup>2</sup>		
Volume @ Elevation	284.85	→	1403	ft <sup>3</sup>					
Storage Depth =	7	inches							

### TREATMENT SUMMARY

Sub-catchment ID	Description	Areas Requiring Treatment			Receives Treatment (Yes/No)	Impervious Area Treated (S.F.)	Landscaped Area Treated (S.F.)	Developed Area Treated (S.F.)	TREATMENT BMP
		Impervious (S.F.)	Landscaping (S.F.)	Total Developed (S.F.)					
11	Northern and western portions of site	4035	13195	17230	Yes	4035	9395	13430	Buffer
12	Building	7108	0	7108	Yes	7108	0	7108	Drip edge
13	Entrance Drive and Parking lot	14330	5050	19380	Yes	14330	5050	19380	USF-1
		<b>25,473</b>	<b>18,245</b>	<b>43,718</b>		<b>25,473</b>	<b>14,445</b>	<b>39,918</b>	

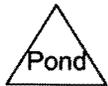
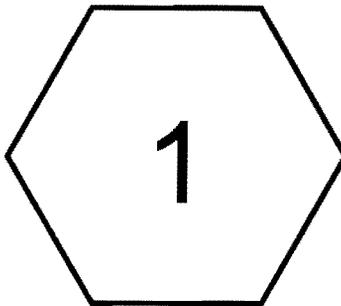
TOTAL IMPERVIOUS AREA (requiring treatment)	<b>25,473</b>	TOTAL DEVELOPED AREA (requiring treatment)	<b>43,718</b>
95% of IMPERVIOUS AREA REQUIRING TREATMENT	<b>24,199</b>	80% of DEVELOPED AREA REQUIRING TREATMENT	<b>34,974</b>
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT	<b>25,473</b>	TOTAL DEVELOPED AREA RECEIVING TREATMENT	<b>39,918</b>
% OF IMPERVIOUS AREA RECEIVING TREATMENT	<b>100.0%</b>	% OF DEVELOPED AREA RECEIVING TREATMENT	<b>91.3%</b>

---

# Attachment B

HydroCAD Output

SP1



**15185PRE-D**

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

Prepared by Sebago Technics, Inc.

Printed 7/27/2015

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Page 2

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

**Subcatchment 1:**

Runoff Area=3.573 ac 6.86% Impervious Runoff Depth>1.14"  
Flow Length=260' Tc=33.4 min CN=80 Runoff=2.76 cfs 0.339 af

**Reach SP1:**

Inflow=2.76 cfs 0.339 af  
Outflow=2.76 cfs 0.339 af

**Total Runoff Area = 3.573 ac Runoff Volume = 0.339 af Average Runoff Depth = 1.14"**  
**93.14% Pervious = 3.328 ac 6.86% Impervious = 0.245 ac**

**Summary for Subcatchment 1:**

Runoff = 2.76 cfs @ 12.49 hrs, Volume= 0.339 af, Depth> 1.14"

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

Area (ac)	CN	Description
* 0.245	98	Existing Offsite Impervious
* 0.184	96	Exisitng Gravel surface
0.376	78	Meadow, non-grazed, HSG D
2.768	77	Woods, Good, HSG D
3.573	80	Weighted Average
3.328		93.14% Pervious Area
0.245		6.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.7	150	0.0200	0.08		<b>Sheet Flow, A to B</b> Woods: Light underbrush n= 0.400 P2= 3.00"
2.7	110	0.0180	0.67		<b>Shallow Concentrated Flow, B to C</b> Woodland Kv= 5.0 fps
33.4	260	Total			

**Summary for Reach SP1:**

Inflow Area = 3.573 ac, 6.86% Impervious, Inflow Depth > 1.14" for 2 Year Storm event  
Inflow = 2.76 cfs @ 12.49 hrs, Volume= 0.339 af  
Outflow = 2.76 cfs @ 12.49 hrs, Volume= 0.339 af, Atten= 0%, Lag= 0.0 min

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

**15185PRE-D**

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

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

**Subcatchment 1:**

Runoff Area=3.573 ac 6.86% Impervious Runoff Depth>2.35"  
Flow Length=260' Tc=33.4 min CN=80 Runoff=5.73 cfs 0.701 af

**Reach SP1:**

Inflow=5.73 cfs 0.701 af  
Outflow=5.73 cfs 0.701 af

**Total Runoff Area = 3.573 ac Runoff Volume = 0.701 af Average Runoff Depth = 2.35"**  
**93.14% Pervious = 3.328 ac 6.86% Impervious = 0.245 ac**

15185PRE-D

Type III 24-hr 25 Year Storm Rainfall=5.40"

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

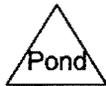
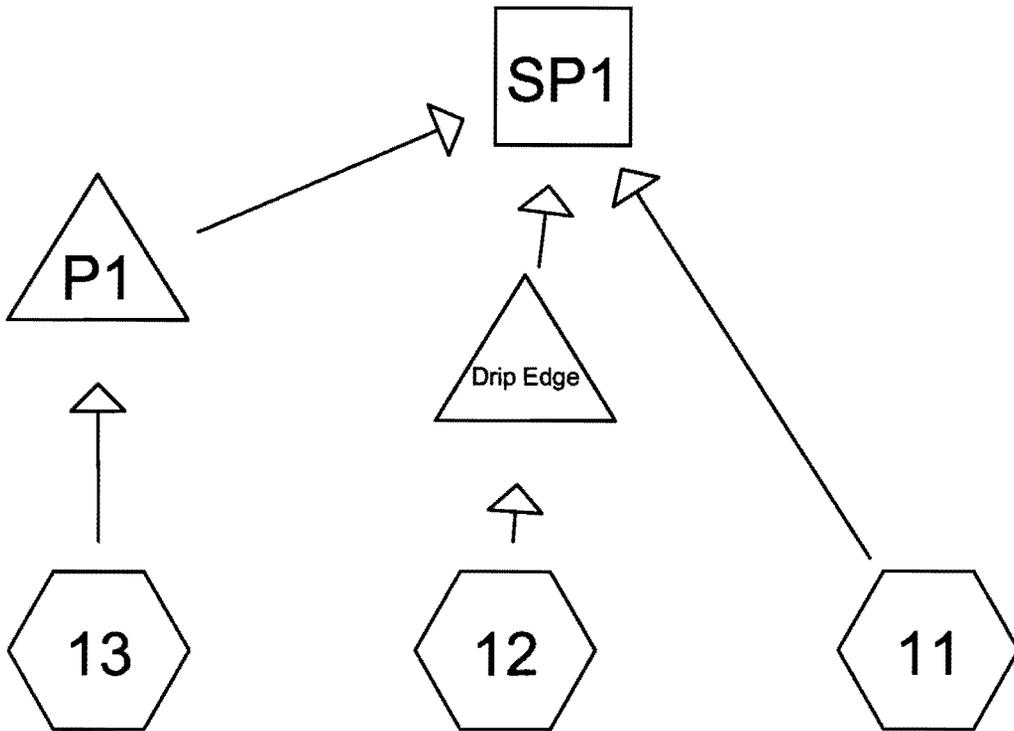
**Subcatchment 1:**

Runoff Area=3.573 ac 6.86% Impervious Runoff Depth>3.01"  
Flow Length=260' Tc=33.4 min CN=80 Runoff=7.30 cfs 0.896 af

**Reach SP1:**

Inflow=7.30 cfs 0.896 af  
Outflow=7.30 cfs 0.896 af

**Total Runoff Area = 3.573 ac Runoff Volume = 0.896 af Average Runoff Depth = 3.01"**  
**93.14% Pervious = 3.328 ac 6.86% Impervious = 0.245 ac**



**Routing Diagram for 15185POST 15-07-24-D**  
Prepared by Sebago Technics, Inc., Printed 7/27/2015  
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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 11:** Runoff Area=2.954 ac 11.07% Impervious Runoff Depth>1.14"  
Flow Length=210' Tc=32.2 min CN=80 Runoff=2.32 cfs 0.281 af

**Subcatchment 12:** Runoff Area=0.163 ac 92.02% Impervious Runoff Depth>2.59"  
Tc=6.0 min CN=98 Runoff=0.46 cfs 0.035 af

**Subcatchment 13:** Runoff Area=0.456 ac 74.56% Impervious Runoff Depth>2.13"  
Tc=6.0 min CN=93 Runoff=1.15 cfs 0.081 af

**Reach SP1:** Inflow=2.42 cfs 0.352 af  
Outflow=2.42 cfs 0.352 af

**Pond Drip Edge:** Peak Elev=289.40' Storage=525 cf Inflow=0.46 cfs 0.035 af  
Primary=0.05 cfs 0.035 af Secondary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.035 af

**Pond P1:** Peak Elev=285.49' Storage=2,357 cf Inflow=1.15 cfs 0.081 af  
Primary=0.05 cfs 0.037 af Secondary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.037 af

**Total Runoff Area = 3.573 ac Runoff Volume = 0.397 af Average Runoff Depth = 1.33"**  
**77.13% Pervious = 2.756 ac 22.87% Impervious = 0.817 ac**

**Summary for Subcatchment 11:**

Runoff = 2.32 cfs @ 12.47 hrs, Volume= 0.281 af, Depth> 1.14"

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

Area (ac)	CN	Description
* 0.234	98	Existing Offsite Impervious
0.805	78	Meadow, non-grazed, HSG D
1.519	77	Woods, Good, HSG D
0.093	98	Paved parking, HSG D
0.303	80	>75% Grass cover, Good, HSG D
2.954	80	Weighted Average
2.627		88.93% Pervious Area
0.327		11.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.7	150	0.0200	0.08		<b>Sheet Flow, A to B</b>
					Woods: Light underbrush n= 0.400 P2= 3.00"
1.5	60	0.0180	0.67		<b>Shallow Concentrated Flow, B to C</b>
					Woodland Kv= 5.0 fps
32.2	210	Total			

**Summary for Subcatchment 12:**

Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.035 af, Depth> 2.59"

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

Area (ac)	CN	Description
0.150	98	Roofs, HSG D
0.013	96	Gravel surface, HSG D
0.163	98	Weighted Average
0.013		7.98% Pervious Area
0.150		92.02% Impervious Area

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

**Summary for Subcatchment 13:**

Runoff = 1.15 cfs @ 12.09 hrs, Volume= 0.081 af, Depth> 2.13"

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



**Primary OutFlow** Max=0.05 cfs @ 11.55 hrs HW=288.02' (Free Discharge)  
 ↳1=Exfiltration (Exfiltration Controls 0.05 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=288.00' (Free Discharge)  
 ↳2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Summary for Pond P1:**

Inflow Area = 0.456 ac, 74.56% Impervious, Inflow Depth > 2.13" for 2 Year Storm event  
 Inflow = 1.15 cfs @ 12.09 hrs, Volume= 0.081 af  
 Outflow = 0.05 cfs @ 14.70 hrs, Volume= 0.037 af, Atten= 95%, Lag= 156.5 min  
 Primary = 0.05 cfs @ 14.70 hrs, Volume= 0.037 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 285.49' @ 14.70 hrs Surf.Area= 2,387 sf Storage= 2,357 cf

Plug-Flow detention time= 261.9 min calculated for 0.037 af (45% of inflow)  
 Center-of-Mass det. time= 171.6 min ( 935.8 - 764.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	284.25'	4,420 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
284.25	1,408	0	0
286.00	2,787	3,671	3,671
286.26	2,976	749	4,420

Device	Routing	Invert	Outlet Devices
#1	Primary	284.25'	<b>2.410 in/hr Exfiltration over Surface area above 284.25'</b> Excluded Surface area = 1,408 sf
#2	Primary	286.20'	<b>1.5" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#3	Secondary	286.25'	<b>10.0' long x 6.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

**Primary OutFlow** Max=0.05 cfs @ 14.70 hrs HW=285.49' (Free Discharge)  
 ↳1=Exfiltration (Exfiltration Controls 0.05 cfs)  
 ↳2=Orifice/Grate ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=284.25' (Free Discharge)  
 ↳3=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

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

**Subcatchment 11:** Runoff Area=2.954 ac 11.07% Impervious Runoff Depth>2.35"  
Flow Length=210' Tc=32.2 min CN=80 Runoff=4.82 cfs 0.579 af

**Subcatchment 12:** Runoff Area=0.163 ac 92.02% Impervious Runoff Depth>4.05"  
Tc=6.0 min CN=98 Runoff=0.72 cfs 0.055 af

**Subcatchment 13:** Runoff Area=0.456 ac 74.56% Impervious Runoff Depth>3.60"  
Tc=6.0 min CN=93 Runoff=1.88 cfs 0.137 af

**Reach SP1:** Inflow=5.11 cfs 0.692 af  
Outflow=5.11 cfs 0.692 af

**Pond Drip Edge:** Peak Elev=289.96' Storage=734 cf Inflow=0.72 cfs 0.055 af  
Primary=0.05 cfs 0.049 af Secondary=0.31 cfs 0.006 af Outflow=0.36 cfs 0.055 af

**Pond P1:** Peak Elev=286.14' Storage=4,081 cf Inflow=1.88 cfs 0.137 af  
Primary=0.08 cfs 0.058 af Secondary=0.00 cfs 0.000 af Outflow=0.08 cfs 0.058 af

**Total Runoff Area = 3.573 ac Runoff Volume = 0.771 af Average Runoff Depth = 2.59"**  
**77.13% Pervious = 2.756 ac 22.87% Impervious = 0.817 ac**

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

**Subcatchment 11:** Runoff Area=2.954 ac 11.07% Impervious Runoff Depth>3.01"  
Flow Length=210' Tc=32.2 min CN=80 Runoff=6.13 cfs 0.741 af

**Subcatchment 12:** Runoff Area=0.163 ac 92.02% Impervious Runoff Depth>4.78"  
Tc=6.0 min CN=98 Runoff=0.84 cfs 0.065 af

**Subcatchment 13:** Runoff Area=0.456 ac 74.56% Impervious Runoff Depth>4.33"  
Tc=6.0 min CN=93 Runoff=2.24 cfs 0.165 af

**Reach SP1:** Inflow=6.52 cfs 0.883 af  
Outflow=6.52 cfs 0.883 af

**Pond Drip Edge:** Peak Elev=289.96' Storage=736 cf Inflow=0.84 cfs 0.065 af  
Primary=0.05 cfs 0.052 af Secondary=0.64 cfs 0.012 af Outflow=0.69 cfs 0.063 af

**Pond P1:** Peak Elev=286.31' Storage=4,420 cf Inflow=2.24 cfs 0.165 af  
Primary=0.11 cfs 0.067 af Secondary=0.35 cfs 0.011 af Outflow=0.45 cfs 0.078 af

**Total Runoff Area = 3.573 ac Runoff Volume = 0.971 af Average Runoff Depth = 3.26"**  
**77.13% Pervious = 2.756 ac 22.87% Impervious = 0.817 ac**

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# **Attachment C**

**STORMWATER FILTER PONDS - TEST PIT LOGS**

**SOIL PROFILE CLASSIFICATION INFORMATION**

Detailed Description of Subsurface Conditions at Project Sites

Project Name: <b>MAIN STREET</b>	Applicant Name: <b>ABBOTT INVESTMENTS, LLC</b>	Project Location (municipality): <b>WATERBORO</b>
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SOIL DESCRIPTION AND CLASSIFICATION				
Exploration Symbol: <u>TP-5</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
1.2' Depth of Organic Horizon Above Mineral Soil				
DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0				
1	SANDY LOAM		DARK BROWN	
2				
3				
4		FRIABLE		
5				
6	LOAMY SAND		GRAY	
7				
8			DARK YELLOWISH BROWN	
9				
10				
11	GRAVELLY SAND		GRAY	COMMON, MEDIUM, & DISTINCT
12				
13				
14	GRAVELLY COARSE SAND	LOOSE	BROWN	
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# **Attachment D**

**INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN**

## INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

### Brooks Dance Center Waterboro, ME

#### Introduction

The owner of the development is Abbott Investments, LLC. The owner's address is 29 Hamilton Road, Lyman, Maine 04002. The owner of the proposed project will be responsible for the maintenance of all stormwater management structures, the establishment of any contract services required to implement the program, and the keeping of records and maintenance logbook. The owner will assure that the following maintenance program will be adhered to.

Records of all inspections and maintenance work accomplished must be kept on file and retained for a minimum 5-year time span. The maintenance logbook will be made available to the Maine Department of Environmental Protection (MDEP) and the Town of Waterboro upon request. At a minimum, the appropriate and relevant activities for each of the stormwater management systems will be performed on the prescribed schedule.

The following plan outlines the anticipated inspection, maintenance, and housekeeping procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

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

#### During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to

completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven (7) calendar days and prior to any storm event (rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three (3) years from the completion of permanent stabilization.

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

A. Sediment Barriers:

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

B. Riprap Materials:

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

beneath the riprap or dislodged any of the stone.

C. Erosion Control Blankets:

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

D. Temporary Storm Drain Inlet Protection:

- The inlet protection structure shall be inspected before each rain event and repaired as necessary.
- Sediment shall be removed and the storm drain sediment barrier restored to its original dimensions when the sediment has accumulated to half of the design depth of the trap.
- Structures shall be removed upon permanent stabilization of the tributary area.
- Upon removal of the structure, all accumulated sediments downstream of the structure shall be cleaned from the storm drain system.

E. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

F. Temporary Seed and Mulch:

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

G. Stabilized Drainage Swales:

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

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

- A. Spill Prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- B. Groundwater Protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- C. Fugitive Sediment and Dust: Actions must be taken to insure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- D. Debris and Other Materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or Foundation Dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

## After Construction

1. **Inspection:** After construction, the owner or operator shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMPs, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
2. **Maintenance, and repair:** If a BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator shall take corrective actions to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective actions to the Department of Public Services (DPS). The following is a list of permanent erosion control and stormwater management measures and the inspection, maintenance, and housekeeping tasks to be performed after construction.

### A. Vegetated Areas:

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

### B. Winter Sanding:

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

### C. Catch Basins:

- Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

### D. Culverts:

- Inspect culverts in the spring, in the 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.

- Inspect and repair any erosion damage at the culvert's inlet and outlet.
  - Inspect embankment for erosion, settling, and structural failure.
3. **Annual Report:** The owner or operator or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification that the person has inspected the BMPs and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, including the record of the deficiency and corrective actions taken.
  4. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

#### **Attachments**

Attachment 1 – Sample Stormwater Inspection and Maintenance Form

## Sample Stormwater Inspection and Maintenance Form

### Brooks Dance Center Waterboro, ME Attachment 1

This log is intended to accompany the stormwater Inspection, Maintenance and Housekeeping Plan for Brooks Dance Center. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review. Qualified personnel familiar with drainage systems and soils shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comments
Ditches and Swales	Inspect after major rainfall event producing greater than 3" of rain in 2 hours.			
	Repair erosion or damage immediately.			
Catch Basins and Culverts	Remove accumulated sediment and debris			
	Sump depth			
Vegetated Areas	Inspect Slopes			
	Replant Bare Areas			
	Check after Major Storms			
Winter Sanding	Clean annually (Spring)			
	Remove sand and sediment from roadway shoulders			