

## DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

# CITY OF PORTLAND BUILDING PERMIT



This is to certify that ENTERPRISE HOLDINGS

Job ID: 2011-10-2463-NEWCOM

Located At 1128 WESTBROOK ST

CBL: 207- A-010-001

has permission to Build a 4,176 square foot rental car maintenance facility and filling station

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED. A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

Fire Prevention Officer

Code Enforcement Officerl/ Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY PENALTY FOR REMOVING THIS CARD

# Plans in Large plans file



JONATHAN SMITH PRESIDENT GENERAL CONTRACTOR SINCE 1988

> OFFICE (207) 839-2744 Fax (207) 839-3737 MOBILE (207) 329-5825 jon@greatfallsinc.com

20 MECHANIC STREET GORHAM ME 04038 www.greatfallsinc.com



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11/29

**Fire Prevention Officer** 

Code Enforcement Officer // Plan Reviewer

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### City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2011-10-2463-NEWCOM	Date Applied: 10/14/2011		CBL: 207- A-010-001			
Location of Construction: 1128 WESTBROOK ST	Owner Name: ENTERPRISE HOLDIN Slagle	IGS – Chris	Owner Address: 600 CORPORATE ST LOUIS, MO 63	PARK DR 105		314-512-3809
Business Name: Enterprise Rent-a-Car	Contractor Name: TBD		Contractor Addr Port City Archi	ess: tecture – Mark Cha	loupecky	Phone: 761-9000
Lessee/Buyer's Name:	Phone:		Permit Type: BLDG - Building		0	Zone: AB
Past Use: Rental Car Service	Proposed Use: Same – Rental Car S	Service	Cost of Work: \$1,204,000.00			CEO District:
to demolish old bldg construct new car wa facility and filling sta expansion of parking area		and ash ation and g/storage	Fire Dept: Approved w/ Con dukin Signature: Capt. Mine 11/8/11		endikin shu	Inspection: Use Group: S-1 Type: 578 TBC - 2009 Signature: B
Proposed Project Description 4,176 sf rental car maintenance f	n: facility		Pedestrian Activ	ities District (P.A.D.)	, l	1/29/11
Permit Taken By: Gayle			I	Zoning Approva	ıl	$l \cdot l$
		Special Z	one or Reviews	Zoning Appeal	Historic P	reservation
<ol> <li>This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</li> <li>Building Permits do not include plumbing, septic or electrial work.</li> <li>Building permits are void if work is not started within six (6) months of the date of issuance.</li> </ol>		Shorelan Wetland	nd s	Variance Miscellaneous	Not in Di	st or Landmark Require Review
		Subdivis	ion	Interpretation Approved		Review
False informatin may in- permit and stop all work	validate a building	Maj Date:	_Min _MM wh condulu 10/2-6/4 ICATION	Denied	Approved Denied Date:	w/Conditions

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE DERSON DU CHARGE C		DATE	DUONE

BUILDING PERMIT INSPECTION PROCEDURES Please call 874-8703 or 874-8693 (ONLY) or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.
- Permits expire in 6 months. If the project is not started or ceases for 6 months.
- If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.

Footings/Setbacks prior to pouring concrete

Foundation/Rebar

Close In Elec/Plmb/Frame prior to insulate or gyp

Certificate of Occupancy Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

Acting Director of Planning and Urban Development Greg Mitchell

Job ID: 2011-10-2463-NEWCOM

Located At: <u>1128 WESTBROOK</u> ST CBL: 207- A-010-001

## **Conditions of Approval:**

## Zoning

- 1. Separate permits shall be required for any new signage.
- This zone has maximum noise allowances. The City of Portland strictly enforces the level of sound generated on the property. Any verified noise violations shall require the owner to take mitigating measures to bring the property and the noise it generates into compliance.
- 3. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

### Building

- 1. Application approval based upon information provided by applicant, including revisions for the additional insulation. Any deviation from approved plans requires separate review and approval prior to work.
- Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
- Special inspection reports shall be submitted to this office on a periodic basis. A final special inspection
  report must be submitted prior to issuance of a certificate of occupancy. This report must demonstrate any
  deficiencies and corrective measures that were taken.

#### Fire

- 1. Installation shall comply with City Code Chapter 10.
- 2. All construction shall comply with City Code Chapter 10.
- 3. This permit is being approved on the basis of the plans submitted. Any deviation from the plans would require amendments and approval.
- 4. Application requires State Fire Marshal approval.
- 5. As-built documents shall be submitted in pdf to the Building Inspections Office upon completion of job.
- Private fire mains and fire hydrants shall be maintained, tested and painted in accordance with NFPA 25 and City Code Chapter 10, Art IV.
- Emergency lights and exit signs are required. Emergency lights and exit signs are required to be labeled in relation to the panel and circuit and on the same circuit as the lighting for the area they serve.
- 8. Any cutting and welding done will require a Hot Work Permit from Fire Department.
- 9. Need Knox Pad Lock for gate or Knox Key switch if an electric gate.

2011 10 2463



## **General Building Permit Application**

If you or the property owner owes real estate or personal property taxes or user charges on any roperty within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: //2	8 Westbrook St.					
Total Square Footage of Proposed Structure/A 4,176 S.F.	rea Square Footage of Lot 128,491	2.95 acres)				
Tax Assessor's Chart, Block & Lot Chart# Block# Lot#	Applicant * <u>must</u> be owner, Lessee or Buyer	r* Telephone:				
207 A 10	Address 600 Corporate Park Drive	3809				
210 B 39	City, State & Zip St. Louis, MO 6310	5				
Lessee/DBA (If Applicable)	Owner (if different from Applicant)	Cost Of Work: \$ 1,203,690.00				
RECLIVED	Name	* 7500				
OCT 1 4 2011	Address	C of O Fee: \$				
UCI 14 2011	City, State & Zip	Total Fee: \$ 12,132				
Current Calus, what was the previous use? <u>rental car maintenance facility</u> If vacant, what was the previous use? <u>rental car maintenance facility</u> Proposed Specific use: <u>rental car maintenance facility</u> Is property part of a subdivision? <u>No</u> If yes, please name <u>Project description</u> : <u>No</u> <i>f</i> <sub>1</sub> /76 s.F. maintenance facility for Enterprise Rent-a-Car w/ 3-Bay shop office and car wash. Fueling equipment and canopy. (Not open to the public.) Contractor's name:						
Address:	osen ty: <u>Mark Chaloupecky</u> te 65 Newbury Street, Portla	elephone: <u>207-761-9000</u> end, ME 04101				
Please submit all of the information do so will result in the	outlined on the applicable Checkli automatic denial of your permit.	st. Failure to				

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

				1				
Signature:	V	Mill	N	4 A A A A A A A A A A A A A A A A A A A	Date:	10 -1	11-2011	
	Th	is is not	a poemit	won may not	ammence A	NV work	intil the nermit is issue	

This is not a permit; you may not commence ANY work until

#### Jeanie Bourke - Re: 1128 Westbrook - Enterprise

From:Philip DiPierroTo:Bourke, JeanieDate:11/29/2011 9:26 AMSubject:Re: 1128 Westbrook - Enterprise

Hi Jeanie, this project, site plan #2011-246, the Enterprise Rent-A-Car project at 1128 Westbrook Street, meets minimum DRC site plan requirements for the issuance of the building permit. The PG has been accepted, site inspection fee paid, preconstruction meeting held, and all site plan conditions prior to BP issuance have been met. I'll make a note in 1S somewhere for a sign off.

Please contact me with any questions. Thanks.

Phil

>>> Jeanie Bourke 11/29/2011 9:03 AM >>> Just checking if this is ok to issue the building permit? Thanks

Date: 5/10/11 /25/1 Applicant: ENTERPRISE -Address: 1128 Westbook C-B-L: 207 - A-Date - Zong ASSessment P 26 14-197 (h) CAT rent & genstas milude Zone Location - AR Proposed UserWork- 41769 NEW CANWASH FACILIZ TO TKISK - EXP 2 parking/Starge Area Servage Disposal still over 50 Lot Street Frontage - 50 m ~ - 61,63 51ven Front Yard - 20' set backmin of west back of 50'+ Showing Rear Yard Abutst Tes. Zne - 50 ministry Side Yard - if Abuts A reszone ×58 on Thenside Scole Projections -Width of Lot - 50 mm - 100 + marchted Height - 75 max - 1/2 stores - Not dose Lot Area - 2.9 Å nes given him reg 20,000 + ok (128, 491). Chieros Coverage Impervious Surface-) 70% impervious Short 128, 491= mp 59. Area per Family - NAA 12 ptg Fremployees plus Offestreet Parking - None reguled for This use -32++8+48 = Loading Bays -Site Plan level, 111 - Sulard 2011-246 Shoreland Zoning/ Stream Protection - NA Flood Plains - Prel 12 - Zone X used panel 2 me film Sorrever Sebago Tech - Jim Seymont



City of Portland Development Review Application Planning Division Transmittal form

Application Number: CBL: Project Name: Address:

207-A-10 Enterprise Rent a Car 1128 Westbrook Street

2011-246

Project Description: Zoning: Other Reviews Required: Site Improvements and Expansion AB Stormwater Level III Final Review

E-PLAN

Application Date: / 5/4/2011

#### **Distribution List:**

**Review Type:** 

Planner	Shukria Wiar	Parking	John Peverada
ZoningAdministrator	Marge Schmuckal	Design Review	Alex Jaegerman
Traffic	Tom Errico	Corporation Counsel	Danielle West-Chuhta
Stormwater	Dan Goyette	Sanitary Sewer	John Emerson
Fire Department	Keith Gautreau	Inspections	Tammy Munson
City Arborist	Jeff Tarling	Historic Preservation	Deb Andrews
Engineering	David Margolis-	Outside Agency	
	Pineo		
		DRC Coordinator	Phil DiPierro

Final Comments needed by: August 17, 2011





## CITY OF PORTLAND, MAINE PLANNING BOARD

Jee Lewis, Chair Carol Morrissette, Vice Chair Lee Lowry, III Stuart G. O'Brien Michael J. Patterson David Silk Bill Hall

AUGUST 29, 2011

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CHRISTOPHER SLAGLE DIRECTOR OF AIRPORT FACILITIES ENTERPRISE HOLDINGS, LLC 600 CORPORATE PARK DRIVE ST. LOUIS, MO 63105 SEBAGO TECHNICS, INC C/O JAMES SEYMOUR, PE ONE CHABOT STREET WESTBROOK, ME 04098

> Project ID: 2011-246 CBL: INSERT CBL

Project Name: Address: Applicant: Planner: ENTERPRISES RENT-A-CAR 1128 WESTBROOK STREET ENTERPRISE HOLDING, LLC SHUKRIA WIAR

Dear Mr. Slagle:

On August 23, 2011, the Portland Planning Board considered Enterprise Rent-a-Car for expansion of the parking lot for 148 inventory spaces and 11 employee parking spaces, a new 4,176 square foot maintenance and car wash building, and a new canopy-covered fueling facility at 1128 Westbrook Street. The Planning Board reviewed the proposal for conformance with the standards of the Site Plan and Stormwater Permit. The proposal includes landscaped islands for the employee parking area and the applicant sought a waiver from the landscaped islands for the inventory parking. The applicant also requested waivers from the curb cut width to accommodate truck traffic and a reduction in the travel lane widths. The Planning Board voted 4-1 (O'Brien opposed, Silk recused, and Patterson absent) to approve the application with the following motions, waivers and conditions as presented below.

#### WAIVERS

The Planning Board voted 5-0 (Silk recused, Patterson absent) that on the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations, contained in the Planning Board Report for application #2011-246 relevant to the Portland's Technical and Design Standards and other regulations, and the testimony presented at the Planning Board hearing:

The Planning Board waives Section 14-526(b) (2) (ii) (b), Parking Lot Landscaping, which requires landscaped islands shall be distributed so that uninterrupted pavement does not exceed forty (40) parking spaces, to allow the landscaped islands to be omitted for the surface inventory lot.

The Planning Board waives Technical Standard 1.7.2.4, which states that the maximum driveway width for a two-way lane for a commercial entity shall be 24 feet, to allow the driveway width to be a maximum of 38 feet at the driveway apron.

The Planning Board waives the Technical Standard 1.14 Parking Lot and Parking Space Design, which requires the parking aisle shall have a minimum width of 24 feet, to allow the aisle widths to be 22' and 11'.

#### SITE PLAN REVIEW

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The Planning Board voted 4-1 (O'Brien opposed, Silk recused, Patterson absent) the on the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report for application #2011-246 relevant to the Site Plan Ordinance, Stormwater Permit requirements, and other regulations, and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan is in conformance with the site plan standards of the land use code, subject to the following conditions of approval:

- A revised boundary survey shall be submitted addressing David Margoli-Pineo's comments in his memorandum dated 08.18.2011 for review and approval by the Planning Authority and Department of Public Services.
- 2. The applicant shall submit a revised site plan that shows the narrowing of the driveway width for review and approval by the Planning Authority and the Traffic Engineer.
- 3. At the pre-construction meeting, the City Arborist shall inspect proposed buffers and landscaping for potential tree save, limits of clearing and proper preservation of vegetation with measures of protection in place. City Arborist shall be notified prior to any cutting. During construction, the site shall be reviewed by the City Arborist for the final planting of proposed trees and landscaping in a manner to benefit the neighbors for present and future visual screening.
- 4. The applicant shall submit the required documentation for the waiver of the Chapter 7.1 of Volume III of the MaineDEP Stormwater Management BMP Manual for review and approval by the Planning Authority and Consultant Engineer.
- A revised photometric plan will be submitted for review and approval by the Planning Authority prior to the issuance of a building permit. The proposed lighting fixtures shall include house-side shields.
- 6. A loudspeaker system shall not be installed or used at the Enterprise Rent-A-Car facility.
- The applicant shall submit the building plans and any canopy light and illumination levels for the proposed canopy for review and approval by the Planning Authority prior to the issuance of the building permit.
- 8. Please verify that the following requirements for the proposed Aboveground Storage Tank (AST) are being coordinated with the appropriate authorities prior to the issuance of a building permit:
  - a. Associated underground piping is subject to the MaineDEP Chapter 691 Rules for Underground Oil Storage Facilities.
  - b. The Maine State Fire Marshal's Office regulates and issues permits for ASTs with a capacity greater than 60 gallons storing flammable and combustible liquids.
  - c. In accordance with the Oil Spill Prevention, Control and Countermeasure (SPCC) planning rules in 40 CFR Part 112, the 10,000-gallon AST system will require secondary containment. Additionally, the piping/pumping system should have a means of containment in the event of a release, and the facility will require an Oil SPCC Plan.

The approval is based on the submitted plans and the findings related to site plan and subdivision review standards as contained in Planning Report for application 2011-246 which is attached.

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#### STANDARD CONDITIONS OF APPROVAL

Please note the following standard conditions of approval and requirements for all approved site plans:

- 1. <u>Develop Site according to Plan</u> The site shall be developed and maintained as depicted in the site plan and the written submission of the applicant. Modification of any approved site plan or alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or the Planning Authority pursuant to the terms of Chapter 14 of the Portland City Code.
- Separate Building Permits Are Required This approval does not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Inspection Division.
- 3. <u>Site Plan Expiration</u> The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval or within a time period up to three (3) years from the approval date as agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the one (1) year expiration date.
- Performance Guarantee and Inspection Fees A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and seven (7) final sets of plans must be submitted to and approved by the Planning Division and Public Services Dept. prior to the release of a building permit, street opening permit or certificate of occupancy for site plans.
- 5. <u>Defect Guarantee</u> A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
- 6. <u>Reconstruction Meeting</u> Prior to the release of a building permit or site construction, a preconstruction meeting shall be held at the project site. This meeting will be held with the contractor, Development Review Coordinator, Public Service's representative and owners to review the construction schedule and critical aspects of the site work. At the time, the Development Review Coordinator will confirm that the contractor is working from the approved site plan. The site/bulding contractor shall provide three (3) copies of a detailed construction schedule to the attending City representative. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
- Stormwater Management Permit Standard Condition of Approval The applicant and all successors and assigns, must comply with the conditions of Chapter 32 Storm Water including Article III Post-Construction Storm Water Management, which specifies the annual inspections and reporting requirements. The

developer/contractor/subcontractor must comply with conditions of the construction storm water management plan and sediment & erosion control plan based on our standards and state guidelines.

Department of Public Services Permits If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

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## **PROJECT DATA**

## (The following information is required where applicable, in order complete the application)

Total S	Site Area	1	2.9	5 AC.	(12	8,491	SOFT)
Propos	and Total Disturbed Area of the Site			• ••••	11	12,480	sq. ft.
(If the p	roposed disturbance is greater than one acre, then the applica	nt shall apply	y for a Mai	ne Cons	tructio	n General	Permit
(MCGP	) with DEP and a Stormwater Management Permit, Chapter 500,	with the City	y of Portia	na)			
IMPER	VIOUS SURFACE AREA	1					
•	Proposed Total Paved Area				7	2,440	sq. ft.
	Existing Total Impervious Area				3	8,400	sq. ft.
	Proposed Total Impervious Area				(7	8,220	sq. ft.
	Proposed Total Impervious Area				-	Branches and the second	
•	Proposed Impervious Net Change				+3	39,820	sq. ft.
BUILD	ING AREA						
•	Proposed Building Footprint				4	,167	sq. ft.
•	Proposed Building Footprint Net change				+2	2,235	sq. ft.
•	Existing Total Building Floor Area				1	,932	sq. ft.
•	Proposed Total Building Floor Area				4	,167	sq. ft.
•	Proposed Building Floor Area Net Change				+2	2,235	sq. ft.
•	New Building				YE	S (yes	s or no)
-	•						
ZONIN					ΔΕ	2	
•	Existing				711		
•	Proposed, ir applicable				A	5	
LAND	USE						
•	Existing	(	CAR REI	IATN (	)PER/	ATIONS	
•	Proposed	(	CAR REI	TAL (	PER	ATIONS	
RESID	ENTIAL, IF APPLICABLE						
•	Proposed Number of Affordable Housing Units		N/A				
•	Proposed Number of Residential Units to be Demolished						
•	Existing Number of Residential Units						
•	Proposed Number of Residential Units						
•	Subdivision, Proposed Number of Lots		V				
DADKI							
PANN	Evicting Number of Parking Space	-	INKNOW	N			
	Pronosed Number of Parking Spaces	128 TNVEN	TORY / 1	2 EMPL	YEE /M	ATNTENAN	ICE VEH
	Number of Handicanned Darking Spaces	1 P	ARKING	SPACE			
	Pronosed Total Parking Spaces	128 TNVEN	TORY / 1	2 EMPLO	YEE/M	ATNTENAL	NCE VEH
	rioposou rotar raining opaces						
BICYC	LE PARKING SPACES						
•	Existing Number of Bicycle Parking Spaces	0 E	BICYCLE	PARK	ING	SPACES	S
•	Existing Number of Bicycle Parking Spaces						
•	Proposed Number of Bicycle Parking Spaces	2 1	BICYCLI	E PARE	ING	SPACE	S
•	Total Bicycle Parking Spaces	2 1	BICYCLI	E PARE	KING	SPACE	S
ESTIM	ATED COST OF PROJECT						

Dept. of Planning and Urban Development ~ Portland City Hall ~ 389 Congress St. ~ Portland, ME 04101 ~ ph (207)874-8721 or 874-8719 - 6 -



#### 1128 Westbrook Street – 207-A-10 & 210-B-39 #2011-246

This project is located in an AB Airport Business Zone which allows "car rental operations, including vehicle storage" under 14-197(h). The existing site was most recently occupied by Budget Rent-A-Car.

The application states that the current building will be removed to be replaced by a 4,176 square foot building along with a separate filling station. The filling station is private and not for public use. My many years experience with renting cars across the USA confirms that the private filling station would be considered part of the car rental's normal operation and is not an unusual part of a car rental operation.

All dimensional requirements are being met, including those setbacks adjacent to the residential zone along Cobb Avenue. The 1 ½ story building is meeting the maximum allowable building height of 75 feet.

The maximum allowable impervious surface of 70% is met. The applicant suggests based on the given information that the post impervious surface will be at 60.87%.

There are 12 parking spaces shown for employees which more than meets 1 parking space for each 400 square feet for office use required on site. In addition there will be 128 parking spaces for vehicle storage.

The property is not in a Shoreland Zone or a Flood Plain Zone.

The application does not address any equipment that will produce noise such as HVAC systems, car repair air wrenches or other. If there is such equipment, it shall meet the AB Zone requirements under section 14-202(c) allowing a maximum of 60 dBAs generated on site measured at the lot boundaries.

Separate building permits and separate sign permits shall be required through Inspection Services when the project goes forward.

Marge Schmuckal Zoning Administrator

7/25/11 – Additional comments:

Revised final plans have been submitted and received on 7/20/11. The concept plans have been changed. The setbacks for the new building placement are meeting the AB Zone requirements. The applicant has lessened the post impervious surface. It will now be 59.19%. It is still under the maximum of 70% allowed.

The applicant is now showing a total of 148 parking spaces on site for employees and vehicle stock.

The previous comment concerning maximum dBAs is still in effect and will be checked prior to any unit installation. Cut sheets showing the unit dBAs will be required at that time.

Again, separate building permits and separate sign permits shall be required through Inspection Services when the project goes forward.

Marge Schmuckal Zoning Administrator

7-25-11

#### **PROJECT DATA**

(The following information is required where applicable, in order complete the application)

	(	))
Total Site Area	2.95 AC. (128,491 SQFT)	
Proposed Total Disturbed Area of the Site	112,680 sq.ft	×
(If the proposed disturbance is greater than one acre, then the applica	ant shall apply for a Maine Construction General Permit	)
(MCGP) with DEP and a Stormwater management Permit, Chapter 500,	, with the City of Portland)	1
IMPERVIOUS SURFACE AREA		
Proposed Total Paved Area	70,225 sq.ft.	7 50
Existing Total Impervious Area	38,440 sq.ft.	
Proposed Total Impervious Area	76,065 sq. ft.	) Du
<ul> <li>Proposed Total Impervious Area</li> </ul>	sq. ft.	NIGI
Proposed Impervious Net Change	+37,625 sq.ft.	ald
		UT I
BUILDING AREA CAR V	NASH=4,176SF EQ.ROOM=320SF	C.
Proposed Building Footprint CANOI	PY=1,344SF (ROOF TOTAL=5,840) \$9. 1.	
Proposed Building Footprint Net change	3,670 sq.ft.	
Existing Total Building Floor Area	2,170 sq.π.	
Proposed Total Building Floor Area	SAME AS FOOTPRINT \$9. 11.	C
Proposed Building Floor Area Net Change	sq. ft.	
New Building	YES (yes or no)	. (
204100		r.A.
e Eviation	AB	
e Proceed if explicable	AB.	10.
• Пороево, наррноале	AD	N
LAND USE		CIN
Existing	CAR RENTAL OPERATIONS	P
Proposed	CAR RENTAL OPERATIONS	P
		. ( D.
RESIDENTIAL IF APPLICABLE		not her
Proposed Number of Affordable Housing Units	N/A	11
Proposed Number of Residential Units to be Demolished		
Existing Number of Residential Units		V
Proposed Number of Residential Units		
Subdivision, Proposed Number of Lots		
PARKING SPACES		
Existing Number of Parking Spaces	UNKNOWN	
Proposed Number of Parking Spaces	142 INVENTORY / 11 EMPLOYEE/MAINTENANCE VE	-
Number of Handicapped Parking Spaces	1 PARKING SPACE	
Proposed Total Parking Spaces	142 INVENTORY / 11 EMPLOYEE/MAINTENANCE VEH	
BICYCLE PARKING SPACES		
Existing Number of Bicycle Parking Spaces	0 BICYCLE PARKING SPACES	
Existing Number of Bicycle Parking Spaces		
Proposed Number of Bicycle Parking Spaces	2 BICYCLE PARKING SPACES	
Total Bicycle Parking Spaces	2 BICYCLE PARKING SPACES	
ESTIMATED COST OF PROJECT		1

Fevrised Ferrised Production

Dept. of Planning and Urban Development ~ Portland City Hall ~ 389 Congress St. ~ Portland, ME 04101 ~ ph (207)674-8721 or 874-8719 -6**UY420** 

P.O. BOX 1339 Westbrook, Maine 04098-1339 Ph. 207-856-0277 Fax 856-2206

7-25-1

Barbara Barhydt, Senior Planner City of Portland Planning Division City Hall, 4<sup>th</sup> Floor 389 Congress St. Portland, ME 04101

Newer

Level III-Final Site Plan Application Submittal Proposed Site Improvements and Expansion Enterprise Rent-A-Car, 1128 Westbrook St., Portland, Maine

Dear Ms. Barhydt:

On behalf of Enterprise Holdings Inc., please find one copy of the Level III Site Plan Application and associated design plans for the proposed improvements and expansion of the Enterprise Rent-A-Car facility at their 1128 Westbrook Street location (shown on City of Portland Tax Map 207, Lot A-10, and Tax Map 210, Lot B-39) for inventory and routine vehicular maintenance. With the redevelopment of the 2.95 acre parcel of land located in the Airport Business (AB) Zone, the applicant proposes to expand the site which will result in an increase of approximately 0.87 acres of new impervious surface.

The applicant is proposing the construction of a new 4,176 square foot maintenance and car wash building and a new fueling facility on the existing lot. The expansion is in response of their need to maintain a local inventory of rented vehicles, and to perform routine maintenance between rental contracts. The project was last heard by the Planning Board in June. Since that meeting, the applicant has been working to finalize the application and address concerns raised by City/ Staff and neighbors. As a result, there were some revisions to the drawings to assist in minimizing the impacts of the rental car operations such that Enterprise Rent-A-Car can be a responsible and considerate neighbor.

The proposed construction involves expansion and re-grading of the vehicle inventory storage area which is now a combination of paved and gravel surface. The proposed expansion area is adjacent to a residential zone and homes along Cobb Avenue. The remainder of this area, to the rear of the lot, is vegetated with mixed woods and low to medium brush understory. The applicant has been conscious of the Stroudwater/Westbrook Streets neighborhood concerns and has met with abutting neighbors during the design process to invoke their involvement and opinions. There has also been a Neighborhood Meeting held to openly discuss the development





5/20/1

#### 1128 Westbrook Street – 207-A-10 & 210-B-39 #2011-246

This project is located in an AB Airport Business Zone which allows "car rental operations, including vehicle storage" under 14-197(h). The existing site was most recently occupied by Budget Rent-A-Car.

The application states that the current building will be removed to be replaced by a 4,176 square foot building along with a separate filling station. The filling station is private and not for public use. My many years experience with renting cars across the USA confirms that the private filling station would be considered part of the car rental's normal operation and is not an unusual part of a car rental operation.

All dimensional requirements are being met, including those setbacks adjacent to the residential zone along Cobb Avenue. The 1 ½ story building is meeting the maximum allowable building height of 75 feet.

The maximum allowable impervious surface of 70% is met. The applicant suggests based on the given information that the post impervious surface will be at 60.87%.

There are 12 parking spaces shown for employees which more than meets 1 parking space for each 400 square feet for office use required on site. In addition there will be 128 parking spaces for vehicle storage.

The property is not in a Shoreland Zone or a Flood Plain Zone.

The application does not address any equipment that will produce noise such as HVAC systems, car repair air wrenches or other. If there is such equipment, it shall meet the AB Zone requirements under section 14-202(c) allowing a maximum of 60 dBAs generated on site measured at the lot boundaries.

Still ARphes

Separate building permits and separate sign permits shall be required through Inspection Services when the project goes forward.

Marge Schmuckal Zoning Administrator 9/6/2011 The final submitted plans still comply with the A-B Zone. All conditions previously outlined are still in effect. – Marge Schmuckal

	Certificate of De	sign Application				
From Designer:	Port City Archite	ecture - Andrew C. Hyland				
Date:	Oct. 11, 2011					
Job Name:	Enterprise Rent-a- Car Maintenance Facility					
Address of Construction:	1128 Westbrook ST	treet, Portland, Maine				
Const	2003 International I ruction project was designed to the	Building Code building code criteria listed below:				
Building Code & Year <u>IBC</u>	<u>2009</u> Use Group Classification	(s) <u>J-/</u>				
Type of Construction _5	8					
Will the Structure have a Fire sup	pression system in Accordance with S	Section 903.3.1 of the 2003 IRC				
Is the Structure mixed use?	If yes, separated or non sepa	arated or non separated (section 302.3)				
Supervisory alarm System?	Geotechnical/Soils report re	equired? (See Section 1802.2) Yes (1802.2.2)				
Structural Design Calculations	\$	N/A Live load reduction				
Submitted for all	structural members (106.1 - 106.11)	Roof live loads (1603.1.2, 1607.11)				
Design Loads on Construction	Documents (1603)	<u>72 PS7</u> Roof snow loads (1603.7.3, 1608)				
Uniformly distributed floor live load	is (7603.11, 1807)	Ground snow load, Pg (1608.2)				
ST LEVE Liv	Loads Shown 10 Load = 100 psf	$\underline{42} \qquad \text{If } P_g > 10 \text{ psf, flat-roof snow load } p_f$				
		$\frac{1.9}{1.6}$ If $P_g > 10$ pst, snow exposure factor, $C_{e}$				
		$\frac{1}{1}$				
		35 Sloped roof snowload p (1608.4)				
Wind loads (1603.1.4, 1609)		C Seismic design category (1616.3)				
Analytical Design option utiliz	zed (1609.1.1, 1609.6)	Reinf. masonry Basic seismic force resisting system (1617.6.2)				
100 mph Basic wind speed (1	(809.3)	$2.0$ Response modification coefficient, $_{R'}$ and				
Building category a	nd wind importance Factor, by table 1604.5, 1609.5)	deflection amplification factor <sub>Cl</sub> (1617.6.2)				
Wind exposure cate	egory (1609.4)	Simplified Analysis procedure (1616.6, 1617.5)				
./8 Internal pressure coel	fficient (ASCE 7)	Design base shear (1617.4, 16175.5.1)				
Component and cladding pressures (1609.1.1, 1609.6.2.2)						

Flood loads (1803.1.6, 1612)

1	Flood Hazard area (1612.3)
1	Elevation of structure
Other loads	
	Concentrated loads (1607.4)
	Partition loads (1607.5)

Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404

#### Earth design data (1603.1.5, 1614-1623)

0	
ELF	Design option utilized (1614.1)
B	Seismic use group ("Category")
27.09	Spectral response coefficients, SDs & SD1 (1615.1)
D	Site class (1615.1.5)

Varies Main force wind pressures (7603.1.1, 1609.6.2.1)

![](_page_25_Picture_0.jpeg)

## Accessibility Building Code Certificate

**Designer:** 

Address of Project:

Nature of Project:

Port City Architecture 1128 Westbrook Street Enterprise Rent-a-Car Maintenance Facility w/ car wash and fueling statim / canopy

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

(SELAL DE OF MAN	Signature: <u>Principker</u> Title: <u>Principker</u> Firm: <u>Port City Architecture</u> Address: <u>US Newbury St.</u>	
A REAL PROVIDENCE AND A	Portland. Maine 04101	
	Phone: 207-761-9000	

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

![](_page_26_Picture_0.jpeg)

## Certificate of Design

Date:

October 11, 2011

From:

ANDREW

LAND

E OF M

(SEAL)

Port City Architecture

These plans and / or specifications covering construction work on: <u>Enterprise Rent-a-Car Maintenance Facility @</u> 1128 Westbrook Street, Portland, Maine

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the **2003 International Building Code** and local amendments.

Signature:	Olare Ages
Title:	Principal
Firm:	Port City Architecture
Address:	65 Newbury Street
	Portland, ME 04101
Phone:	207-761-9000

5

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov Project: Enterprise Rent-A-Car Maintenance Facility Date Prepared: 10/11/2011

## Structural Statement of Special Inspections

Project: Enterprise Rent-A-Car Maintenance Facility
Location: 1128 Westbrook Street, Portland< ME

Owner: Enterprise Rent-A-Car

This Statement of Special Inspections encompass the following discipline: Structural

This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Structural Special Inspection Coordinator (SSIC) and the identity of other approved agencies to be retained for conducting these inspections and tests.

The Structural Special Inspection Coordinator shall keep records of all Structural inspections and shall furnish inspection reports to the Building Code Official (BCO) and the Structural Registered Design Professional in Responsible Charge (SRDP). Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Structural Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Structural Registered Design Professional in Responsible Charge at an interval determined by the SSIC and the BCO.

A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted to the BCO prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency:

Upon request of Building Official

or per attached schedule.

Prepared by:

Aaron C. Jones, P.E., SECB

Owner's Authorization:

(type or print name of the Structural Registered Design Professional in Responsible Charge)

Aaron Chin Signature

![](_page_27_Picture_17.jpeg)

Date

Building Code Official's Acceptance:

Signature

Date

Signature

10/14/2011 Date

## Structural Statement of Special Inspections (Continued)

#### List of Agents

Project: Enterprise Rent-A-Car Maintenance Facility

1128 Westbrook Street, Portland< ME Location:

Owner: Enterprise Rent-A-Car

This Statement of Special Inspections encompass the following discipline: Structural

#### (Note: Statement of Special Inspections for other disciplines may be included under a separate cover)

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- Soils and Foundations
- $\square$ Cast-in-Place Concrete
- Precast Concrete System
- Masonry Systems
- $\boxtimes$ Structural Steel
- Wood Construction

Special Cases

Firm	Address, Telephone, e-mail
To Be Determined	
Structural integrity, Inc.	77 Oak Street Portland, ME 04101 207 272-4910
To Be Determined	
	Firm         To Be Determined         Structural integrity, Inc.`         To Be Determined

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

### Structural Statement of Special Inspections (Continued)

#### Final Report of Special Inspections (SSIC/SI 1)

[To be completed by the Structural Special Inspections Coordinator (SSIC/SI 1). Note that all Agent's Final Reports must be received prior to issuance.]

 Project:
 Enterprise Rent-A-Car Maintenance Facility

 Location:
 1128 Westbrook Street, Portland< ME</td>

 Owner:
 Enterprise Rent-A-Car

Owner's Address:

Architect of Record:	Andrew C. Hyland		Port City Architecture		
	(name)		(firm)		
Structural Registered Desi	gn				
Professional in Responsible	le Charge:	Aaron C. Jones, P.E. SECB	St	ructural Integrity, Inc.	
		(name)	G	irm)	

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted, Structural Special Inspection Coordinator

(Type or print name)

(Firm Name)

Signature

Date

![](_page_29_Picture_14.jpeg)

## Structural Statement of Special Inspections (Continued) Special Inspector's/Agent's Final Report

Project:	Enterprise Rent-A-Car Maintenance Facility
Special Inspector or Agent:	
0	(name)

Designation:

4

To the best of my information, knowledge and belief, the Special Inspections or testing required for this project, and designated for this Inspector/Agent in the *Statement of Special Inspections* submitted for permit have been performed and all discovered discrepancies have been reported and resolved.

(firm)

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted, Special Inspector or Agent:

(Type or print name)

Signature

Daite

Licensed Professional Seal or Certification Number

## Structural Schedule of Special Inspections SOILS & FOUNDATION CONSTRUCTION

VERIFICATION AND INSPECTION IBC Section 1704.7, 1704.8, 1704.9 1. Verify existing soil conditions, fill placement and load bearing requirements		EXTENT: CONTINUOUS, PERIODIC, SUBMITTAL, OR NONE	COMMENTS	AGENT	AGENT QUALIFICATION	TASK COMPLETED
a. Prior to placement of prepared fill, determine that the site has been prepared in accordance with the approved soils report.		Р	IBC 1704.7.1		PE/GE, EIT or ETT	
b. During placement and compaction of fill material, verify material being used and maximum lift thickness comply with the approved soils report.		Р	IBC 1704.7.2		PE/GE, EIT or ETT	
<ul> <li>c. Test in-place dry density of compacted fill complies with the approved soils report.</li> </ul>		р	IBC 1704.7.2		PE/GE, EIT or ETT	

![](_page_32_Picture_0.jpeg)

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Planning & Urban Development Department Gregory A. Mitchell, Acting Director

Planning Division Alexander Jaegerman, Director

November 10, 2011

Jonathan Smith Great Falls Construction 20 Mechanic Street Gorham, ME 04038

Project Name:	Enterprise Rent-A-Car	Project ID:	2011-246
Address: Applicant:	Christopher Slagle	CBL:	207 A 010001
Planner:	Shukria Wiar		

Dear Mr. Smith,

On August 23, 2011, the Portland Planning Board approved with conditions the proposal for the Enterprise Rent-A-Car project at 1128 Westbrook Street. As provided in Section 14-532, this letter serves as the written permission from the Planning Authority to commence site work prior to the issuance of the building permit. The commencement of site work is limited to the extent of work outlined in an e-mail letter from Jonathan Smith, Project Manager with Great Falls Construction Company dated November 10, 2011 (attached) and listed below:

- Erosion control
- Clearing and stumping
- Topsoil and pavement strip
- Building demolition
- Structural excavation and backfill
- Over excavation of footings by 1' and replace with crushed stone
- Excavation and backfill for interior utilities
- Supply and installation of aggregate subbase and base materials
- Remove and reset granite curbing
- Supply and installation of 8" hydrant service
- Supply and installation of 2" water service
- Supply and installation of one hydrant
- Supply and installation of one meter pit
- Supply and installation of sewer main
- Supply and installation of sewer service

City Hall, 389 Congress Street . Portland, ME 04101-3509 . Ph (207) 874-8719 . Fx 756-8258 . TTY 874-8936

O:\PLAN\DRC\Projects\Westbrook Str 1128 - Enterprise Rent-A-Car\Site Work Pre BP Authorization 11-14-11.doc

• Supply and installation of two sewer manholes

All of the above work shall be done in accordance with the final approved plans, revision G submitted by Sebago Technics dated 9-13-2011. Please be advised that you must obtain a demolition permit from the City's Inspection Division prior to commencing any demolition work, and obtain any permits that may be required from Public Services for street openings, the disconnecting and capping any sewer and stormwater lines, temporary closing of any sidewalks, and any temporary loss of on-street parking.

Prior to the start of any site or demolition work, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Service's representative and owner to review the construction schedule, erosion and sedimentation controls, and other critical aspects of the site work. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.

The approval to proceed with the demolition and site work is based on the submitted request of Jonathan Smith of Great Falls Construction Company dated November 10, 2011 and the approved site plan, Revision G from Sebago Technics dated 9-13-11. If you need to make any modifications to the site plan, you must submit a revised site plan for staff review and approval.

The decision of the Planning Board to approve this project has been appealed to the Maine Superior Court by one of the abutters to the site. A final decision has not yet been rendered with regard to that appeal. Consequently, any work (described above or otherwise) on the site by the applicant/owner or his/her agents is at the applicant/owner's own risk.

Please contact Philip DiPierro, Development Review Coordinator at 874-8632 regarding the preconstruction meeting. If there are any further questions, please contact the Planning Office at 874-8721.

Sincerely,

Alexander Jaegerman Planning Division Director

Electronic Distribution Gregory Mitchell, Acting Director of Planning and Urban Development Department Barbara Barhydt, Development Review Services Manager, Planning Shukria Wiar, Planner Philip DiPierro, Development Review Coordinator, Planning Marge Schmuckal, Zoning Administrator, Inspections Division Matt Doughty, Public Services Tammy Munson, Plan Reviewer, Inspections Division Lannie Dobson, Administration, Inspections Division Approval Letter File

Attachments:

1. Jonathan Smith, Great Falls Construction Company, November 10, 2011

City Hall, 389 Congress Street . Portland, ME 04101-3509 . Ph (207) 874-8719 . Fx 756-8258 . TTY 874-8936

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Great Falls Construction 20 Mechanic Street Gorham, ME 04038

![](_page_34_Picture_2.jpeg)

EEO and Affirmative Action Contractor

(207)839-2744 office (207)839-3737 fax (207)329-5825 cell

www.GreatFallsinc.com Great Falls Facebook Page Great Falls Twitter Page Great Falls LinkedIn Page

![](_page_35_Picture_0.jpeg)

GEOTECHNICAL DESIGN MEMORANDUM PROPOSED ENTERPRISE RENT-A-CAR 1128 WESTBROOK STREET PORTLAND, MAINE NOV 2 1 2011

Dept. of Building Inspections City of Portland Maine

PREPARED FOR:

Sebago Technics, Inc. Westbrook, Maine

PREPARED BY:

Isabel V. (Be) Schonewald, P.E. Schonewald Engineering Associates, Inc. (SchonewaldEA) 129 Middle Road Cumberland, Maine 04021 Be@SchonewaldEngineering.com

May 30, 2011

SchonewaldEA Project No. 11-005

![](_page_36_Picture_0.jpeg)

Geotechnical Solid Waste Stormwater/E&SC Engineering

#### VIA EMAIL

TO:	James R. Seymour, P.E., Sebago Technics, Inc. (STI) Owens A. McCullough, P.E., STI
FROM:	Isabel V. (Be) Schonewald, P.E., Schonewald Engineering OF Ma
DATE:	May 30, 2011
PROJECT NO .:	11-005
RE:	Geotechnical Design Memorandum Proposed Enterprise Rent-A-Car 1128 Westbrook Street Portland, Maine

Schonewald Engineering Associates, Inc. (SchonewaldEA) is pleased to provide Sebago Technics, Inc. (STI) with this design memorandum that summarizes the geotechnical evaluation completed to support STI's design of the proposed Enterprise Rent-A-Car facility to be located at 1128 Westbrook Street in Portland, Maine. SchonewaldEA's work included evaluating subsurface conditions, completing geotechnical engineering analyses, and preparing this memorandum that summarizes the findings of the work and provides recommendations for the geotechnical aspects of the project.

This work was completed in accordance with the agreement between STI and SchonewaldEA dated April 1, 2011. This design memorandum is subject to the limitations contained in Attachment A. A quality assurance review of the technical aspects of SchonewaldEA's work was completed by Stephen J. Rabasca, P.E. of SoilMetrics, LLC located in Cape Elizabeth, Maine.

#### PROJECT UNDERSTANDING

SchonewaldEA understands that the Enterprise Rent-A-Car site located at 1128 Westbrook Street was formerly occupied by Budget Rent-A-Car. The site is partially wooded with an open and developed area in the easterly and central portions of the site. The developed portion of the site currently contains a commercial building that reportedly houses offices and a car wash and service area, a shed, and paved and gravel driveway and parking areas. Ransom Environmental Consultants, Inc. (Ransom) completed Phase I and Phase II Environmental Site Assessments of the subject parcel for Enterprise Rent-A-Car in late 2009 and mid-2010, respectively, including completing 13 geoprobe soil borings across the developed portion of the site. Ransom's subsurface explorations reportedly were terminated at refusal at between 4 and 13 feet below the ground surface (BGS); refusal was presumed to represent the top of bedrock. Depth to groundwater was reported to range between 2 and 4 feet BGS. We understand that no underground storage tanks remain on the property and that no significant environmental concerns were identified by Ransom. We further understand that the existing commercial building is scheduled for demolition as part of the proposed development.

Based upon site layout and grading and utility plans provided by STI on April 18, 2011, the following items are part of the proposed development:

 A new approximately 4,200-square-foot single-story commercial building that will house car wash and service areas and will have a finished floor elevation equal to 67.0 feet. The proposed building footprint straddles a portion of the existing building footprint. SchonewaldEA

![](_page_37_Picture_0.jpeg)

#### ATTACHMENT B

#### SUBSURFACE EXPLORATION LOGS

understands that pits are not proposed for the vehicle service area within the building. Above ground vehicle lifts will be installed in the service area of the building. Exterior slabs at the entrance and exit of the car wash will be heated. Cuts as deep as 10 to 11 feet are anticipated for construction of the building's exterior wall footing;

- A canopy-covered fueling area with a 320-square-foot equipment room having a finished floor elevation equal to 67.0 feet, as well as a 10,000-gallon above ground storage tank;
- Paved parking area across most of the westerly half of the site at elevations ranging from about 69 feet in the east to 87 feet in the west, and having a grade-separation retaining wall along the northerly edge of pavement. Cuts as deep as 10 to 13 feet are anticipated in the proposed parking area to achieve final site grades; and
- An underground stormwater treatment system, as well as a stormwater basin, in the easterly end of the site.

#### SUBSURFACE EXPLORATION PROGRAM

SchonewaldEA retained Maine Test Borings (MTB) to drill four test borings, designated B-1 through B-4, and six test probes, designated P-5 through P-10. The drilling work was completed on April 5, 2011 and was observed and logged by SchonewaldEA. A sketch showing the approximate locations of the test borings is included as Figure 1 and logs of the subsurface explorations are included as Attachment B.

The borings and probes were extended to refusal, which was encountered at between 4.8 and 11.2 feet BGS. The explorations were completed using solid-stem and hollow-stem augers to avoid using drilling fluids (water). Standard Penetration Tests (SPTs) were completed and split-spoon soil samples obtained near the ground surface and at five-foot intervals to the bottom of the test borings. Probes were completed without SPTs. Samples of auger cuttings were obtained in selected probes. No rock coring was undertaken. The groundwater level was measured in each borehole upon completion of the exploration and removal of the augers. The boreholes were backfilled with auger cuttings.

#### SUBSURFACE CONDITIONS

The generalized soil conditions observed in the explorations consisted of the following strata from the ground surface downward. Detailed descriptions of the soils encountered are provided on the logs included as Attachment B:

- Granular Fill Material: Approximately 1 to 2.9 feet of granular fill material was encountered . beneath a thin layer of asphalt in test borings B-1 through B-3. The granular fill material encountered consisted of loose sand and gravel with less than about 10 percent silt;
- Miscellaneous/Silt-Clay Fill Material: Miscellaneous fill consisting of low-plasticity clayey-silt with varying amounts of sand and gravel, as well as wood, was encountered below the granular fill in test borings B-2 and B-3. The miscellaneous fill was 1.3 feet thick in B-2 and 3.3 feet thick in B-3, where it extended to 6.2 feet BGS. The miscellaneous fill would not be considered a suitable bearing material for building footings or slab and unsuitable for reuse as backfill material.
- Glacial Till: Glacial till consisting of medium dense, fine to medium sand with about 10 to 30 percent silt and about 5 to 20 percent gravel was encountered in all of the test borings and probes.

Refusal was encountered at between 4.8 feet BGS in the westerly portion of the site and 11.2 feet BGS in the easterly portion of the site. Refusal was presumed to be on rock. The shallow refusals are consistent with the environmental work completed previously by Ransom. Bedrock in the area is mapped as a

Sebago Technics Inc.
May 30, 2011
Project No. 11-005

Phyllite. Based upon experience and drilling behavior, it is anticipated that some of the rock requiring cutting may be rippable. In consideration of the anticipated deep cuts, however, blasting will likely be necessary to achieve required grades.

Groundwater observations were made during the exploration program and are noted on the logs included in Attachment B. Groundwater was observed in test borings B-1 through B-3 and probes P-5 and P-6 and ranged from 0.8 feet to 5.2 feet BGS at the time of drilling. The remaining explorations were dry at the end of drilling. Groundwater fluctuations would be expected to vary over time due to a number of factors, most notably weather and seasonal fluctuations.

#### IMPLICATIONS OF SUBSURFACE CONDITIONS

<u>Silty Glacial Till</u>: The silty glacial till soil encountered on the site has sufficient bearing capacity to support shallow foundations for the proposed building. The material, however, should be considered to be frost-susceptible and to have a low permeability that will necessitate provisions to control groundwater. Construction techniques will need to control the material's moisture content and to avoid over-working the silty material.

<u>Shallow Bedrock</u>: Shallow bedrock is anticipated to be encountered in excavations for the foundation elements for the buildings and in cuts needed to achieve grades within the parking area. Shallow bedrock may also be encountered in utility trenches and for the stormwater treatment system.

<u>Shallow Groundwater</u>: Both construction-phase and permanent groundwater controls will be required, such as a perimeter (footing) drain and/or underdrains for the building.

<u>Mixed Footing Subgrade Materials</u>: It is anticipated that portions of the building foundations will be underlain by glacial till and other portions will be underlain by bedrock. To achieve a consistent bearing material, all footings should be overexcavated by 12 inches and replaced with compacted Structural Fill to achieve footing subgrade elevation.

#### GEOTECHNICAL RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

The following geotechnical recommendations are provided for the design and construction of the Enterprise Rent-A-Car facility.

<u>Site Preparation/Earthwork</u>: In building and paved areas, all existing vegetation, fill materials not meeting the gradation requirements for Granular Fill, asphalt, topsoil and other organic or deleterious material should be removed to expose suitable subgrade soils consisting of glacial till or bedrock. Foundations of demolished buildings and abandoned utilities should be removed from within the proposed building and paved areas. Alternatively, abandoned utilities within the proposed building and paved areas may be grouted in place.

Unsuitable subgrade soils in the building and paved areas should be overexcavated and replaced using Granular Fill that meets the MaineDOT specifications for Granular Borrow for Underwater Backfill (MaineDOT Standard Specification 703.19). The subgrade soils should be proofrolled using a self-propelled static roller. Loose or yielding areas should also be overexcavated and replaced using Granular Fill. Fill material should be placed in loose lifts not to exceed 12 inches and compacted to 95 percent of the material's maximum dry density as determined by ASTM D-1557. Special placement and compaction methods may be warranted in wet areas.

Fill material that is required to achieve subgrade elevation for the building foundations and pavement subbase course should consist of Granular Fill, except where Structural Fill is recommended. Fill material should be placed in loose lifts not to exceed 12 inches and compacted to 95 percent of the material's maximum dry density as determined by ASTM D-1557.

	Sebage Technics, Inc.
	May 30, 2011
Associates, Inc.	Project No. 11-005

In fill areas for the building, compacted fill should extend outward from the building walls to the limit of the zone of influence of the building foundations. The limit of the zone of influence is defined by a line extending downward and outward at a one horizontal to two vertical slope from a point two feet outside of the lower outside edge of the exterior footings to the exposed suitable subgrade. In cut areas, Granular Fill should be used for backfill against the interior and exterior of the foundation walls, and extend to a distance of at least five feet out from the walls.

All footings, mat foundations (if used to support the vehicle lifts), slab-on-grade floors, and heated exterior slabs should bear on a minimum of a 12-inch thickness of compacted free-draining Structural Fill overlying prepared suitable subgrade materials. Structural Fill should meet the MaineDOT specifications for Aggregate for Base, Type B (MaineDOT Standard Specification 703.06.a) and be compacted to 95 percent of the material's maximum dry density as determined by ASTM D-1557. Proper drainage is critical for the heated exterior slabs to avoid damage due to frost action.

It should be noted that the silty glacial till soils near the groundwater level are susceptible to disturbance and become difficult to place and compact when repeatedly worked with construction equipment or when subjected to sustained vibrations such as from vibratory compaction equipment. This material can also pump up/migrate into overlying granular fill materials. Should the soil become disturbed, the material should be overexcavated and replaced with Granular Fill. Nonwoven geotextile fabric can be used to separate the silty on-site soils from overlying fill materials.

The contractor should be prepared to provide temporary shoring or use other means of excavation support/protection. OSHA guidelines for trenching and excavating should be strictly observed.

<u>Bedrock Removal</u>: As indicated previously, the uppermost portion of the bedrock underlying the site may be rippable, however, the necessity of blasting is anticipated. Blasting should meet all applicable Federal, State, and local regulations and ordinances, including notifications and vibration monitoring. It is recommended that the selected blasting contractor complete a pre-blast survey.

<u>Foundation and Floor Slab</u>: Conventional spread footing foundations bearing directly on a 12-inch thickness of compacted Structural Fill overlying prepared subgrade material should provide satisfactory support for the proposed building, retaining wall, and the columns supporting the fueling area canopy. Footings should be proportioned based upon a net allowable bearing pressure of 1.5 tons per square foot (tsf). A modulus of subgrade reaction of 100 tons per cubic foot (tcf) should be used for the design of mat foundations and floor slabs that are underlain by a minimum of 12 inches of compacted Structural Fill. Continuous (wall) footings should be at least 2 feet wide and isolated spread footings should be at least 2 feet square, regardless of the calculated bearing capacity provided. For evaluation of sliding on the base of a spread footing, the friction angle between the cast-in-place concrete footing and the underlying granular bedding material should be taken as 24 degrees.

Exterior footings should be founded a minimum of 4.5 feet below the lowest adjacent grade for frost protection. Interior footings not susceptible to frost action should be placed a minimum of 18 inches below finished grade. Footings should be protected from frost action during construction.

Earth Support (Retaining) Wall: For the design of earth support walls that are not laterally restrained, an active earth pressure coefficient of 0.36 is recommended. The use of an active earth pressure coefficient assumes that the structural design of the wall will be such that the top of the wall will be allowed to rotate sufficiently to mobilize the active earth pressure condition. A backfill soil unit weight of 125 pounds per cubic foot (pcf) should be used for determining the earth pressure acting on the wall. Drainage provisions to eliminate the build-up of hydrostatic pressure on the wall are assumed. Earth support walls should be designed to withstand surcharge loads that may be imposed during the life of the structure, including loads from fill and/or construction equipment that may be placed adjacent to the wall.

![](_page_41_Picture_0.jpeg)

Retaining wall footings should be founded a minimum of 4.5 feet below the lowest adjacent grade for frost protection and should bear directly on a 12-inch thickness of compacted Structural Fill overlying prepared subgrade material. The Structural Fill bearing material should be contiguous with the free-draining wall backfill material discussed below.

Walls should be backfilled with compacted, free-draining Structural Fill having a maximum stone size of 4 inches. This zone of free-draining backfill material should extend to 5 feet behind the face of the wall for frost protection. Retaining walls should be provided with a footing drain having a positive outlet and with weep holes located approximately 12 inches above finished grade.

<u>Groundwater Control</u>: Groundwater levels could be near the anticipated bottom of the excavation for the footings. The contractor should be responsible for controlling surface water runoff, infiltration seepage, groundwater, and water from any other source by methods that preserve the undisturbed condition of the subgrade and permit foundation construction in the dry. We anticipate this can be accomplished by pumping from sumps installed in the bottom of excavation(s).

A permanent perimeter drain should be provided along and slightly below the exterior wall footing for the building. The drain should be provided with a positive outlet. Additionally, the car wash area of the building should be provided with underdrains. Final grades around the building should direct surface water runoff away from the structure. Likewise, roof drains should be provided with a proper outlet that directs flow away from the structure.

In consideration of the significant cuts that will be required in the paved parking area, the site's stormwater management design should incorporate underdrains within this area.

<u>Underground Utilities</u>: Underground pipes and utilities should be placed on bedding in accordance with the manufacturer's specifications. In the absence of specific recommendations by the manufacturer, pipe bedding should consist of <sup>3</sup>/<sub>4</sub>-inch Crushed Stone wrapped in non-woven geotextile fabric in wet areas and for pipes/conduits requiring rigid bedding. The <sup>3</sup>/<sub>4</sub>-inch Crushed Stone should meet the MaineDOT specifications for Underdrain Backfill Material, Type C (MaineDOT Standard Specification 703.22). Otherwise Granular Fill with a maximum stone size of 1 inch may be used for pipe bedding. Granular Fill with a maximum stone size of 1 inch should also be used for trench backfill above the bedding material.

Trench backfill should be placed in loose lifts not to exceed 12 inches (6 inches in areas where compaction will be by hand-operated vibratory compaction equipment) and compacted to at least 92 percent of the material's maximum dry density as determined by ASTM D-1557; 95 percent compaction should be required where utilities are located below structure slabs or foundations and where utilities are placed below pavement.

<u>Pavement Section</u>: The flexible pavement section should be developed to meet the standards and design methodologies required by Enterprise Rent-A-Car and STI's experience. Proper drainage of the subbase and base materials should be provided due to the moisture sensitive silty glacial till subgrade materials.

SchonewaldEA appreciates the opportunity to work with STI on the proposed Enterprise Rent-A-Car facility in Portland, Maine. If you have any questions regarding this design memorandum or the attachments, please call me at your convenience.

Attachments:

Figure 1: Exploration Location Plan A: Limitations B: Subsurface Exploration Logs

![](_page_42_Picture_0.jpeg)

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FIGURE

EXPLORATION LOCATION PLAN

![](_page_43_Figure_0.jpeg)

![](_page_44_Picture_0.jpeg)

#### LIMITATIONS

#### Explorations

The analyses and recommendations submitted in this report are based in part upon the data obtained from subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the boring logs.

Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, and other factors occurring since the time measurements were made.

#### Review

In the event that any changes in the nature, design, or location of the proposed construction are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by SchonewaldEA. It is recommended that this firm be provided the opportunity for a general review of final design and specifications in order that geotechnical design and construction recommendations may be properly interpreted and implemented in the design and specifications.

#### Construction

It is recommended that this firm be retained to provide soil engineering services during construction of the earthwork and foundation phases of the work. This is to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

#### Use of Report

This geotechnical engineering report has been prepared f or this project by SchonewaldEA. This report is for design purposes only and is not sufficient to prepare an accurate bid. Contractors wishing a copy of the report may secure it with the understanding that its scope is limited to design considerations only.

This report has been prepared for this project by SchonewaldEA for the exclusive use of Sebago Technics, Inc. for specific application to the proposed Enterprise Rent-A-Car facility located at 1128 Westbrook Street in Portland, Maine in accordance with generally accepted soil and foundation engineering practices. No Warranty, express or implied, is made.

Attachment A-1

![](_page_45_Picture_0.jpeg)

ATTACHMENT A

LIMITATIONS

#### Jeanie Bourke - Enterprise Rent-a-Car

From: To:	"Mark Chaloupecky" <mark@portcityarch.com> <imb@portlandmaine.gov></imb@portlandmaine.gov></mark@portcityarch.com>
Date:	11/22/2011 2:21 PM
Subject:	Enterprise Rent-a-Car
CC:	<jon@greatfallsinc.com>, <vpaquingould@greatfallsinc.com>, "Chris Allain</vpaquingould@greatfallsinc.com></jon@greatfallsinc.com>

Jeanie –

Per the requirements of ASHRAE 90.1:

Per Section 5.5.3, we can meet either the minimum R-values of insulation or the maximum U-factor of the assembly.

Per Table 5.5-6:

Roofs: min. R-38 (attic) / we have provided R-56

Walls Above Grade: min. R-13.3 / we have provided R-10 (we also go over the max. U-factor of .08). We need to add another inch of rigid insulation (R-5) for a total of R-15.

Walls Below Grade: min. R-12.5 / we have provided R-10 (and again, we go over the max. U-factor of .064). We need to add  $\frac{1}{2}$ " of rigid insulation (R-2.5) for a total of R-12.5

Floors: min. R-15 for 24" or max. F-.86 (heated floor) / we have provided for R-10 under the entire floor which gives us F-.55 (well under the .86).

Therefore...

Valerie – Can you submit a proposal to us to add 1" of R-5 rigid insulation (extruded polystyrene) to the exterior walls above grade and increase the z-channels to 3"? Also, provide an additional ½" of R2.5 rigid insulation (extruded polystyrene) to the concrete foundation walls. And remove the R-10 from under the slab, except for 36" around the perimeter. (Jeanie, this gives us a F-.84 according to Table A6.3....below the .86 required).

I will make the revisions to the ComCheck data certificates. I will also include these changes for the Construction Set of Documents.

Jeanie - Do you have any additional comments?

Mark Chaloupecky, LEED AP Port City Architecture 65 Newbury Street Portland, Maine 04092 207-761-9000 207-650-6512 cell

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![](_page_47_Picture_0.jpeg)

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

#### Air Leakage, Component Certification, and Vapor Retarder Requirements:

![](_page_48_Picture_0.jpeg)

## 2009 IECC

#### Section 1: Project Information

#### Project Type: New Construction

Project Title : Enterprise Rent-a-Car, Portland, Maine Copy 2 Exterior Lighting Zone: 2 (Light industrial area with limited nighttime use)

Construction Site:

Owner/Agent:

Designer/Contractor:

### Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
Car Rental storage area (Parking area)	67000 ft2	0.06	Yes	4020	2520
building sides (Illuminated length of facade wall or surface)	260 ft	2.5	No	650	469
fueling island (Entry canopy)	1664 ft2	0.25	Yes	416	936
		Total Tradable Watts* =		4436	3456
	Total Allowed Watts = 50 Total Allowed Supplemental Watts** = 6		5086		
			ntal Watts** =	600	

\* Wattage tradeoffs are only allowed between tradable areas/surfaces.

\*\* A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

#### Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	(C X D)
Car Rental storage area (EXTERIOR_PARKING_AREA, 67000 ft2): Tradable Wattage				
HID: Low-Pressure Sodium 18W / Standard	0	8	180	1440
HID: Ceramic Metal Halide 20W / Standard	0	3	360	1080
building sides (EXTERIOR_ILLUMINATED_LENGTH_WALL, 260 ft): Non-tradable Watta	ge			
HID: Low-Pressure Sodium 18W / Standard	0	7	67	469
fueling island (EXTERIOR_ENTRY_CANOPY, 1664 ft2): Tradable Wattage				1
HID: Low-Pressure Sodium 18W / Standard	0	6	156	936
Tel	al Teedah	In Desser	J Manhha	0450

Total Tradable Proposed Watts = 3456

#### Section 4: Requirements Checklist

#### Lighting Wattage:

Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.
 Compliance: Passes.

#### Controls, Switching, and Wiring:

2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.

![](_page_49_Picture_0.jpeg)

## 2009 IECC

## Section 1: Project Information

Project Type: New Construction Project Title : Enterprise Rent-a-Car, Portland, Maine Copy 2

Construction Site:

1

Owner/Agent:

Designer/Contractor:

## Section 2: General Information

 Building Location (for weather data):
 Portland, Maine

 Climate Zone:
 6a

## Section 3: Mechanical Systems List

#### Quantity System Type & Description

- 1 HVAC System (Unknown w/ Perimeter System) :
  - Heating: 1 each Unit Heater, Hot Water, Capacity = 168 kBtu/h
  - Plant: Heating: Hot Water Boiler, Capacity 399 kBtu/h, Gas, Efficiency: 93.00
- 1 Water Heater: Electric Storage Water Heater, Capacity: 120 gallons, Efficiency: 100.00

## Section 4: Requirements Checklist

#### **Requirements Specific To: HVAC System :**

1. Balancing and pressure test connections on all hydronic terminal devices

#### **Requirements Specific To: Plant :**

- 1. Equipment minimum efficiency: Boiler Thermal Efficiency 75% Et 80% Ec
- 2. Newly purchased heating equipment meets the efficiency requirements
   used equipment must meet 80% Et @ maximum capacity
- □ 3. Systems with multiple boilers have automatic controls capable of sequencing boiler operation
- 4. Hydronic heating systems comprised of a single boiler and >500 kBtu/h input design capacity include either a multistaged or modulating burner

#### **Requirements Specific To: Water Heater :**

- 1. Water heating equipment meets minimum efficiency requirements: Electric Water Heater efficiency: 0.77 EF (403 SL, Btu/h (if > 12 kW))
- 2. First 8 ft of outlet piping is insulated
- 3. Hot water storage temperature controls that allow setpoint of 90°F for non-dwelling units and 110°F for dwelling units.
- 4. Heat traps provided on inlet and outlet of storage tanks

#### Generic Requirements: Must be met by all systems to which the requirement is applicable:

- 1. Plant equipment and system capacity no greater than needed to meet loads Exception(s):
  - Standby equipment automatically off when primary system is operating
  - Multiple units controlled to sequence operation as a function of load
- □ 2. Minimum one temperature control device per system
- 3. Minimum one humidity control device per installed humidification/dehumidification system
- 4. Load calculations per ASHRAE/ACCA Standard 183.
- 5. Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup

6. The system must supply outside ventilation air as required by Chapter 4 of the International Mechanical Code. If the ventilation system is designed to supply outdoor-air quantities exceeding minimum required levels, the system must be capable of reducing outdoor-air flow to the minimum required levels.

7. All pipes serving space-conditioning systems must be insulated as follows:

Hot water piping for heating systems:

1 1/2 in. for pipes <=1 1/2-in. nominal diameter,

- 2 in. for pipes >1 1/2-in. nominal diameter.
- Chilled water, refrigerant, and brine piping systems:
  - 1 1/2 in. insulation for pipes <=1 1/2-in. nominal diameter,
  - 1 1/2 in. insulation for pipes >1 1/2-in. nominal diameter.
- Steam piping:
  - 1 1/2 in. insulation for pipes <=1 1/2-in. nominal diameter,
- 3 in. insulation for pipes >1 1/2-in. nominal diameter.

Exception(s):

- Pipe insulation is not required for factory-installed piping within HVAC equipment.
- Pipe insulation is not required for piping that conveys fluids having a design operating temperature range between 55°F and 105°F.
- Pipe insulation is not required for piping that conveys fluids that have not been heated or cooled through the use of fossil fuels or electric power.
- Piping within room fan-coil (with AHRI440 rating) and unit ventilators (with AHRI840 rating).
- Pipe insulation is not required for runout piping not exceeding 4 ft in length and 1 in. in diameter between the control valve and HVAC coil.
- 8. Operation and maintenance documentation must be provided to the owner that includes at least the following information:
  - a) equipment capacity (input and output) and required maintenance actions
  - b) equipment operation and maintenance manuals
  - c) HVAC system control maintenance and calibration information, including wiring diagrams, schematics, and control sequence descriptions; desired or field-determined set points must be permanently recorded on control drawings, at control devices, or, for digital control systems, in programming comments
  - d) complete narrative of how each system is intended to operate.
- Service hot water piping, where required, must be insulated to 1/2 in. if pipe less than 1.5 in. nominal diameter. Larger pipe must be insulated to 1 in.. Pipe insulation will have a conductivity of less than 0.28 Btu.in/(h-ft2-°F).
- 10. Temperature controlling means must be provided to limit the maximum temperature of water delivered from lavatory faucets in public facility restrooms to 110°F.
- Hot water space-heating systems with a capacity exceeding 300 kBtu/h supplying heated water to comfort conditioning systems must include controls that automatically reset supply water temperatures by representative building loads (including return water temperature) or by outside air temperature. Exception(s):
  - Where the supply temperature reset controls cannot be implemented without causing improper operation of heating, cooling, humidification, or dehumidification systems.
  - Hydronic systems that use variable flow to reduce pumping energy.
- 12. Demand control ventilation (DCV) required for high design occupancy areas (>40 person/1000 ft2 in spaces >500 ft2) and served by systems with any one of 1) an air-side economizer, 2) automatic modulating control of the outdoor air damper, or 3) a design outdoor airflow greater than 3000 cfm.

Exception(s):

- Systems with heat recovery.
- Multiple-zone systems without DDC of individual zones communicating with a central control panel.
- Systems with a design outdoor airflow less than 1200 cfm.
- Spaces where the supply airflow rate minus any makeup or outgoing transfer air requirement is less than 1200 cfm.
- 13. All freeze protection systems, including self-regulating heat tracing, must include automatic controls capable of shutting off the systems when outside air temperatures are above 40°F or when the conditions of the protected fluid will prevent freezing. Snow- and ice-melting systems must include automatic controls capable of shutting off the systems when the pavement temperature is above 50°F and no precipitation is falling, and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F.
- 14. Hydronic systems that use a common return system for both hot water and chilled water must not be used.
- 15. Individual fan systems with a design supply air capacity of 5000 cfm or greater and minimum outside air supply of 70 percent or greater of the supply air capacity must have an energy recovery system with at least a 50 percent effectiveness. Where cooling with outdoor air is required there is a means to bypass or control the energy recovery system to permit cooling with outdoor air. Exception(s):
  - Hazardous exhaust systems, commercial kitchen and clothes dryer exhaust systems that the International Mechanical Code prohibits the use of energy recovery systems.
  - Systems serving spaces that are heated and not cooled to less than 60°F.

- Where more than 60 percent of the outdoor heating energy is provided from site-recovered or site solar energy.
- Heating systems in climates with less than 3600 HDD.
- Cooling systems in climates with a 1 percent cooling design wet-bulb temperature less than 64°F.
- Systems requiring dehumidification that employ energy recovery in series with the cooling coil..
- Laboratory fume hood exhaust systems that have either a variable air volume system capable of reducing exhaust and makeup air volume to 50 percent or less of design values or, a separate make up air supply meeting the following makeup air requirements: a) at least 75 percent of exhaust flow rate, b) heated to no more than 2°F below room setpoint temperature, c) cooled to no lower than 3°F above room setpoint temperature, d) no humidification added, e) no simultaneous heating and cooling.

![](_page_52_Picture_0.jpeg)

## 2009 IECC

The following list provides more detailed descriptions of the requirements in Section 4 of the Mechanical Compliance Certificate.

#### **Requirements Specific To: HVAC System :**

1. Hydronic heating and cooling coils must be equipped with a way to pressure test connections and measure and balance water flow and pressure.

#### **Requirements Specific To: Plant :**

- 1. The specified heating and/or cooling equipment is covered by the ASHRAE 90.1 Code and must meet the following minimum efficiency: Boiler Thermal Efficiency 75% Et 80% Ec
- The specified heating equipment is covered by Federal minimum efficiency requirements. New equipment of this type can be assumed to meet or exceed ASHRAE 90.1 Code requirements for equipment efficiency. Used equipment must meet 80% Et @ maximum capacity.
- 3. Systems with multiple boilers have automatic controls capable of sequencing the operation of the boilers.
- Hydronic heating systems comprised of a single boiler and >500 kBtu/h input design capacity include either a multistaged or modulating burner.

#### **Requirements Specific To: Water Heater :**

- Water heating equipment used solely for heating potable water, pool heaters, and hot water storage tanks must meet the following miniumum efficiency: Electric Water Heater efficiency: 0.77 EF (403 SL, Btu/h (if > 12 kW))
- 2. Insulation must be provided for the first 8 ft of outlet piping for a constant temperature nonrecirculating storage system and for the inlet pipe between the storage tank and a heat trap in a storage system.
- Service water-heating equipment shall be provided with controls to allow a setpoint of 110°F for equipment serving dwelling units and 90°F for equipment serving non-dwelling units. Lavatory outlet temperatures shall be limited to 110°F.
- 4. Heat traps must be provided on inlet and outlet vertical pipe risers serving storage water heaters and storage tanks not having integral heat traps and serving a nonrecirculating system.
  - Heat traps must be installed as close as practical to the storage tank. Acceptable heat traps are either
  - a) a device specifically designed for the purpose or
  - b) an arrangement of tubing that forms a loop of 360°F, or
  - c) piping that from the point of connection to the water heater (inlet or outlet) includes a length of piping directed downwards before connection to the vertical piping of the supply water or hot water distribution system.

#### Generic Requirements: Must be met by all systems to which the requirement is applicable:

 All equipment and systems must be sized to be no greater than needed to meet calculated loads. A single piece of equipment providing both heating and cooling must satisfy this provision for one function with the capacity for the other function as small as possible, within available equipment options.

Exception(s):

- The equipment and/or system capacity may be greater than calculated loads for standby purposes. Standby equipment must be automatically controlled to be off when the primary equipment and/or system is operating.
- Multiple units of the same equipment type whose combined capacities exceed the calculated load are allowed if they are provided with controls to sequence operation of the units as the load increases or decreases.
- 2. Each heating or cooling system serving a single zone must have its own temperature control device.
- 3. Each humidification system must have its own humidity control device.
- Design heating and cooling loads for the building must be determined using procedures in the ASHRAE Handbook of Fundamentals or an approved equivalent calculation procedure.
- The system or zone control must be a programmable thermostat or other automatic control meeting the following criteria:
   a) capable of setting back temperature to 55°F during heating and setting up to 85°F during cooling,
  - b) capable of automatically setting back or shutting down systems during unoccupied hours using 7 different day schedules,
  - c) have an accessible 2-hour occupant override,

d) have a battery back-up capable of maintaining programmed settings for at least 10 hours without power. Exception(s):

- A setback or shutoff control is not required on thermostats that control systems serving areas that operate continuously.
- A setback or shutoff control is not required on systems with total energy demand of 2 kW (6,826 Btu/h) or less.

#### Exception(s):

- Continuously operating zones
- 2 kW demand or less, submit calculations
- □ 6. Outside-air source for ventilation; system capable of reducing OSA to required minimum
- 7. Hot water pipe insulation: 1.5 in. for pipes <=1.5 in. and 2 in. for pipes >1.5 in. Chilled water/refrigerant/brine pipe insulation: 1.5 in, for pipes <=1.5 in, and 1.5 in, for pipes >1.5 in.
  - Steam pipe insulation: 1.5 in. for pipes <=1.5 in. and 3 in. for pipes >1.5 in. *Exception(s):* 
    - Piping within HVAC equipment.
    - Fluid temperatures between 55 and 105°F.
    - Fluid not heated or cooled with renewable energy.
    - Piping within room fan-coil (with AHRI440 rating) and unit ventilators (with AHRI840 rating).
    - Runouts <4 ft in length.
- 8. Operation and maintenance manual provided to building owner
- 9. Piping, insulated to 1/2 in. if nominal diameter of pipe is <1.5 in.;
- Larger pipe insulated to 1 in. thickness
- 10.Lavatory faucet outlet temperatures in public restrooms limited to 110°F (43°C)
- 11.Hot water distribution systems >= 300 kBtu/h must have one of the following:
  - a) controls that reset supply water temperature by 25% of supply/return delta T
  - b) mechanical or electrical adjustable-speed pump drive(s)
  - c) two-way valves at all heating coils
  - d) multiple-stage pumps
  - e) other system controls that reduce pump flow by at least 50% based on load

calculations required

Exception(s):

- Where the supply temperature reset controls cannot be implemented without causing improper operation of heating, cooling, humidification, or dehumidification systems.
- Hydronic systems that use variable flow to reduce pumping energy.
- 12. Demand control ventilation (DCV) present for high design occupancy areas (>40 person/1000 ft2 in spaces >500 ft2) and served by systems with any one of 1) an air-side economizer, 2) automatic modulating control of the outdoor air damper, or 3) a design outdoor airflow greater than 3000 cfm.

Exception(s):

- Systems with heat recovery.
- Multiple-zone systems without DDC of individual zones communicating with a central control panel.
- Systems with a design outdoor airflow less than 1200 cfm.
- Spaces where the supply airflow rate minus any makeup or outgoing transfer air requirement is less than 1200 cfm.
- 13. Automatic controls for freeze protection systems present
- 14. Three-pipe systems not used
- 15. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempted Exception(s):
  - Hazardous exhaust systems, commercial kitchen and clothes dryer exhaust systems that the International Mechanical Code prohibits the use of energy recovery systems.
  - Systems serving spaces that are heated and not cooled to less than 60°F.
  - Where more than 60 percent of the outdoor heating energy is provided from site-recovered or site solar energy.
  - Heating systems in climates with less than 3600 HDD.
  - Cooling systems in climates with a 1 percent cooling design wet-bulb temperature less than 64°F.
  - Systems requiring dehumidification that employ energy recovery in series with the cooling coil.
  - Laboratory fume hood exhaust systems that have either a variable air volume system capable of reducing exhaust and makeup air volume to 50 percent or less of design values or, a separate make up air supply meeting the following makeup air requirements:
     a) at least 75 percent of exhaust flow rate, b) heated to no more than 2°F below room setpoint temperature, c) cooled to no lower than 3°F above room setpoint temperature, d) no humidification added, e) no simultaneous heating and cooling.

## Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2009 IECC requirements in COMcheck-Web and to comply with the mandatory requirements in the Requirements Checklist.

- 3. Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.
- 1. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
- 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

#### Exterior Lighting Efficacy:

C 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumer/watt.

#### Exceptions:

- Lighting that has been claimed as exempt and is identified as such in Section 3 table above.
- Lighting that is specifically designated as required by a health or life safety statue, ordinance, or regulation.
- Emergency lighting that is automatically off during normal building operation.
- Lighting that is controlled by motion sensor.

#### Exterior Lighting PASSES: Design 31% better than code.

#### Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck-Web and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title

Signature

Date

- 6. Individual dwelling units separately metered.
- 7. Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.
- 8. Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.

#### Exceptions:

- Only one luminaire in space.
- An occupant-sensing device controls the area.
- The area is a corridor, storeroom, restroom, public lobby or sleeping unit.
- Areas that use less than 0.6 Watts/sq.ft.
- 9. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

#### Exceptions:

- Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.
- 10. Photocell/astronomical time switch on exterior lights.

#### Exceptions:

Lighting intended for 24 hour use.

11. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

#### Exceptions:

Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

#### Interior Lighting PASSES: Design 1% better than code.

#### **Section 5: Compliance Statement**

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck-Web and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title

Signature

Date

- All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- 2. Windows, doors, and skylights certified as meeting leakage requirements.
- □ 3. Component R-values & U-factors labeled as certified.
- □ 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- 5. 'Other' components have supporting documentation for proposed U-Factors.
- 6. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- 8. Cargo doors and loading dock doors are weather sealed.
- 9. Recessed lighting fixtures installed in the building envelope are Type IC rated as meeting ASTM E283, are sealed with gasket or caulk.
- 10. Building entrance doors have a vestibule equipped with self-closing devices. Exceptions:
  - Building entrances with revolving doors.
  - Doors not intended to be used as a building entrance.
  - Doors that open directly from a space less than 3000 sq. ft. in area.
  - Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
  - Doors opening directly from a sleeping/dwelling unit.

#### Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2009 IECC requirements in COMcheck-Web and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title

Signature

Date

Project Notes:

Shop and Car Wash for Enterprise Rent-a-Car

	Scho Engl	DNEWALD NEERING		Proposed Enterp Portland Intern	ational Jetport		B	Page	PROBES
	Asso	CIATES, INC.		Portland	, Maine		-	Check	IVS
Be@Schon	ewaldEngineer	ing.com							
Contractor Foreman Logged by	Maine Test Tom Schae Be Schone	Borings efer wald		Auger/ Casing Type SSA	Sampler no sampling	Date	GROUND	Depth S ft., BGS	ATIONS
Date Start/	inish	4/5/11	4/5/11				AS	NOTED BELOW	
Boring Loca	ition	see boring loc	ation plan						
PROBE NUMBER	Refusal Depth (ft., BGS)	Approx. Groundwater Depth (ft BGS)		Soil Description &	Classification			Sample Type	Approx. Sample Depth (ft., BGS)
P-5	6.4	1.6	PROBE P-5: 0 to BTM:	Grayish-brown, fine SA Sand, trace fine Gravel	ND, little to some Silt ; Wet. TILL	trace coar	se	none	(, /
P-6	6.9	2.1	PROBE P-6: 0 to BTM:	Buff, fine SAND, some	Silt; Wet. TILL			cuttings	4.0
P-7	9.2	dry	PROBE P-7: 0 to 4 ft.: 4 ft. to BTM:	MISC FILL: (Silty fine S Grayish-brown, fine SA trace fine Gravel; Dry.	SAND) ND, little Silt, trace co TILL	earse Sand		cuttings	7.0
P-8	4.8	dry	PROBE P-8: 0 to BTM:	Grayish-brown, fine SA trace fine Gravel; Dry.	ND, some Silt, trace of TILL	coarse San	d,	none	
P-9	6.3	dry	PROBE P-9: 0 to BTM:	Buff, fine SAND, some	Silt, trace coarse San	d; Dry. Til	.L	cuttings	4.5
P-10	7.4	dry	PROBE P-10: 0 to BTM: (located in west come	Buff, fine SAND, some r of proposed building foo	Silt, trace coarse San tprint)	d; Dry. Til	-L	none	
R 1. Probes E 2. Auger r M 3. No equ A R BGS = bel sampler ut Stratification line	advanced usin efusals as note prent installed ow ground surf ilized); V = in-s is represent appr	g solid-stem auger d, presumed to be d. Boreholes backt ace; D = split-spoo itu vane shear test roximate boundaries to	s without testing. Samp top of rock. Groundwa filled using drill spoils. n sample (blow counts p (undisturbed and remol petween soil types, transiti	oles of auger cuttings obta ter measured in open bore provided if SPT conducted ded); WH = Weight of han ons may be gradual. Water le	ined as noted shole sat end of drillin ); U = thin-wall Shelb nmer; WR = Weight o avel readings have been	g. y tube sam f rods; WC made at	ple (hydrau = Weight d	ulk-actuated, fixed of casing.	piston

ENGINEERING Associates, dengineering.com Test Borings chaefer onewald 4/5/11 see boring locatio pen/Rec (m.) Depth (FL) Blow (m.) C-5.1 25 27-2 1/0 5-5.1 25 20 1/0 5-5.1 25 20 20 20 20 20 20 20 20 20 20 20 20 20	G , INC. 4/5 ion plan itum MSL/N or % RQD 25/2" 5/1"	Portland International Septint         Portland, Maine         File No. 1         Portland, Maine         Auger/ Casing         Sampler Split Spoon         Jot Casing         Other see notes         Safety hammer         Other see notes         Safety hammer         Other see notes         Sample Description & Classification         Description         Other see notes         Sample Description & Classification         Description         Other see notes         Sample Description & Classification         Description         Description         Description & Classification	1-005 IVS /ATIONS
Associates, dengineering.com Test Borings chaefer onewald 4/5/11 see boring locatio per/Rec Depth (m.) Depth (FL) Blow 2-2.7 27-2 1/0 5-5.1 25 1/0 5-5.1 25 1		Portland, Maine       Check         Portland, Maine       Check         Auger/       GROUNDWATER OBSERV         5/11       1.D.       1-3/8 in.         1.D.       1-3/8 in.       4/5/11 1125 dry OPE         NGVD       Hammer Wt.       140 lbs.         Other       see notes       safety hammer         0       Other       see notes         sample       Description & Classification       Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         1D: 2.3 to 2.7 ft.:       Brown, SiLT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SiLT, some fine Sand; Dry.       TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel , little fine to coarse SAND, trace to little Sit; Dry. WEATHERED ROCK       S.8'         WEATHERED ROCK in tip of spoon       S.8'       PROBABLE ROCK         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	Note
dEngineering.com Test Borings chaefer onewald 4/5/11 see boring locatio Dat mple Information Pen/Rec Depth (FL) Blow 2-2.7 27-2 1/0 5-5.1 25 1/0	4/5 ion plan itum MSL/N ws/ 6" % RQD 25/2" 5/1"	Auger/ Casing       Sampler Split Spoon       GROUNDWATER OBSERV Date         5/11       I.D.       1-3/8 in.         Hammer Wit       140 lbs.         NGVD Hammer Fall       30 inches         Other       see notes         safety hammer       1         Sample Description & Classification       Stratum Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK       WEATHERED ROCK         WEATHERED ROCK in tip of spoon       5.8'       PROBABLE ROCK         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	ATIONS bilization Note
Test Borings chaefer onewald 4/5/11 see boring location perv/Rec (n.) Depth (FL) Blow 8/6 2-2.7 27-2 1/0 5-5.1 25 1/0	4/5 ion plan ttum MSL/h ws/6" or % RQD 25/2" 5/1"	Auger/ Casing       Sampler Split Spoon       GROUNDWATER OBSERV Date         5/11       I.D.       1-3/8 in.         Hammer Wt.       140 lbs.         MGVD       Hammer Fall         Other       see notes         safety hammer       1         Other       see notes         Sample Description & Classification       Stratum Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Sil; Dry. WEATHERED ROCK         WEATHERED ROCK in tip of spoon       5.8'         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	ATIONS bilization N to 5.8 ft Note
chaefer onewald 4/5/11 see boring location Pen/Rec (In.) Depth (FL) Blow 8/6 2-2.7 27-2 8/6 2-2.7 27-2 1/0 5-5.1 25 1/0 5-5.1 25 1/0 5-5.1 25		Casing       Sampler       Date       Time       Depth       State         5/11       I.D.       1-3/8 in.       4/5/11       1125       dry       OPE         Hammer Wt.       140 lbs.       4/5/11       1125       dry       OPE         NGVD       Hammer Fall       30 inches       4/5/11       1125       dry       OPE         Other       see notes       safety hammer       1	Note
Onewaid         A/5/11           see boring locatic         Dat           nple Information         Depth           (n.)         Depth           8/6         2-2.7           1/0         5-5.1           25           1/0           5-5.1           25           26           27-2	4/5 ion plan itum MSL/N % % % % % % % % % % % % % % % % % % %	1/ppe       SSA       Split Spoon       II, BSS         5/11       I.D.       1-3/8 in.       4/5/11       1125       dry       OPE         NGVD       Hammer Kall       30 inches       1 <td>N to 5.8 ft</td>	N to 5.8 ft
area     Depth       nple Information       ren/Rec       Depth       (In.)       2-2.7       27-2       1/0       5-5.1       25       1/0       5-5.1       25       1/0 <td< td=""><td></td><td>Hammer Wt.       140 lbs.         NGVD       Hammer Fall         Other       see notes         Sample Description &amp; Classification       Stratum         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry.         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry.       WEATHERED ROCK         WEATHERED ROCK in tip of spoon       5.8'         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK</td><td>Note</td></td<>		Hammer Wt.       140 lbs.         NGVD       Hammer Fall         Other       see notes         Sample Description & Classification       Stratum         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry.         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry.       WEATHERED ROCK         WEATHERED ROCK in tip of spoon       5.8'         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	Note
Dat nple Information Pen/Rec Depth (In.) Depth (FL) Blow 2-2.7 27-2 8/6 2-2.7 27-2 1/0 5-5.1 25- 1/0 5- 1/0 5-	tum MSL/M MSL/M vs/ 6" N Value % RQD 25/2" 5/1" 5/1"	NGVD       Hammer Fall       30 inches         Other       see notes       safety hammer         Sample Description & Classification       Stratum         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry.       TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry.       WEATHERED ROCK         WEATHERED ROCK       5.8'       PROBABLE ROCK         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	n Note
Imple Information           Pen/Rec         Depth (FL)         Blow           8/6         2-2.7         27-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2	N Value or % RQD	Other       see notes       safety hammer         Sample Description & Classification       Stratum Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry. TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel , little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK         WEATHERED ROCK       5.8'         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	n Note
Imple         Information           Pen/Rec         Depth (FL)         Blow           2         2           8/6         2-2.7         27-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-2           1/0         5-5.1         25-3           1/0         5-5.1         25-3           1/0         5-5.1         25-3           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1           1/0         5-5.1         1 <td>N Value or % RQD 25/2" 5/1" 5/1"</td> <td>Sample Description &amp; Classification       Stratum Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry. TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK         WEATHERED ROCK in tip of spoon       5.8'         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK</td> <td>n Note</td>	N Value or % RQD 25/2" 5/1" 5/1"	Sample Description & Classification       Stratum Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry. TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK         WEATHERED ROCK in tip of spoon       5.8'         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	n Note
Pen/Rec (In.) Depth (FL) Blow 2-2.7 27-2 3 1/0 5-5.1 25 1/0 5-5.1 25 1/0 5-5.1 25 1/0 5-5.1 25 1/0 5-5.1 25 1/0 5-5.1 25 1/0 10 1/0 1/0 10 1/0	N Value or % RQD 25/2" 5/1"	Sample Description & Classification       Stratum Description         0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.       TILL         2.0 to 2.3 ft.:       Brown, SILT, some fine Sand; Dry. TILL         1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK         WEATHERED ROCK in tip of spoon.       5.8'         PROBABLE ROCK       PROBABLE ROCK	n Note
(In.) (FL) 8/6 2-2.7 27-2 1/0 5-5.1 25 	% RQD	0.1 ft GRAVEL, underlain by Brown, SILT, some fine Sand; Dry.     TILL       2.0 to 2.3 ft.:     Brown, SILT, some fine Sand; Dry. TILL       1D: 2.3 to 2.7 ft.:     Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry.       WEATHERED ROCK     S.8'       WEATHERED ROCK in tip of spoon.     S.8'       Bottom of boring at 5.8 ft. at auger refusal.     PROBABLE ROCK	n 1 *
8/6 2-2.7 27-2 1/0 5-5.1 25 1/0 5-5.1 25	25/2" 5/1"	0.1 ft GRAVEL, underlain by Brown, SiL1, some fine Sand; Dry. 2.0 to 2.3 ft.: Brown, SiLT, some fine Sand; Dry. TILL 1D: 2.3 to 2.7 ft.: Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK WEATHERED ROCK in tip of spoon. Bottom of boring at 5.8 ft. at auger refusal. PROBABLE ROCK	1 * - 2,3
8/6 2-2.7 27-2 1/0 5-5.1 25 1/0 5-5.1 25	25/2" 5/1"	2.0 to 2.3 ft.: Brown, SILT, some fine Sand; Dry. TILL 1D: 2.3 to 2.7 ft.: Brown, fine Gravel , little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK WEATHERED ROCK in tip of spoon. Bottom of boring at 5.8 ft. at auger refusal. 2.3' WEATHERED ROCK PROBABLE ROCK	ж 2, 3
8/6 2-2.7 27-2 1/0 5-5.1 25 1/0 5-5.1 25	5/1"	2.0 to 2.3 ft.: Brown, SILT, some fine Sand; Dry. TILL 1D: 2.3 to 2.7 ft.: Brown, fine Gravel , little fine to coarse SAND, trace to little Silt; Dry. WEATHERED ROCK WEATHERED ROCK in tip of spoon Bottom of boring at 5.8 ft. at auger refusal.	
1/0 5-5.1 25. 	5/1"	1D: 2.3 to 2.7 ft.:       Brown, fine Gravel, little fine to coarse SAND, trace to little Silt; Dry.       WEATHERED ROCK         WEATHERED ROCK       5.8'         PROBABLE ROCK       PROBABLE ROCK         Bottom of boring at 5.8 ft. at auger refusal.       PROBABLE ROCK	- 2, 3
1/0 5-5.1 25	5/1"	WEATHERED ROCK in tip of spoon. 5.8' PROBABLE ROCK Bottom of boring at 5.8 ft. at auger refusal.	2, 3
1/0 5-5.1 25	5/1"	WEATHERED ROCK in tip of spoon 5.8' Bottom of boring at 5.8 ft. at auger refusal.	2,3
		Bottom of boring at 5.8 ft. at auger refusal.	2,3
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ue	ling station footp t 5.1 feet; auger ed. Borehole ba	ling station footprint. Boring a t5.1 feet; auger refusal at 5.8 ed. Borehole backfilled using	ling station footprint. Boring advanced using solid-stem augers. t 5.1 feet; auger refusal at 5.8 feet, likely at top of rock. Groundwater measured in open hole at end of drilling. ed. Borehole backfilled using drill spoils.

ENGINEERING       Portation methational deport         Be@SchonewaldEngineering.com       Westbrook Street         Contractor       Maine Test Borings       Auger/         Tom Schaefer       Casing       Sampler         Logged by       Be Schonewald       Type       HSA       Split Spoon         Date Start/Finish       4/5/11       4/5/11       I.D.       2-1/2 in.       1-3/8 in.         Boring Location       see boring location plan       Hammer Wt.       140 lbs.       4/5/11       0.00000000000000000000000000000000000	VATER OBS	11-00 IVS SERVATION Stabilizat	)5	
Production Context         Be@SchonewaldEngineering.com         Portland, Maine         Contractor       Maine Test Borings       Auger/       GROUNDI         Foreman       Tom Schaefer       GROUNDI         Logged by       Be Schonewald       Type       HSA       Split Spoon         Date Start/Finish       4/5/11       4/5/11       I.D.       2-1/2 in.       1-3/8 in.       4/5/11       0934         Boring Location       see boring location plan       Hammer Wt.       140 lbs.       140 lbs.       140 lbs.         GS Elev.       Datum       MSL/NGVD       Hammer Fall       30 inches       140 lbs.         Other       see notes       safety hammer       1       1         Depth       Blows       0.       Per/Rec       Depth       or of % RQD       0.2 ft ASPHALT, underlain by GRANULAR FILL	Check	IVS SERVATION Stabilizat		
Be@SchonewaldEngineering.com       Contractor     Maine Test Borings     Auger/     GROUNDI       Foreman     Tom Schaefer     Casing     Sampler     Date     Tim       Logged by     Be Schonewald     Type     HSA     Split Spoon     Date     Tim       Date Start/Finish     4/5/11     4/5/11     1.D.     2-1/2 in.     1-3/8 in.     4/5/11     0934       Boring Location     see boring location plan     Hammer Wt.     140 lbs.	VATER OBS b Depth ft, BGS 5.2	SERVATION Stabilizat		
Maine Test Borings       Auger/       GROUND         Foreman       Tom Schaefer       Casing       Sampler       Date       Tim         Logged by       Be Schonewald       Type       HSA       Split Spoon       Date       Tim         Date Start/Finish       4/5/11       4/5/11       I.D.       2-1/2 in.       1-3/8 in.       4/5/11       0934         Boring Location       see boring location plan       Hammer Wt.       140 lbs.       145/11       140 lbs.       140 lbs. <td>WATER OBS Depth ft, BGS</td> <td>Stabilizat</td> <td></td>	WATER OBS Depth ft, BGS	Stabilizat		
Tom Schaefer       Casing       Sampler       Date       Tim         Logged by       Be Schonewald       Type       HSA       Split Spoon       1-3/8 in.       4/5/11       093         Date Start/Finish       4/5/11       4/5/11       I.D.       2-1/2 in.       1-3/8 in.       4/5/11       093         Boring Location       see boring location plan       Hammer Wt.       140 lbs.       30 inches       140 lbs.       140 lb	e Depth ft, BGS	Stabilizat	NS	
Logged by     Be Schonewald     Type     HSA     Split Spoon       Date Start/Finish     4/5/11     4/5/11     I.D.     2-1/2 in.     1-3/8 in.       Boring Location     see boring location plan     Hammer Wt.     140 lbs.       GS Elev.     Datum MSL/NGVD     Hammer Fall     30 inches       Other     see notes     safety hammer     1       Depth BGS (tt)     No.     Pen/Rec (n.)     Depth Blows/6"     N Value or % RQD       0.2 ft ASPHALT, underlain by GRANULAR FILL     0.2 ft ASPHALT, underlain by GRANULAR FILL	π, BGS 5.2	OPEN	ilization	
Date Start/Finish     4/5/11     4/5/11     4/5/11     1.D.     1-5/8 III.     4/5/11     035       Boring Location     see boring location plan     Hammer Wt.     140 lbs.	0.2	OFEN		
Set Doring Ecolution     Set Doring Receiver plan     Nature reliance of the set of th			-	
Other see notes     safety hammer       Depth BGS (ft.)     Casing Blows     No.     Per/Rec (ft.)     Depth (Ft.)     Nolue Blows/6"     N Value or % RQD     Sample Description & Classification       0.2 ft ASPHALT, underlain by GRANULAR FILL     0.2 ft ASPHALT, underlain by GRANULAR FILL				
Depth BGS (ft.)         Casing Blows         Sample Information           No.         Pen/Rec (In)         Depth (Ft.)         N Value or (Ft.)         N Value or % RQD         Sample Description & Classification           1         1         1         1         0.2 ft ASPHALT, underlain by GRANULAR FILL				
Depth BGS (ft.)     Casing Blows     No.     Pen/Rec (In.)     Depth (Ft.)     Dopth (Ft.)     N Value or % RQD     Sample Description & Classification       1     1     1     1     0     0     0.2 ft ASPHALT, underlain by GRANULAR FILL			_	
0.2 ft ASPHALT, underlain by GRANULAR FILL	Strat Descri	um ption	lot	
			1	
	GRANU	ILAR		
1D 24/15 2-4 3-3 2010 208 . Brown find to control CANID little Crowd trace Citit	2.9			
2.0 to 2.9 ti Brown, the to coarse SAND, inter Graver, trace Sirt, Moist. GRANULAR FILL				
1D: 2.9 to 4.0 ft.: Dark gravish-brown, Clayey SILT, little fine to coarse SAND trace fine Gravel trace wood. MISC. FILL	MISC / S	SILT-		
	CLAY	-ILL		
(1.3 m) 2D 24/17 3-7 3-7 14 5.0 to 6.2 ft.: Brownish-gray, m. dense, Clayey SILT, little Gravel, little fine to coarse Sand. MISC. FILL	6.2'			
2D: 6.2 to 7.0 ft.: Buff, fine to medium SAND, little Gravel, trace to little				
Sin, rece coarse sand. Title				
	1			
10 3D: Brown fine to madium CAND some fine Crowel Little City trace to Little				
(3.0 m) 3D 14/11 10-11.2 6-4 Coarse Sand. TILL	11.4			
10/2" Bottom of boring at 11.4 ft, at auger refusal	PROBABLE	ROCK	2,	
bottom of boring at 11.4 m. at augor rolada.				
15				
(4.8 m)				
20				
20 (5.1 m)				
25 (7.8 m)			-	
30				
(0.1 m)				
			_	
R       1. Boring located in westerly side of proposed stormwater basin. Boring advanced using hollow-stem augers.         2. Split-spoon refusal at 11.2 feet; auger refusal at 11.4 feet, likely at top of rock. Groundwater measured in open hole at end of drilling         3. No equipment installed. Borehole backfilled using drill spoils.	g.			

			SCH ENC	IONEV	NALD		Portland International Jetport	Page	1	of 1	
					KING		Westbrook Street	File No. 1		-005	
	Deces		Ass	OCIAI	TES, INC		Portland, Maine	Check	1\	VS	
	Be@S	cnonew	aldEngin	eenng.c	om						
ont	ractor	Maine	e Test B	orings			Auger/ GROUNDW	ATER OB	SERVAT	TIONS	
ore	nan od by	Tom a	schaete	ald		-	Ture HSA Solit Speen	Deptn	Stabil	ization	
late	Start/F	inish	4/5	/11		4/5	1/11 LD 2-1/2 in 1-3/8 in 4/5/11 1000	4.4	44 OPEN		
orin	g Loca	tion	see bo	pring lo	cation r	olan	Hammer Wt. 140 lbs.		0.	LIV	
SE	lev.				Datum	MSL/M	GVD Hammer Fall 30 inches				
							Other see notes safety hammer				
		Sa	ample Ir	nforma	tion						
epth	Casing	No	Pen/Rec	Depth	Blowe/ 6"	N Value	Sample Description & Classification	Stra	tum	Notes	
(ft.)	Blows	NU.	(ln.)	(Ft.)	DIOWSOU	% RQD	Gample Description & Classification	Description		Notes	
							0.2 ft ASPHALT, underlain by GRANULAR FILL (Brown, fine to coarse SAND, some Gravel, trace Silt.)	GRAN	ULAR	1	
								FIL	L		
		1D	24/18	2-4	2-4		2.0 to 2.7 ft.: Brown, fine to coarse SAND, trace Gravel, trace Silt:	2.7			
					5.9	9	Moist. GRANULAR FILL	MISC /	SILT-		
							to coarse SAND. MISC. FILL			2	
5 .5 m)		2D	24/19	5-7	6-9		2D: Buff m dense fine to coarse SAND little Gravel trace Silt: Wet TILL	4.4' ±		-	
			2 11 10		0.10	18	20. Duil, IN. Gense, Inte to Coarse SAND, Intile Gravel, Tace Sin, Wet. The	TIL	L		
				_	3-10	-					
		-			-			8.2		2.4	
							Bottom of boring at 8.2 ft. at auger and rod refusal.	PROBABL	EROCK	3,4	
0	_	_		_		-				-	
(m 0				-							
15											
6 m)											
~											
20											
					-			1			
		-						1			
25	_	-		_		_					
5 m)		-									
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10										_	
1 m)											

					RING		Portland Internati	Portland International Jetport					1 005	
			Ass	OCIAT	ES, INC.		VVestbrook	Street		· ·	Check	11-	2005	
Be	Be@S	chonew	aldEngine	eering.c	om		Portiand, M	vaine	-		Check -		13	
ontract	tor	Maine	Test B	orings			Auger/		GRO	UNDW	ATER OF	SERVA	TIONS	
premar	n	Tom S	Schaefe	r			Casing	Sampler	Date	Time	Depth	Stabi	lization	
gged I	by	Be Sc	honewa	ald		-	Type SSA	Split Spoon			ft, BGS			
ate Sta	art/F	nish	4/5	/11		4/5	11 I.D.	1-3/8 in.	4/5/11	1035	0.8	OF	PEN	
oring L	ocat	ion	see bo	ring lo	cation p	olan	Hammer Wt.	140 lbs.						
S Elev	/				Datum	MSL/N	GVD_Hammer Fall	30 inches	-	_				
	_	-					Other see notes	satety nammer						
ath		Sa	imple Ir	nforma	tion	NI Value					0	A	1	
GS Ca	asing	No.	Pen/Rec	Depth	Blows/ 6"	or	Sample Description	& Classification			Doso	tum	Note	
(ft.)	IOWS		()	(FL)		% RQD	0.1 # ASPHALT underlain by GRANULAR	FILL to≈10ft		-	GRANI	ILAR	+	
					-		U. HEASPINET, UNCHAINEY CHARGEAR	1122 10 - 1.0 1.			FIL	L	1	
						_	20 to 35 ft Brown fine to coarse S	AND little to some	Gravel		1.0'+/-			
		1D	24/17	2-4	3-5	16	trace to little Silt; Wet.	TILL				L	1	
					11-16	10	1D: 3. 5 to 4.0 ft.: Brown, fine Gravel, little little Silt WEATHERE	le fine to coarse SAI	ND, trace	to	2.51			
-											WEATHER	EDROCK		
5 m)		2D	1/0	5-5.1	25/1"		WEATHERED ROCK In tip of spoon; appe	ars to be PHTLLITE			5.6'		-	
	-	-		_			Bottom of boring at 5.6 ft. at auger refusal.				PROBABL	EROCK	2.3	
	-	-		-					-				1	
-	-													
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		-												
1. Bori 2. Spli 3. No	ring lo lit-spo equip	cated ir on refus ment in	south co al at 5.1 stalled.	omer of feet; au Borehole	proposed ger refusa backfille	building al at 5.61 d using d	Boring advanced using solid-stem augers. eet, likely at top of rock. Groundwater measuril spoils.	ured in open hole at	end of dri	lling.				

![](_page_62_Picture_0.jpeg)

# Certificate of Occupancy

## CITY OF PORTLAND, MAINE

![](_page_62_Picture_3.jpeg)

Department of Planning and Urban Development Building Inspections Division

Location: 1128 WESTBROOK ST

CBL: 207- A-010-001

Issued to: ENTERPRISE HOLDINGS – CHRIS SLAGLE

Date Issued: 6/7/2012

**This is to certify** that the building, premises, or part thereof, at the above location, built-altered-changed as to use under Building Permit No. 2011-10-2463-NEWCOM, has had a final inspection, has been found to conform substantially to the requirements of the Building Code and the Land Use Code of the City of Portland, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES

ENTIRE

**Approved:** 6-7-2012 (Date) Inspector

Notice: This certificate identifies the legal use of the building or premises, and ought to be transferred from owner to owner upon the sale of the property.

APPROVED OCCUPANCY

USE GROUP S-1 YPE 5-B BC 2009 Inspections Division Director