

Project: **The Asylum Expansion & Renovation** WBRC Project Number: 4071.10 Date: 3/25/2016

To: Barbara Barhydt, Development Review Services Manager City of Portland Planning Division 389 Congress Street Portland, Maine 04101 From: WBRC ARCHITECTS ENGINEERS 44 Central Street Bangor, ME 04401-5116 (207) 947-4511 phone (207) 947-4628 fax www.wbrcae.com

#### RE: The Asylum - Level III Development Review Application

Please find the attached items:

Copies	Date	Description
1	03/25/2016	Level III Development Review Application Submittal
2	03/25/2016	Site Plans
1	03/25/2016	Site Plans (11" x 17")
1	09/18/2016	Check for Application Fee (\$500)

They are transmitted as checked below:

- 🔀 For Approval
- For Your Use
- As Requested
- For Review and Comment
- 🛛 For Distribution

Delivery Method:



Signed:

λĽ

John Kenney, P.E. Senior Engineer

Copy To (cc): Valerie Levy, Krista Newman, Laurie Willey, JRB, RMF



March 25, 2016

Barbara Barhydt, Development Review Services Manager City of Portland Planning Division 389 Congress Street Portland, ME 04101

#### Re: 4071.10 – The Asylum – Level III Development Review Application

Dear Barbara;

Enclosed are the Level III Development Review Application, final site plans and the application fee for the proposed building additions and site improvements for The Asylum located at 121 Center Street. We are planning to schedule a neighborhood meeting on April 7 and would like to discuss the project with the Planning Board at their workshop on April 12. Please contact me if you have any questions or would like additional information. Thank you.

Best regards,

John Kenney P.E. LEED<sup>AP</sup> Senior Engineer, Firm Associate

CC: Valerie Levy, Krista Newman, Laurie Willey, JRB, RMF

#### www.wbrcae.com

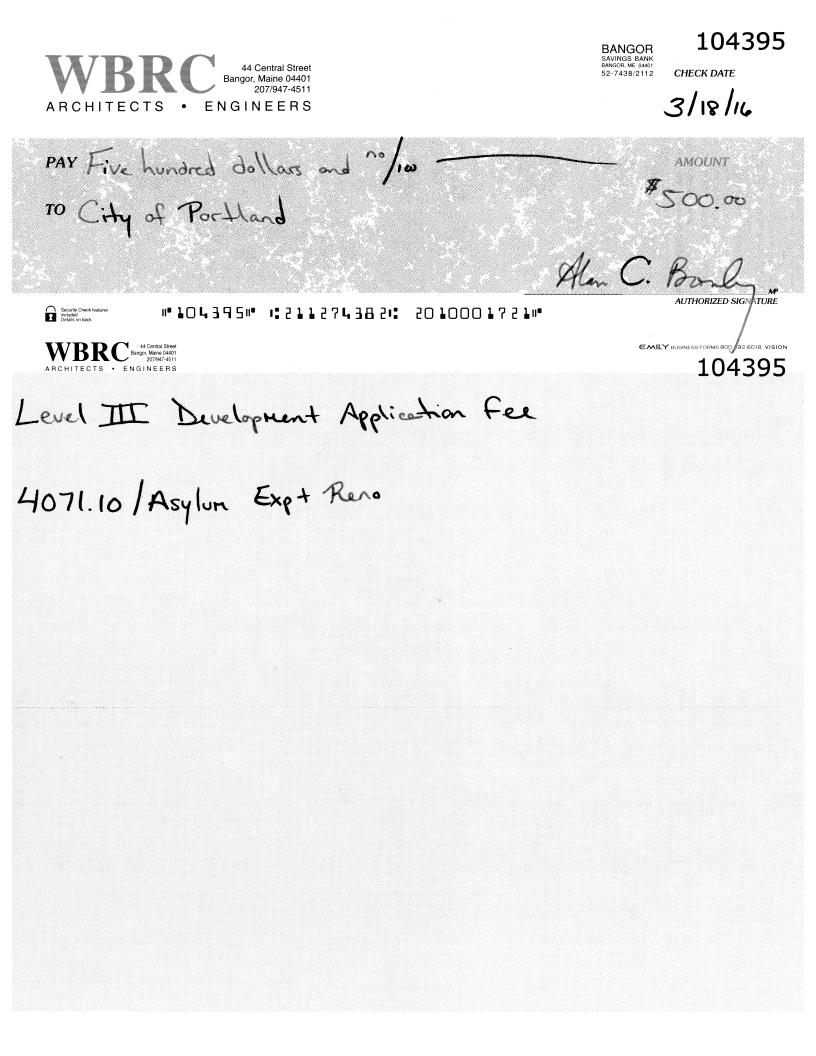
#### BANGOR

44 Central Street Bangor, Maine 04401-5116 207.947.4511 voice 207.947.4628 fax 141 Preble Street Portland, Maine 04101 207.828.4511 voice 207.828.4515 fax

PORTLAND

#### SARASOTA

8130 Lakewood Main Street, Suite 210 Lakewood Ranch, Florida 34202 941.556.0757 voice 941.556.0759 fax FL COA#AA260001395 & 27389



# THE ASYLUM EXPANSION & RENOVATION

## **PORTLAND, MAINE**



# CITY OF PORTLAND DEVELOPMENT REVIEW APPLICATION

March 25, 2016



BANGOR PORTLAND SARASOTA

### Table of Contents

Section 1 – Level III Development Review Application
Section 2 – Description of the Project
Section 3 – Right, Title and Interest
Section 4 – State and/or Federal Permit Approvals
Section 5 – Compliance with Zoning Requirements
B-3 Downtown Business Zone Standards (14-203 to 14-215)18
Site Plan Standards (14-526)21
Section 6 – Existing & Proposed Easements
Section 7 – Request for Waivers
Section 8 – Financial and Technical Capacity45
Section 9 – Traffic Analysis
Section 10 – Construction Management Plan
Section 11 – Significant Natural Features
Section 12 – Stormwater Management Plan
Section 13 – Consistency with Master Plans
Section 14 – Utility Capacity to Serve
Section 15 – Solid Waste Generation and Management47
Section 16 – Fire Safety
Section 17 – Conformity with Applicable Design Standards
Section 18 – Emissions Requirements
Exhibit 1 – Deeds
Exhibit 2 – HVAC/Generator Information
Exhibit 3 – Capacity to Serve Letters
Exhibit 4 – Financial Capacity Information
Exhibit 5 – Technical Capacity Information
Exhibit 6 – Geotechnical Information110



SECTION 1 – LEVEL III DEVELOPMENT REVIEW APPLICATION







Yes. Life's good here.

Jeff Levine, AICP, Director Planning & Urban Development Department

# **Electronic Signature and Fee Payment Confirmation**

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a *legal signature* per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are *paid in full* to the Inspections Office, City of Portland Maine by method noted below:

Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.

Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.

I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

	ALE OF MANA
/	Applicant Signature: JOHN S KENNEY No 11676
	Thave provided digital copies and sent them on:

Х

March 25, 2016 Date:

March 25, 2016 Date:

NOTE: All electronic paperwork must be delivered to <u>buildinginspections@portlandmaine.gov</u> or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3<sup>rd</sup> Floor, Room 315.

389 Congress Street \* Portland Maine 04101-3509 \* Phone: (207) 874-8703 \* Fax: (207) 874-8716 http://www.portlandmaine.gov/planning/buildinsp.asp \* E-Mail: buildinginspections@portlandmaine.gov



# Level III – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

#### Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <u>http://me-portland.civicplus.com/DocumentCenter/Home/View/1080</u> Design Manual: <u>http://me-portland.civicplus.com/DocumentCenter/View/2355</u> Technical Manual: <u>http://me-portland.civicplus.com/DocumentCenter/View/2356</u>

Planning Division Fourth Floor, City Hall 389 Congress Street (207) 874-8719

Office Hours Monday thru Friday 8:00 a.m. – 4:30 p.m.

#### **PROPOSED DEVELOPMENT ADDRESS:**

#### 121 Center Street, Portland, Maine

#### **PROJECT DESCRIPTION:**

The proposed project consists of the demolition of a basement and one-story 2940 SF portion of the existing building at located 121 Center Street in Portland, the construction of a new basement and two-story 5445 SF building addition with frontage on Free Street and Center Street, the construction of a new one-story 350 SF building addition adjacent to the existing kitchen area, interior renovations of the remaining building and related site improvements. Construction is scheduled to start in the early summer of 2016 with completion in the spring of 2017.

CHART/BLOCK/LOT: <u>F9SE / 027-F009, F9SE / 027-F010,</u>	PRELIMINARY PLAN	(date)
<u>F9SE / 027-F015, F9SE / 027-F028</u>	FINAL PLAN	3/25/2016 (date)

#### **CONTACT INFORMATION:**

Applicant – must be owner, Lessee or Buyer	Applicant Contact Information	
Name: Valerie Levy	Work # (207) 232-6556	
Business Name, if applicable: Tedlum Associates LLC & The Asylum Inc.	Home#	
Address:121 Center Street	Cell # Fax#	
City/State : Portland, ME Zip Code: 04101	e-mail:levy9683@roadrunner.com	
<b>Owner</b> – (if different from Applicant)	Owner Contact Information	
Name:	Work #	
Address:	Home#	
City/State : Zip Code:	Cell # Fax#	
	e-mail:	
Agent/ Representative	Agent/Representative Contact information	
Name: WBRC Architects Engineers	Work # (207) 947-4511	
Address: 30 Danforth Street, Suite 306	Cell #	
City/State : Portland, ME Zip Code: 04101	e-mail:john.kenney@wbrcae.com	
Billing Information	Billing Information	
Name: See Applicant/Owner	Work #	
Address:	Cell # Fax#	
City/State : Zip Code:	e-mail:	

Engineer	Engineer Contact Information
Name: WBRC Architects Engineers	<sub>Work</sub> # (207) 947-4511
Address: 30 Danforth Street, Suite 306	Cell # Fax#
City/State : Portland, ME Zip Code: 04101	e-mail:john.kenney@wbrcae.com
Surveyor	Surveyor Contact Information
Name: Owen Haskell Inc.	Work # (207) 774-0424
Address:	Cell # Fax#
390 US Route One, Unit 10 City/State : Falmouth, ME Zip Code:04105	e-mail:jschwanda@owenhaskell.com
Architect	Architect Contact Information
Name: WBRC Architects Engineers	work # (207) 828-4511
Address: 30 Danforth Street, Suite 306	Cell # Fax#
City/State : Portland, ME Zip Code: 04101	e-mail:jocelyn.boothe@wbrcae.com
Attorney	Attorney Contact Information
Name:	Work #
Address:	Cell # Fax#
City/State : Zip Code:	e-mail:

#### **APPLICATION FEES:**

### Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Other Reviews (check applicable reviews)
Traffic Movement (\$1,000)
Stormwater Quality (\$250)
Subdivisions (\$500 + \$25/lot)
# of Lots x \$25/lot =
Site Location (\$3,000, except for
residential projects which shall be
\$200/lot)
# of Lots x \$200/lot =
Other
Change of Use
Flood Plain
Shoreland
Design Review
Housing Replacement
Historic Preservation

#### **APPLICATION SUBMISSION:**

- 1. All site plans and written application materials <u>must be submitted electronically on a CD or thumb drive</u> with each plan and each document submitted as separate files. Naming conventions for the individual files can be found on the **Electronic Plan and Document Submittal** page of the City's website at <u>http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal</u>
- 2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

- 1. One (1) full size site plans that must be folded.
- 2. One (1) copy of all written materials or as follows, unless otherwise noted:
  - a. Application form that is completed and signed.
    - b. Cover letter stating the nature of the project.
    - c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
- 3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
- 4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
- 5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

#### **APPLICANT SIGNATURE:**

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 Planning Authority and Code Enforcement'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.

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant, OF MANNE	Date: 3/25/2016
No. 11676	

Updated: October 6, 2015

## **PROJECT DATA**

### The following information is required where applicable, in order to complete the application.

Total Area of Site	14,235 sq. ft.
Proposed Total Disturbed Area of the Site	12,735 sq. ft.
If the proposed disturbance is greater than one acre, then the	applicant shall apply for a Maine Construction General Permit
(MCGP) with DEP and a Stormwater Management Permit, Cha	oter 500, with the City of Portland.
Impervious Surface Area	
Impervious Area (Total Existing)	14,235 sq. ft.
Impervious Area (Total Proposed)	14,235 sq. ft.
Building Ground Floor Area and Total Floor Area	
Building Footprint (Total Existing)	8460 sq. ft.
Building Footprint (Total Proposed)	11,310 sq. ft.
Building Floor Area (Total Existing)	15,600 sq. ft.
Building Floor Area (Total Proposed)	24,459 sq. ft.
Zoning	
Existing	B3, Congress St. Historic District
Proposed, if applicable	No change proposed.
Land Use	
Existing	Restaurant, Drinking Est., Performance Hall
Proposed	No change
Residential, If applicable	Not Applicable
# of Residential Units (Total Existing)	
# of Residential Units (Total Proposed)	
# of Lots (Total Proposed)	
# of Affordable Housing Units (Total Proposed)	
Proposed Bedroom Mix	Not Applicable
# of Efficiency Units (Total Proposed)	
# of One-Bedroom Units (Total Proposed)	
# of Two-Bedroom Units (Total Proposed)	
# of Three-Bedroom Units (Total Proposed)	
Parking Spaces	
# of Parking Spaces (Total Existing)	8 standard spaces (per ordinance)
# of Parking Spaces (Total Proposed)	60 (off-site)
# of Handicapped Spaces (Total Proposed)	0
Bicycle Parking Spaces	
# of Bicycle Spaces (Total Existing)	0
# of Bicycle Spaces (Total Proposed)	7
Estimated Cost of Project	\$9.1 million

	FINAL PLAN - Level III Site Plan		
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
Х		1	* Completed Application form
Х		1	* Application fees
Х		1	* Written description of project
Х		1	* Evidence of right, title and interest
Х		1	* Evidence of state and/or federal permits
Х		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
Х		1	<ul> <li>Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site</li> </ul>
Х		1	* Evidence of financial and technical capacity
Х		1	Construction Management Plan
Х		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
Х		1	Written summary of significant natural features located on the site (Section 14- 526 (b) (a))
Х		1	Stormwater management plan and stormwater calculations
Х		1	Written summary of project's consistency with related city master plans
Х		1	Evidence of utility capacity to serve
Х		1	Written summary of solid waste generation and proposed management of solid waste
Х		1	A code summary referencing NFPA 1 and all Fire Department technical standards
Х		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
Х		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)		
Х		<ul> <li>* Boundary Survey meeting the requirements of Section 13 of the City of</li> <li>Portland's Technical Manual</li> </ul>			
Х		1	Final Site Plans including the following:		
Х		-	Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);		
Х		Existing a	and proposed structures on parcels abutting site;		
Х			is and intersections adjacent to the site and any proposed geometric tions to those streets or intersections;		
Х			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb		
Х		Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;			
Х		Location	Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;		
N/A		Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;			
Х		Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;			
Х		Location of all snow storage areas and/or a snow removal plan;			
N/A		A traffic control plan as detailed in Section 1 of the Technical Manual;			
N/A		Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);			
N/A		Location and proposed alteration to any watercourse;			
N/A		A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;			
N/A		Proposed buffers and preservation measures for wetlands;			
Х		Existing soil conditions and location of test pits and test borings;			
N/A		Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;			
N/A		A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;			
Х		Grading plan;			
N/A		Ground water protection measures;			
Х		Existing and proposed sewer mains and connections;			

- Continued on next page -

Х	Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;		
Х	Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;		
Х	Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;		
Х	Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;		
Х	Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;		
N/A	A shadow analysis as described in Section 11 of the Technical Manual, if applicable;		
х	A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;		
Х	Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;		
Х	An exterior lighting plan in accordance with Section 12 of the Technical Manual;		
Х	A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;		
Х	Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.		



## PORTLAND FIRE DEPARTMENT SITE REVIEW FIRE DEPARTMENT CHECKLIST



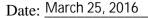
A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

- Name, address, telephone number of applicant Valerie Levy, 121 Center Street, Portland, ME 04101 1. 2.
  - (207) 232-4693
- Name address, telephone number of architect Jocelyn Boothe, WBRC Architects Engineers, 30 Danforth 3. Street, Portland, ME 04101 (207) 828-4511
- Proposed uses of any structures [NFPA and IBC classification] See code sheets (GI003, GI004, GI005) 4.
- 5.
- 6. Square footage of all structures [total and per story] See code sheets (GI003, GI004, GI005)
- Elevation of all structures See sheets AE202 and AE203 Building Elevations 7.
- 8. Proposed fire protection of all structures Automatic Sprinkler System
  - As of September 16, 2010 all new construction of one and two family homes are • required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)
- Hydrant locations Hydrants are located on Center Street and at the intersection of Center 9. Street and Free Street. See topographic survey for more information.
- Water main[s] size and location A 12" diameter water main is located on Center Street and an 8" 10. diameter water main is located on Free Street. See topographic survey for more information.
- Access to all structures [min. 2 sides] Access to structure is provided from Free Street. 11. Center Street and Lancaster Lane.
- 12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards. See code sheets (GI003, GI004, GI005)

Some structures may require Fire flows using annex H of NFPA 1

## CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services, 55 Portland Street, Portland, Maine 04101-2991





David Margolis-Pineo Deputy City Engineer 207-874-8850 207-400-6696 dmp@portlandmaine.gov

Chart Block Lot Number: \* See below.

Industrial (complete part 5 below)

\* F9SE / 027-F009, F9SE / 027-F010,

F9SE / 027-F015, F9SE / 027-F028

Commercial (see part 4 below)

Governmental

Other (specify)

Residential

Х

## 1. Please, Submit Utility, Site, and Locus Plans.

121 Center Street Site Address: Proposed Use: Sports Bar, Dance Club, Music Venue Sports Bar, Dance Club, Music Venue Previous Use: **Existing Sanitary Flows:** GPD 0 Existing Process Flows: GPD Description and location of City sewer that is to receive the proposed building sewer lateral. A new 6" diameter SDR35 PVC sanitary service is proposed in place of the existing service near the intersection of Center and Free Streets.

Clearly, indicate the proposed connections, on the submitted plans.

#### 2. Please, Submit Contact Information.

City Planner's Name: Barbara Barhydt Phone: 207-874-8699 Tedlum Associates LLC & The Asylum Inc. (Valerie Levy) Owner/Developer Name: Owner/Developer Address: 121 Center Street, Portland, ME 04101 Phone: 207-232-6556 E-mail: levy9683@roadrunner.com Fax: Engineering Consultant Name: WBRC Architects Engineers 30 Danforth Street, Suite 306, Portland, ME 04101 Engineering Consultant Address: (207) 947-4511 john.kenney@wbrcae.com Phone: E-mail: Fax:

Category

Site

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

#### 3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 8840 (Max. Occupancy) GPD Peaking Factor/ Peak Times: Specify the source of design guidelines: (*i.e.*<u>X</u> "Handbook of Subsurface Wastewater Disposal in Maine," "Plumbers and Pipe Fitters Calculation Manual," Portland Water District Records, Other (specify)

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

Sports Bar: 60 seats x 20 gallons per day per seat = 1200 gallons per day Dance Hall: 1336 attendees x 5 gallons per day per attendee = 6680 gallons per day Employees (max.): 80 employees x 12 gallons per day per employee = 960 gallons per day

#### 4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values:	
Size of External Grease Interceptor:	
Retention Time:	
Peaking Factor/ Peak Times:	
No external grease interceptors are proposed. See below.	

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

#### 5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: Do you currently hold Federal or State discharge permits? Is the process wastewater termed categorical under CFR 40? OSHA Standard Industrial Code (SIC): Peaking Factor/Peak Process Times:

	0 GPD
Yes	No
Yes	No
(http://www.osha.go	v/oshstats/sicser.html)

(mip.//www.osna.gov/osnstats/sicser.nimi)

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

<u>Grease interceptors</u>: There are three (3) existing internal grease interceptors in the basement. Wastewater from the existing kitchen near the sports bar flow to these grease interceptors prior to discharge to the sanitary sewer in Center Street. The proposed project will include new kitchen equipment to replace existing equipment, but capacity of the kitchen area will not change.











TELY COMMITTED

Sports Bar Dance Club Lounge

March 17, 2016

To Whom It May Concern:

Tedlum LLC and The Asylum have retained the services of WBRC Architects · Engineers located in Portland, Maine to prepare requisite local site plan permit application materials for two building additions, building renovations and associated site improvements at 121 Center Street in Portland, Maine.

We, the undersigned, hereby authorize WBRC Architects · Engineers and their sub-consultants contracted and assigned to the above mentioned project to act on behalf of Tedlum LLC and The Asylum in matters related to these permits, including signing of documentation. Please contact my office at (207) 232-4693 should you have any questions.

Sincerely,

Valerie Levy, Owner

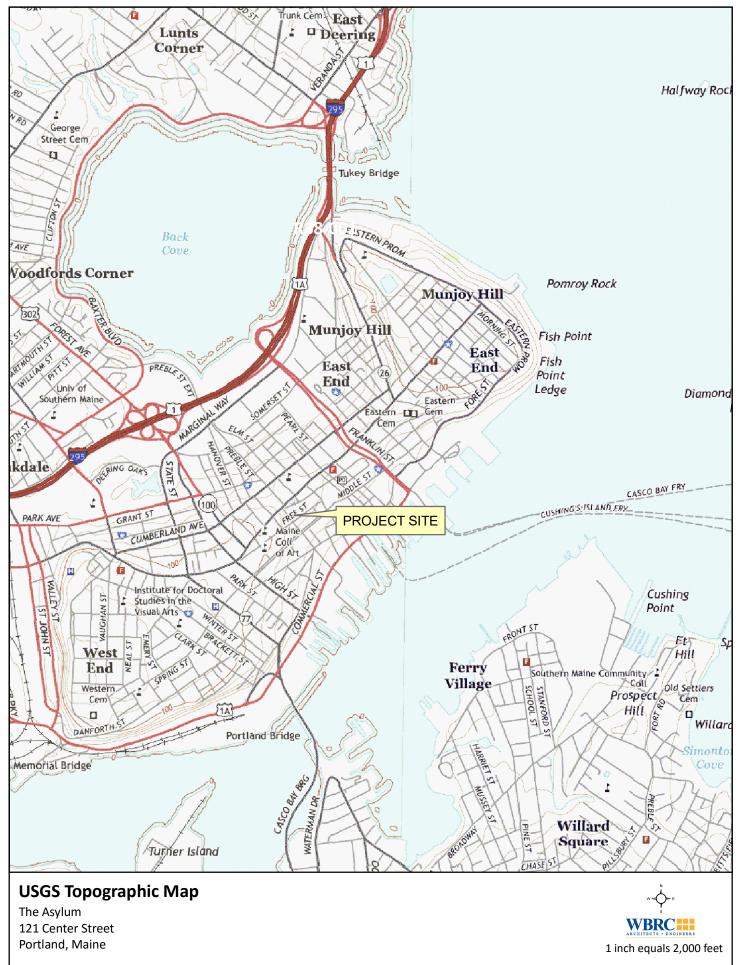
Asylum Inc.

121 Center Street

Portland Maine 04101

© 207.772.8274

fax 207.772.8738



## SECTION 2 – DESCRIPTION OF THE PROJECT

The existing Asylum event venue is a 1-story plus basement building, constructed in 1960. The structure originally consisted of 3 separate buildings, resulting in varying floor and ceiling heights throughout the 3 different spaces. The building is located at the corner of Center Street and Free Street in Portland, Maine with the main entrance located along Center Street. The exterior is a brick and CMU structure, with minor amounts of storefront glazing, spandrel and brick accents. The majority of the façade along Center Street is an unarticulated brick expanse with a brick entry arch and individual letters/signs near the parapet. The façade along Free Street consists of a number of brick piers with metal panels located near the parapet and a curtain wall system near the emergency egress.

The existing venue consists of 15,600 gross square feet, divided between the fully occupied first floor and partially occupied basement level. The existing first floor consists of a sports bar, kitchen, lobby area and event space. The current first floor event space includes a stage and three separate bars. The current basement consists of a utility/storage area, a basement club, a green room and office space. All existing areas, except the basement utility area and first floor sports bar will be renovated/refreshed as part of this project.

The proposed addition includes demolishing and rebuilding the portion of building at the corner of Center Street and Free Street, and expanding the building into the adjacent parking lot space to the north east of the site along Free Street. The addition will add 5,208 gross square to the basement and 5,497 gross square feet to the first floor and building a 3,732 gross square foot balcony. The resultant building will have a total area of 24,459 gross square feet.

Included in the new first floor program is an expansion to the existing event venue, a separate prefunction/flex space, restroom upgrade and addition to the kitchen. Spread throughout the existing building are a number of coolers, which will be consolidated to one central unit off of the kitchen. The existing kitchen layout will remain the same, though finishes will be upgraded and some new equipment will be purchased. A kitchen vendor has been hired to prepare design services and supply equipment for the kitchen and bars. The pre-function space will include the main bar for the event venue, and will have a top hung sliding glass partition between it and the event space. The bathrooms and support areas will be updated and enlarged to accommodate the increase in occupants. The new/renovated event space will include a 4 foot tall stage and 3 foot tall seating tier. The main level and the top seating tier/stage will be accessible via a new elevator. The new elevator will also service the basement level and the balcony.

The program for the basement addition/renovation includes a 2 new Green Rooms for touring acts, complete with private toilet and shower rooms. The basement addition will also include a pre-function space and separate bar. The bathrooms and support areas will be updated and enlarged to accommodate the increase in occupants. Renovations to the existing basement dance club include



removing an existing CMU wall to provide more space, and switching the locations of the bar and stage, both of which will be new. The office and restrooms will be refreshed to bring the finishes up to date.

The new design approach is based on grounding the building in strong existing masonry site elements, especially the brick wall along Center Street, and contrasting the historic masonry nature with a more modern aperture highlighting the event space. While a portion of this brick wall will need to be removed during construction, the intent is to replace this wall in its original location. New punched windows will be introduced along the Center Street brick wall to provide a connection to the interior space. A lighter colored masonry base will wrap around the corner to Free Street and culminate in a vertical masonry element acting as an end cap to the design and a tie to the surrounding buildings. The same light colored masonry used at Free Street, will also be used at the main entry, as will the smaller punched windows, tying together to two facades. Additionally, new angled canopies with recessed LED lighting are proposed over each of the three entries, further tying together the design.

Sitting on top of this masonry base, we have proposed a simple, modern form, which will act as a 'lens' to the event venue and a connection between the pedestrian district and the performance space. This upper mass will be clad in a dark metal panel with simple lines. Two large curtainwall openings with acoustical glazing are proposed along free street for maximum transparency. Additionally, smaller punched windows are proposed along Center Street and along the rear façade over Lancaster Lane. Each of these openings, as well as the main entries have an accent band of color surrounding them. A new building sign/logo will be located on the metal panel along Center Street, as well as the masonry 'tower' along Free Street.

Construction is scheduled to begin in the early summer 2016 with completion in early spring of 2017.

## SECTION 3 – RIGHT, TITLE AND INTEREST

The project site is located at 121 Center Street and consists of four parcels (F9SE-027-F009, F9SE-027-F010, F9SE-027-F015, and F9SE-027-F028) owned by Tedlum Associates, LLC.

Three parcels (F9SE-027-F009, F9SE-027-F010 and F9SE-027-F015) were conveyed from Valerie J. Levy to Tedlum Associates, LLC on October 29, 2015 (Cumberland County Registry of Deeds Book 32711 Page 4). This deed describes various rights, including access to Lancaster Lane, and encumbrances.

The fourth parcel (F9SE-027-F028) was conveyed from The Surplus Store, Inc. to Tedlum Associates, LLC on July 21, 2015 (Cumberland County Registry of Deeds Book 32452 Page 114). Exhibit A of this warranty deed references the plan entitled "Plan of Land for Art Gallery Restaurant, Center and Free Street, Portland, Maine", dated May 23, 1985, a copy of which is attached for reference. Certain rights and encumbrances affecting this parcel are described in the quitclaim deed from the City of Portland to John Martin Enterprises dated June 22, 1984 (Cumberland County Registry of Deeds Book 6489 Page 175).



See Exhibit 1 for copies of deeds.

## Section 4 – State and/or Federal Permit Approvals

No State or Federal land use permit approvals are required for this project.

## Section 5 – Compliance with Zoning Requirements

### B-3 Downtown Business Zone Standards (14-203 to 14-215)

The proposed project is located in the B-3 Downtown Business Zone where "Restaurants", "Drinking Establishments" and "Theaters and performance and exhibition halls" are permitted uses (14-217).

The Free Street façade of the proposed 5445 SF building addition is located in the PAD overlay zone, where additional restrictions apply. Restaurants and drinking establishments are permitted uses in the PAD overlay zone. In the PAD overlay zone, at least 75% of the street frontage must be available for public use and publicly available floor area must equal or exceed 75% of the street frontage multiplied by 20' depth (1025 SF). On the Free Street façade, the elevation of the first floor level is approximately 6' above street level and the elevation of the basement level is approximately 4' below street level. 75% of the basement level street frontage, which consists of an entry space and pre-function room, are available for public use and 80% of the first floor street frontage, which consists of a stair and event space, are available for public use. Publicly available floor areas for the basement level and first floor level and first floor street street frontage, which exceeds the minimum required floor area of 1025 SF. As previously discussed with the City's Zoning Administrator, the first floor is considered the main activity level for this project. See architectural floor plans and elevations for more information.

#### Dimensional Requirements (14-220)

Dimensional requirements are summarized in the following table.

Standard	
Min. lot size	Ordinance: None
Min. street frontage	Ordinance: 15 FT
	Existing: 76.53' (Free Street) & 163.62 FT (Center Street)
	Proposed: No Change
Street wall build-to line:	Ordinance: All buildings or structures shall be located within five (5) feet of the property line along street frontages, unless the Planning Board requires or approves an additional distance to comply with the requirements of section 14-526 (d)9 and the City of Portland Design Manual



	<u>Existing</u> : The existing building is located within 5' of the Center Street and Free Street rights-of-way.
	<u>Proposed</u> : The proposed 5445 SF building addition is located within 5' of the Center Street and Free Street rights-of-way.
Min. yard dimensions	Ordinance: None
Min. lot width	Ordinance: None
Max. length of undifferentiated blank wall along a public street or publicly accessible pedestrian way	Ordinance: 30 FT on Center Street and 15 FT on Free Street
	Existing: The existing undifferentiated brick wall on Center Street and Free Street is approximately 85 FT and 7 FT, respectively.
	<u>Proposed:</u> The proposed renovation of the existing building on Center Street will include façade features that will provide differentiation to the existing brick wall. The building addition on Center Street and Free Street will not include any undifferentiated blank walls exceeding 15 FT. See architectural elevations for more information.
Maximum lot	Ordinance: 100%
coverage	Existing: 59%
	Proposed: 79%
Min. building height	Ordinance: No new construction of any building shall be less than thirty-five (35) feet in height within fifty (50) feet of any street frontage.
	<u>Proposed:</u> Within 50' of the Free Street and Center Street frontage, the roof elevation of the proposed building addition at the intersection of Free Street and Center Street is 114.6' (NGVD 1929). The existing elevation varies from 68.08' to 68.62' along Free Street and 68.62' to 71.85' along Center Street. Therefore, the height of the proposed building addition above existing grade varies from 42.75' to 46.52' within 50' of the street right-of-way.
	See architectural elevations and the topographic survey for more information.
Max. height of structures	Ordinance: 150 FT + 40 FT additional height for building cap per Downtown Height Overlay Map
	<u>Proposed:</u> The height of the proposed building addition will not exceed 150' in height. See <i>Min. building height</i> above.
Maximum building area and floor area for buildings which exceed one hundred twenty-five (125) feet in height	Not applicable. The existing building and proposed additions do not exceed 125' in height.

#### Sec. 14-221. Other requirements and standards.

(a) Downtown Urban Design Guidelines: **The proposed project is consistent with Downtown Urban Design Guidelines.** 



(b) *Off-street parking and loading:* Off-street parking and loading are required as provided in division 20 and division 21 of this article. *See Section (a)(4) in Site Plan Standards narrative below.* 

(c) *Signs:* Signs shall be subject to the provisions of division 22 of this article. In addition, signs within the pedestrian activities district (PAD) overlay zone or in areas designated as PAD encouragement areas, as shown on the pedestrian activities district map, a copy of which is on file in the department of planning and urban development, shall be consistent with the Downtown Urban Design Guidelines. *See Section* (d)(8) in Site Plan Standards narrative below.

(d) *Exterior storage:* There shall be no exterior storage, with the exception of receptacles for solid waste disposal which are not visible from a public street. Such receptacles shall be shown on the approved site plan. *Exterior storage is not proposed. Receptacles for solid waste will be located in a secured area located off Lancaster Lane as shown on sheet CP101 – Site Layout & Materials Plan.* 

(e) *Storage of vehicles:* No more than one (1) unregistered vehicle shall be stored outside for a period in excess of thirty (30) days. *Storage of vehicles storage is not proposed.* 

(f) *Shoreland and flood plain management regulations:* If the lot is located in a shoreland zone or in a flood hazard zone, then the requirements of division 26 and/or division 26.5 shall apply. *The proposed project is not located in the shoreland zone or in a flood hazard zone.* 

(g) *Downtown arts program:* All new development subject to section 14-851 shall make provision for participation in the public arts program. *The proposed project is not subject to section 14-851.* 

(h) *Relocation of displaced residents:* Any development which results in the displacement of residents of dwelling units currently located on the development site shall meet the requirements of sections 14-861 through 14-864. *The proposed project will not result in the displacement of residents.* 

(i) *Historic resources:* The exterior design of proposed or renovated structures located within historic districts shall be subject to the provisions of article IX (historic preservation) of this chapter. The exterior design of proposed or renovated structures located adjacent to historic districts or historic resources shall be subject to section 14-526(d) 5, b. *See Section (d)(5) in Site Plan Standards narrative below.* 

#### Sec. 14-221.1. External effects.

Every use in the B-3, B-3b and B-3c zones shall be subject to the following requirements:

(a) *Enclosed structure:* The use shall be operated within a completely enclosed structure, except for those uses customarily operated in the open air. *The proposed use will be operated within a completely enclosed structure.* 

(b) *Noise:* The level of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American National Standards Institute, Inc.), inherently and recurrently within the B-3 and B-3b zones shall not exceed fifty-five (55) decibels on the A scale between the hours of 9:00 p.m. and 7:00 a.m., and sixty (60) decibels on the A scale between



7:00 a.m. and 9:00 p.m. at the boundaries of any lot nor within publicly accessible pedestrian open space, except for sound from construction activities, sound from traffic on public streets, sound from temporary activities such as festivals, and sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices. In measuring sound levels under this section, sounds with a continuous duration of less than sixty (60) seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of sixty (60) seconds or more shall be measured on the basis of the energy average sound level over a period of sixty (60) seconds (LEQ1). With the exception of noise related to construction activities, the proposed building additions and renovation will not result in noise that exceeds this standard. CavanaughTocci acoustical consultants have been hired to ensure that acoustical treatments within the event space will be installed to comply with this standard during concert events. See Exhibit 2 for proposed roof-top HVAC unit cutsheets.

(c) *Vibration:* Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. *With the exception of vibration related to construction activities, the proposed building additions and renovation will not result in any vibration that is perceptible without instruments at lot boundaries.* 

(d) *Heat:* Heat shall be imperceptible without instruments at lot boundaries. Heating elements which are intended to melt snow and ice shall be placed within sidewalk paving only when approved by the department of parks and public works. *The proposed building additions and renovation will not result in any heat that is perceptible without instruments at lot boundaries.* 

(e) *Glare, radiation or fumes:* Glare, radiation or fumes shall be imperceptible without instruments at lot boundaries. *The proposed building additions and renovation will not result in any glare, radiation or fumes that are perceptible without instruments at lot boundaries.* 

(f) *Smoke:* Smoke shall not be emitted at a density in excess of twenty (20) percent opacity level as classified in Method 9 (Visible Emissions) of the Opacity Evaluation System of the U.S. Environmental Protection Agency. *The proposed building additions and renovation will not result in any smoke at a density in excess of twenty (20) percent opacity level as classified in Method 9 (Visible Emissions) of the Opacity Evaluation System of the U.S. Environmental Protection Agency.* 

(g) *Materials or wastes:* No materials or wastes shall be deposited on any lot in such form or manner that they may be transferred beyond the lot boundaries by natural causes or forces. All material which might cause fumes or dust, or constitute a fire hazard if stored out-of-doors, shall be only in closed containers and in accordance with section 14-221(d). Areas attracting large numbers of birds, rodents or insects are prohibited. *No material or waste deposits are proposed as part of this project.* 

Site Plan Standards (14-526)

Sec. 14-526. Site plan standards.



Requirements for approval. The Planning Board or Planning Authority shall not approve a site plan application unless the development proposal meets the following criteria:

#### (a) Transportation Standards

1. Impact on Surrounding Street Systems:

The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets and ways; and the incremental volume of traffic will not create or aggravate any significant hazard to safety at or to and including intersections in any direction where traffic could be expected to be impacted; and will not cause traffic congestion on any street which reduces the level of service below Level "D" as described in the 1985 Highway Capacity Manual published by the Transportation Research Board of the National Research Council, a copy of which manual is on file with the public works authority, or substantially increase congestion on any street which is already at a level of service below Level "D";

According to the City's Land Use ordinance, the proposed building additions and renovation will require an additional 60 parking spaces (see parking calculations below). The applicant is proposing to provide off-site parking to meet this requirement at the existing parking lot at the intersection of Center Street and Free Street and/or at the Midtown Parking Lot at 44 Free Street. In 2012, Gorrill Palmer Consulting Engineers wrote that the addition of up to 70 peak hour trips associated with the Cross Arena project would have a minimal impact on the adjacent street system. Because the additional 60 trips associated with The Asylum project will take place in the evenings and on weekends, it is our opinion that the additional traffic will have a minimal impact on the adjacent street system. Due to the nature of the proposed use, many attendees will be combining activities such as attending other restaurants or entertainment venues and will be walking to The Asylum for events. Pedestrian facilities in the vicinity of the Cross Area, including the crosswalks and accessible ramps at the intersection of Center Street and Free Street, were upgraded and improved recently as part of the Cross Center renovation project. A new entrance is proposed on Free Street, which has a 16' wide sidewalk for approximately 40' to allow for ample pedestrian use. The existing entrance on Center Street will remain. Deliveries to the facility will remain on Lancaster Lane. For concerts requiring the use of full-size semi-trailer trucks, the applicant will coordinate with the City to utilize up to five parallel parking spaces on Free Street for loading and unloading equipment.

2. Access and Circulation:

a. Site Access and Circulation.

(i) The development shall provide safe and reasonable access and internal circulation for the entire site for all users of the site and shall comply with the standards set forth in Sections 1 of the Technical Manual. *A new entrance is proposed on Free Street, which has a 16' wide sidewalk for approximately 40' to allow for ample pedestrian use. The existing entrance* 



# on Center Street will remain. Safe and reasonable access and internal circulation for the entire site is provided.

(ii) Points of access and egress shall be located to avoid conflicts with existing turning movements and traffic flows. *The existing parking lot curb-cut on Free Street will be removed. No new points of access or egress are proposed.* 

(iii)Where drive up features such as gasoline pumps, vacuum cleaners and menu/order boards are permitted, they shall not extend nearer than twenty five (25) feet to the street line. The site must have stacking capacity for vehicles waiting to use these service features without impeding on-site vehicular circulation or creating hazards to vehicular circulation on adjoining streets. **Not applicable for this project.** 

b. Loading and Servicing.

(i) All developments served by delivery or other service vehicles shall provide a clear route and travel way geometric design that permits safe turning and backing for the maximum vehicle length that would service the development and does not impede site access, vehicle circulation, pedestrian movements or parking. *Delivery and service vehicles will continue to use Lancaster Lane to access the facility. For concerts requiring the use of full-size semitrailer trucks, the applicant will coordinate with the City to utilize up to five parallel parking spaces on Free Street for loading and unloading equipment.* 

c. Sidewalks.

(i) All proposed developments shall provide sidewalks along all frontages in accordance with Sections 14-498 and 14-499 of the City Code, installed to City specifications as described in Section 1 of the Technical Manual. An applicant may request a waiver from curb and sidewalk installation requirements if they meet applicable waiver criteria listed in Section 14-506 (b) of the City Code. *The existing sidewalk layout configuration will remain. The existing parking lot curb-cut on Free Street will be removed and replaced with vertical granite curb. The existing brick sidewalk surface will be reconstructed with new or salvaged brick according to requirements in the City's technical Manual.* 

(ii) Where sidewalks already exist but are in substandard condition, they shall be repaired or replaced in conformance with Chapter 25 of the City Code and Section 1 of the Technical Manual. *The existing brick sidewalk surface on Center Street and Free Street as shown on sheet CP101 – Site Layout plan will be reconstructed with new or salvaged brick according to requirements in the City's technical Manual.* 

(iii)Continuous internal walkways shall be provided between existing or planned public sidewalks adjacent to the site, transit stops and street crossings and primary building entrances on the site. *Not applicable.* 



#### 3. Public Transit Access:

a. For any residential development consisting of twenty (20) or more dwelling units or commercial or institutional development of at least 20,000 square feet gross floor area, a transit facility shall be constructed where the following criteria are met:

(i) The development is proposed along an existing public transit route on a local principal or minor arterial roadway, as shown in the Federal Street Classification Map provided in Section 1 of the Technical Manual.

(ii) The nearest existing transit shelter and/or bus pullout on the route is ¼ mile(1,320 feet) or more away from the closest primary building on the site, measured along rights-of-way.

b. Transit facilities shall consist of a transit shelter and a transit pullout bay.

c. Transit facilities shall be connected to the public sidewalk system.

d. Waiver: All or some of this standard may be waived if the Reviewing Authority determines one or more of the following:

(i) That some or all of the required improvements cannot reasonably be made due to site constraints and/or insufficient right of way width; or

(ii) That the development is not anticipated to generate public transit usage due to particular characteristics or proposed use of the development.

#### Not applicable. The proposed building additions are less than 20,000 SF gross floor area.

4. Parking:

a. Location and Required Number of Vehicle Parking Spaces:

(i) Off-street parking shall meet the applicable zoning requirements, except the Planning Board shall determine the parking requirement, based upon the applicant's parking study and a recommendation from the City Transportation Engineer, for new structures, building additions and changes of use with a total floor area of 50,000 sf or more and for projects, regardless of size, in the B-6, B-7 and USM Overlay zone.

#### Required parking calculations for this project are as follows:

Existing parking removed [14-332.2(d)]: Eight (8) standard 9' x 18' parking spaces (see sheet CD101 – Site Removals Plan)

Basement: 557 SF new pre-function room minus 450 SF demolished pre-function room = 107 SF net new pre-function room. 107 SF @ 1 space per 400 SF [14-332(j)] = 1 space



(see sheet AD101 – Basement & First Floor Removals Plan and sheet AE101 Basement Floor Plan)

First Floor: 2838 SF new event space minus 2800 SF demolished event space = 38 SF net new event space. 38 SF @ 1 space per 100 SF = 1 space (see sheet AD101 – Basement & First Floor Removals Plan and sheet AE102 First Floor Plan)

Balcony:

175 SF new standing area @ 1 space per 100 SF = 2 spaces 239 new seats @ 1 space per 5 seats = 48 spaces (see sheet AE104 Balcony & Roof Plan)

Required Parking: 8 +1+1+2+48 = 60 spaces

The applicant is proposing to enter into a lease agreement with Unified Parking Partners to lease 60 spaces in the parking lot at the intersection of Center Street and Free Street and/or the Midtown Parking Lot located at 44 Free Street. See Exhibit 3 for a copy of the letter of intent from Unified Parking Partners. The applicant understands that an executed lease agreement will be required prior to issuance of any certificate of occupancy.

(ii) Where a parking study is required, the City encourages Transportation Demand Management (TDM) strategies to be employed. *A parking study is not required.* 

(iii)Developments proposing to exceed minimum parking requirements by 10% or more must demonstrate through a parking analysis that the amount of parking is appropriate for the proposed use of the site. *No on-site parking is proposed.* 

(iv) Parking spaces and aisles shall meet applicable dimensional standards as detailed in Section 1 of the Technical Manual. *No on-site parking is proposed. Proposed off-site parking will meet applicable dimensional standards.* 

(v) Parking lots, except for temporary lots to be used for less than one year, shall be constructed of a permanent and durable hard surface that is not subject to ponding or erosion. *No on-site parking is proposed.* 

b. Location and Required Number of Bicycle Parking Spaces:

(i) The site plan shall provide secure bicycle parking in conformance with Section 1 of the Technical Manual and shall meet the following requirements:

(a) Residential structures. Two (2) bicycle parking spaces for every five (5) dwelling units shall be required. *Not applicable.* 



(b) Non-residential structures. Two (2) bicycle parking spaces for every ten (10) vehicle parking spaces for the first one hundred (100) required vehicle parking spaces, plus one (1) bicycle parking space for every twenty (20) required motor vehicle parking space over one hundred (100) City of Portland Land Use required vehicle parking spaces.

## 60 parking spaces are required. Therefore, 6 bicycle parking spaces are required. Bicycle parking is provided off Lancaster Lane. See sheet CP101 – Site Layout Plan.

(c) Development with zero (0) to ten (10) required vehicle parking spaces shall provide at least two (2) bicycle parking spaces. *Not applicable.* 

(ii) Waiver: The reviewing authority may reduce the required number of bicycle parking spaces if it is determined, based on evidence submitted by the applicant, that the proposed development is expected to generate reduced demand for bicycle parking due to characteristics or uses such as elderly or disabled persons housing or industrial uses located in outlying areas. *No waivers are proposed.* 

c. Motorcycle and Scooter Parking.

(i) The site plan shall accommodate access and parking for two-wheeled motorized vehicles such as motorcycles and scooters. *No on-site two-wheeled parking is proposed. Adequate off-site parking for two-wheeled motorized vehicles is available in the vicinity of the project site.* 

d. Snow Storage.

(i) The site plan shall include areas for snow storage or shall include an acceptable snow removal plan. *No snow storage areas are proposed. Snow removal from public access areas and the alley between the proposed building addition and the existing parking garage will be minimal and transported off-site.* 

(ii) Snow storage areas may not encroach on areas designated to meet minimum parking requirements or on pedestrian walkways and shall not be located where they would adversely impact the functionality of bioretention or other stormwater management systems. Landscaping in designated snow storage areas shall be such that it can withstand the snow pile. *No on-site snow storage areas are proposed. Snow will be removed off-site.* 

5. Transportation Demand Management (TDM):

a. The following types of development shall design and implement a Transportation Demand Management (TDM) plan:

(i) All Level III development in the B7 zone;



(ii) All commercial or institutional uses of 50,000 sf or more total floor area;

(iii)All commercial or institutional uses designed to accommodate 100 or more employees and, for educational institutions, 100 or more students.

b. The TDM Plan shall establish trip reduction targets and shall employ a combination of the following elements to achieve these targets:

(i) Public transit incentives;

(ii) Parking cash-out;

(iii)Car sharing;

(iv) Car and van pooling incentives;

(v) Guaranteed ride home programs;

(vi) Other such strategies that reduce single occupancy vehicle trips to and from the development.

c. The development shall comply with the City of Portland TDM standards as described in Section 1 of the Technical Manual.

#### A Transportation Demand Management plan is not required for this project.

(b) Environmental Quality Standards

1. Preservation of Significant Natural Features:

a. The site plan shall preserve and protect significant natural features by incorporating them into site design. Significant natural features shall be defined as:

(i) Populations of trees and plants listed on the Official List of Endangered and Threatened Plants in Maine, published by the Maine Natural Areas Program.

(ii) Habitat for species appearing on the official state of federal list of endangered or threatened animal species;

(iii)High and moderate value waterfowl and wading bird habitat including nesting and feeding areas, as defined by the Department of Inland Fisheries and Wildlife;

(iv) Aquifers on islands in Casco Bay, as identified in the City of Portland Island Groundwater Management Study and/or by the Maine Geological Survey;

(v) Waterbodies including wetlands, watercourses, significant vernal pools and floodplains. These features may also be regulated by Division 26, Shoreland Regulations, Division 26.5,



Flood Plain Management Regulations and Division 26.7, Stream Protection Ordinance of the City Code, along with Sections 5 and 8 of the Technical Manual or other State regulations.

b. Where areas set aside for preservation are part of a larger existing habitat block extending beyond the boundaries of the site, the contiguity of these features shall be preserved, where possible.

c. Waiver: Where complete preservation of significant natural features substantially compromises development of the site otherwise permitted by zoning, the Reviewing Authority may reduce the requirement to accommodate development provided that the applicant demonstrates compliance with applicable state and federal regulations and implements preservation measures to the extent practicable.

#### There are no significant natural features on the project parcel.

- 2. Landscaping and Landscape Preservation:
  - a. Landscape Preservation.

(i) Site development shall be designed to incorporate, and limit disturbance to or removal of existing trees, as specified below. Preserved trees may be counted towards site landscaping requirements.

(ii) All development subject to zoning setbacks shall preserve a minimum of 30% of existing trees ten (10) inches DBH or greater within the required setback area unless trees are non-native invasive species, as identified in Section 4 of the Technical Manual, or are deemed unsalvageable by the Portland City Arborist or their designee.

(iii)Protection during Construction: The site plan shall include adequate measures to protect vegetation to be preserved from construction impacts, in accordance with the tree preservation standards listed in Section 4 of the Technical Manual.

(iv) Waiver: Where the applicant can demonstrate that preservation of existing vegetation would compromise development of the site, the Reviewing Authority may permit the substitution of replacement landscaping in other areas of the site, and/or a financial contribution to the City of Portland Tree Fund for an amount proportionate to the cost of trees removed, as described below:

(a) For each tree required to be preserved that is removed and is greater than 16" in caliper DBH, two (2) replacement trees of a species identified on the City of Portland Recommended Tree List shall be planted on the site as detailed in Section 4 of the Technical Manual).

(b) For each tree required to be preserved that is removed and is between ten (10) and sixteen (16) inch DBH, one (1) replacement tree of a species identified on the City of



Portland Recommended Tree List shall be planted on the site as detailed in Section 4 of the Technical Manual).

(c) Where the planting of replacement trees on the site is not feasible, the applicant shall contribute an amount proportionate to the cost of required replacement trees to the City of Portland Tree Fund, as detailed in Section 4 of the Technical Manual.

(v) In addition to the provisions of this section, all development within the Shoreland Zone shall meet the requirements of Division 26, Shoreland Regulations.

# There are no existing trees or vegetation located on the project parcel. The parcel is completely developed.

b. Site Landscaping.

(i) Landscaped Buffers:

(a) Screening. Loading and servicing areas, dumpsters, storage areas and utility structures, except for renewable energy systems, shall be screened from view from public sidewalks, streets and adjacent properties by dense evergreen landscaping, fencing, masonry wall building walls, or a combination thereof. *The proposed loading and servicing area, dumpsters, storage areas and utility structures will be located off Lancaster Lane and will not be visible from public sidewalks or streets.* 

(b) Understory Plantings. All development subject to required zoning setbacks shall include a minimum of six (6) shrubs per forty five (45) linear feet of all frontages as measured along the property line. A shrub shall be defined as one shrub, one ornamental grass, and/or 3 perennials. Required shrubs may be installed anywhere on the site, including a green roof, if proposed, and may be planted in any arrangement.

Existing vegetation to be preserved on the site may be counted towards this requirement as detailed in Section 4 of the Technical Manual.

# Not applicable. The proposed project is located in the B-3 zoning district and is not subject to zoning setbacks.

(c) Industrial and Commercial Zones. For non-residential development proposed in an industrial or commercial zone subject to required zoning setbacks and abutting a residential zone, an evergreen, densely landscaped buffer of not less than ten (10) ft wide and six (6) ft tall is required along the side abutting the residential zone. Where site constraints prevent such a buffer from being established, the width of the landscaped buffer may be reduced but shall include architectural quality fencing of not less than six (6) ft tall and a mix of evergreen and deciduous trees spaced no further than twenty (20) ft apart along the abutting the residential zone. *Not applicable. The* 



# proposed project is located in the B-3 zoning district and is not subject to zoning setbacks.

(d) Buffer from Surrounding Development. All residential development shall provide and/or preserve evergreen vegetated buffers where necessary to buffer the development from detrimental impacts of existing surrounding development. *Not applicable.* 

(ii) Parking Lot Landscaping:

(a) Developments with five (5) or more parking spaces shall include at least two (2) trees (or one (1) tree and three (3) shrubs) per five (5) parking spaces planted in landscaped islands to screen shade and break up parking. Trees and shrubs in parking lots may be in informal groups, straight rows, or concentrated in clusters as detailed in Section 4 of the Technical Manual.

(b) Landscaped islands shall be distributed so that uninterrupted pavement does not exceed forty (40) parking spaces.

(c) Landscaped islands shall be curbed and a minimum of eight (8) feet in width, not including curbing. The incorporation of bioretention into landscaped islands is strongly encouraged.

(d) Vehicle display lots shall be subject to the parking lot landscaping standards of this section.

(e) Waiver: Where site constraints prevent implementation of all or a portion of required parking lot landscaping, as determined by the Reviewing Authority, the requirements may be all or partially waived and the applicant shall contribute an amount proportionate to the cost of required parking lot trees to the City of Portland Tree Fund.

### No new parking lots are proposed.

(iii)Street Trees:

(a) All development shall include street trees in numbers and locations as specified in Section 4 of the Technical Manual. Street trees shall be planted in the right of way, as specified in Section 4 of the Technical Manual. Street trees shall be of a species identified on the City of Portland Recommended Tree List, unless otherwise approved by the Portland City Arborist or his/her designee.

(b) Waiver. Where the applicant can demonstrate that site constraints prevent the planting of required street trees in the City right of way, the Reviewing Authority may permit the planting of street trees in the front yard, within ten feet of the property line.



Existing preserved healthy trees that are six (6) inches or more in caliper and are on the site within ten (10) feet of the property line may be counted towards this requirement. If planting street trees is neither feasible in the City right of way nor within the site, the applicant shall contribute to the City of Portland Tree Fund an amount proportionate to the cost of required street trees. *Site constraints (underground electrical utilities)* prevent the planting of street trees in the City right-of-way or within the site. Therefore, the applicant will contribute to the City of Portland Tree Fund an amount proportionate to the cost of 3 street trees, which is required for approximately 150' of new street frontage on Center Street and Free Street.

3. Water Quality, Stormwater Management and Erosion Control:

a. All development must demonstrate that the proposed site improvements are designed to minimize the amount of stormwater leaving the site. This must include consideration of the design and location of improvements to minimize the total area of impervious surface on the site and stormwater management techniques to minimize both the volume and rate of runoff from the lot. The stormwater management plan must demonstrate the following:

(i) Any stormwater draining onto or across the lot in its pre-improvement state will not be impeded or re-directed so as to create ponding on, or flooding of, adjacent lots;

(ii) Any increase in volume or rate of stormwater draining from the lot onto an adjacent lot following the improvement can be handled on the adjacent lot without creating ponding, flooding or other drainage problems and that the owner of the lot being improved has the legal right to increase the flow of stormwater onto the adjacent lot;

(iii)Any increase in volume or rate of stormwater draining from the lot onto City property following the improvement can be handled without creating ponding, flooding or other drainage problems and that the owner of the lot being improved has the legal right to increase the flow of stormwater onto the City's property; and

(iv) Any increase in volume or rate of stormwater draining from the lot into the City's separate storm sewer system can be accommodated in the system without creating downstream problems or exceeding the capacity of the storm sewer system.

Stormwater draining onto or across the lot in its pre-improvement state will not be impeded or re-directed so as to create ponding on, or flooding of, adjacent lots. The entire parcel is currently an impervious surface. The proposed project will not increase the volume or rate of stormwater draining from the site.

b. All development, except Level I minor residential development, shall comply with the standards of Section 5 of the Technical Manual including basic, general and flooding standards, as applicable, to prevent and control the release of pollutants to waterbodies, watercourses, wetlands and groundwater, and reduce adverse impacts associated with increases or changes in



flow, soil erosion and sedimentation. *General and flooding standards are not applicable for this project. The entire parcel is impervious. See sheet CG101 – Site Grading, Erosion Control & Utility Plan and Site Details for proposed erosion control best management practices.* 

c. All development, except Level I minor residential development, that are located within the watershed of an Urban Impaired Stream shall comply with the Urban Impaired Stream standards pursuant to Maine DEP Chapter 500 Stormwater Management Rules, as described in Section 5 of the Technical Manual. *The proposed project is not located in an Urban Impaired Stream.* 

d. Level I: minor residential development shall comply with basic erosion control standards, as described in Section 6 of the City of Portland Technical Manual. *Not applicable. The proposed project requires a Level III application.* 

e. Development shall not pose a risk of groundwater contamination either during or postconstruction, as described in Sections 5 and 9 of the Technical Manual. *The proposed project does not pose a risk of groundwater contamination either during or post-construction.* 

f. Development shall provide for adequate and sanitary disposal of sewage as described in Section 2 of the Technical Manual. *Sewage disposal and treatment will be provided by the City of Portland sanitary sewer system and the Portland Water District's wastewater treatment facility. The applicant has submitted a Wastewater Capacity Application to the City of Portland regarding the adequacy of the sanitary sewer system to convey wastewater to the treatment plant. Portland Water District provided a letter stating that the East End Wastewater Treatment Plant has the capacity to treat wastewater generated as a result of this project. See Exhibit 3 for a copy of their letter.* 

(c) Public Infrastructure and Community Safety Standards.

1. Consistency with City Master Plans:

a. All developments shall be designed so as to be consistent with City Council approved master plans and facilities plans and with off-premises infrastructure, including but not limited to sewer and stormwater, streets, trails, pedestrian and bicycle network, environmental management or other public facilities (see Section 15 of the Technical Manual). *The proposed building addition and renovation project is consistent with all applicable City master plans.* 

b. The site plan shall include suitable easements, rights and improvements to connect or continue off-premises public infrastructure as may be required by the reviewing authority. *Not applicable.* 



## 2. Public Safety and Fire Prevention:

a. The development shall incorporate the following public safety principles for Crime Prevention through Environmental Design (CPTED) into site design to enhance the security of public and private spaces and to reduce the potential for crime:

(i) Natural surveillance that promotes visibility of public spaces and areas.

(ii) Access control that promotes authorized and/or appropriate access to the site.

(iii)Territorial reinforcement that promotes a sense of ownership and responsibility through environmental design.

The alley between the proposed building addition and the existing parking garage will be visible from Free Street and Lancaster Lane. A new fence and gate will be installed at either end of the alley, which will be locked on the exterior side of the gate and open for passage in the direction for egress travel. The owner will be installing building-mounted site lighting along the existing building façade on Lancaster Lane to improve safety.

b. Provide adequate emergency vehicle access to the site in accordance with City standards for street widths and turning radii, as described in Section 1 of the Technical Manual. *Street widths and turning radii on Free Street, Center Street and Lancaster Lane will not change as a result of this project.* 

c. Be consistent with City public safety standards, Section 3 of the City of Portland Technical Manual, including but not limited to availability and adequacy of water supply and proximity of fire hydrants to structures. *Existing hydrants are located on Center Street and at the intersection of Center Street and Free Street (see topographic survey). The Portland Water District has the capacity to serve this project. See Exhibit 3 for a copy of their letter.* 

3. Availability and Adequate Capacity of Public Utilities:

a. The development shall not overburden sanitary sewers and storm drains, water lines, or other public infrastructure and utilities. Development shall provide adequate utility capacity and distribution network on-site and in connection to surrounding locations and facilities. *The proposed building additions and renovation project are not expected to overburden existing sanitary sewers and storm drains, water lines, and other public infrastructure and utilities. The applicant has submitted a Wastewater Capacity Application to the City of Portland regarding the adequacy of the sanitary sewer system to convey wastewater from the project site to the East End Wastewater Treatment plant. Portland Water District provided a letter stating that the East End Wastewater Treatment Plant has the capacity to treat wastewater generated as a result of this project. See Exhibit 3 for a copy of their letter. Because the existing site is completely impervious, the proposed project will not* 



overburden the City's storm drainage system. Electrical service will be upgraded, with new underground primary service from Center Street to a new exterior transformer off Lancaster Lane and new underground secondary service from the exterior transformer to the new electrical room. The existing gas service on Center Street will be upgraded with a larger capacity service.

b. Electrical service shall be underground unless otherwise specified for industrial uses, or if it is determined to be unfeasible due to extreme cost, the need to retrofit properties not owned by the applicant or complexity of revising existing overhead facilities. *Electrical service will be upgraded, with new underground primary service from Center Street to a new exterior transformer off Lancaster Lane and new underground secondary service from the transformer to the new electrical room.* 

c. Installation of new or upgrades to existing sanitary sewers, storm drains, water lines or other utilities shall meet the provisions outlined in Section 2 and Section 9 of the Technical Manual. Upgrades to existing water, sanitary sewer and storm drains are proposed. Installation of these improvements meets the provisions outlined in Section 2 and Section 9 of the Technical Manual (see sheet CG101 - Site Grading, Erosion Control and Utility plan and related site details for more information).

d. All development within 200 feet of a public sanitary collection and treatment system shall connect sanitary sewer lines into the nearest available public sewer. If a public sanitary collection and treatment system is not available, a private wastewater system may be used according to the requirements of Chapter 24 of the City Code and Section 2 of the Technical Manual. *Connection to the public sanitary collection system is proposed.* 

e. All sanitary sewer and stormwater utilities proposed as part of the development shall be designed to City standards as specified in Section 2 and Section 4, Chapter 500 Stormwater Management Standards, of the Technical Manual. *New sanitary sewer and storm drain connections are proposed. Installation of improvements meets the provisions outlined in Section 2 and Section 4 of the Technical Manual (see sheet CG101 - Site Grading, Erosion Control and Utility plan and related site details for more information).* 

f. All residential development of 20 units or more, commercial development and industrial development shall provide for the temporary storage and timely removal of all trash and recyclable materials including, at a minimum, paper, corrugated cardboard, plastics and metals. Storage containers for recyclable materials shall be separated from trash containers. All exterior storage of trash and recyclables shall be screened from view from public sidewalks, streets and adjacent properties. *Dumpsters will be enclosed within the fenced storage area off Lancaster Lane, which is not visible from public sidewalks or streets .* 



## 4. Reserved.

### (d) Site Design Standards

1. Massing, Ventilation and Wind Impact:

a. The bulk, location or height of proposed buildings and structures shall not result in health or safety problems from a reduction in ventilation to abutting structures or changes to the existing wind climate that would result in unsafe wind conditions for users of the site and/or adjacent public spaces. *The proposed building additions will not result in health or safety problems from a reduction in ventilation to abutting structures or changes to the existing wind climate that would result in one abutting structures or changes to the existing wind climate that would result in unsafe wind conditions for users of the site and/or adjacent public spaces.* 

b. The bulk, location or height of proposed buildings and structure shall minimize, to the extent feasible, any substantial diminution in the value or utility to neighboring structures under different ownership and not subject to a legal servitude in favor of the site being developed. *The applicant anticipates that the proposed building additions and related site improvements will be beneficial in terms of the value or utility to neighboring structures under different ownership.* 

c. Development shall locate all HVAC venting mechanisms to direct exhaust away from public spaces and residential properties directly adjacent to the site. *New roof-top HVAC units are proposed that will direct exhaust vertically.* 

2. Shadows:

a. All development outside the B3, B5, B6 and B7 zones shall be designed to avoid and/or mitigate the adverse impacts of shadows cast by new structures or building additions from falling on publicly accessible open space where such shadowing would adversely affects the viability of its use and/or the viability of existing vegetation. Examples of publicly accessible open spaces that may require direct sunlight for a portion of the day to maintain the viability of existing vegetation and/or use(s) include but shall not be limited to sitting or sunning areas, community gardens, grass sports fields, landscaped areas, children's play areas). For submittal requirements and additional information, please refer to Section 11 of the Technical Manual. *Not applicable. The proposed project is located in the B-3 zone.* 

3. Snow and Ice Loading:

a. The development shall be designed to prevent significant amounts of accumulated snow and ice from loading or falling onto adjacent properties or public ways. *The proposed building additions have flat roofs that will prevent significant amounts of accumulated snow and ice from loading or falling onto adjacent properties or public ways.* 



# 4. View corridors:

a. The massing, location and height of development shall not substantially obstruct public views corridors identified in the Downtown Vision View Corridor Protection Plan, as provided in the City of Portland Design Manual, Appendix 1. *The proposed building additions are not located near a designated visual landmark or within a designated gateway area. The building addition at the intersection of Center Street and Free Street is located in the Center Street view corridor. The images below show existing conditions toward the harbor from near Congress Street.* 





**BUILDING MASSING - VIEW FROM CENTER STREET** 

WBRC

Image 1 Existing view on Center Street toward Free Street and the harbor. The proposed building addition will be located at the intersection of Center Street and Free Street.



Image 2 Proposed view on Center Street toward Free Street and the harbor. The proposed building addition will be located at the intersection of Center Street and Free Street.



## 5. Historic Resources:

a. Developments affecting designated landmarks or within designated historic districts or historic landscape districts: Any proposed development required to obtain a certificate of appropriateness under article IX (historic preservation) of the land use code shall be exempt from the following design standards, as described in the Design Manual:

(i) Section (b) of the Design Manual (development in B-3 zone), except for (b) (1) e.2.
(increasing setback beyond street build-to line), (b) (1)f. (shadow impact on open space),
(b)(1)h. (wind impacts), and b)(1)g. (setbacks from existing structures);

(ii) Section (c) of the Design Manual (development in B-5 and B-5b zones), except for (c)a. (shared infrastructure) and (c)d. (parking lot location);

(iii)Section (k) of the Design Manual (small residential lot development in R-6 zone);

(iv) Section (e) of the Design Manual (University of Southern Maine);

(v) Section (f) of the Design Manual (development in B-7 zone), except for (f)(1)a. (transportation demand management);

(vi) Section (g) of the Design Manual (development in Eastern Waterfront zone).

The proposed project is located in the B-3 zone. Therefore, the project is exempt from Section (b) of the Design Manual (development in B-3 zone), except for (b) (1) e.2. (increasing setback beyond street build-to line), (b) (1)f. (shadow impact on open space), (b)(1)h. (wind impacts), and b)(1)g. (setbacks from existing structures).

The existing building is classified as a "Non-Contributing Structure" in the Congress Street Historic District. The proposed building addition will be constructed partially in the footprint of a portion of the existing building and within the existing parking lot off Free Street, which is classified as "Non-Contributing Vacant Land or Parking lot/Garage" in the Congress Street Historic District. Because the proposed project is located in the Congress Street Historic District, a Certificate of Appropriateness from the Historic Preservation Board is required and will be provided when received.

b. Development adjacent to designated landmarks, historic districts or historic landscape districts: when any part of a proposed development is within one hundred (100) feet of any designated landmark, historic district or historic landscape district, such development shall be generally compatible with the major character-defining elements of the landmark or portion of the district in the immediate vicinity of the proposed development. Character-defining elements of landmarks and historic districts are identified in the historic resources inventory and respective historic district designation reports For the purposes of this provision, "compatible" design shall be defined as design which respects the established building patterns and visual characteristics that exist in a given setting and, at the same time, is a distinct product of its own



time. To aid the planning board in its deliberations, historic preservation staff shall provide a written analysis of the proposed development's immediate context, identifying the major character-defining elements and any established building patterns that characterize the context.

## The proposed project is located in the Congress Street Historic District.

c. Preservation and/or Documentation of Archaeological Resources. Where a state or local archaeological resource is known to exist or is discovered on the site, the developer shall inform the City and State and shall protect and/or document such resources.

(i) Protection shall include leaving archaeological resources untouched beneath a new development through adaptation of foundation design or architectural layout.

(ii) Where the applicant can demonstrate that complete protection is not feasible, the applicant shall excavate and document archeological resources. Such measures shall be conducted in consultation with the City Historic Preservation Program and Maine Historic Preservation Commission. For resources of state significance, excavation and documentation shall be conducted by a qualified professional, in coordination with Maine Historic Preservation Commission. Local archeological resources may or may not be recognized by the Maine Historic Preservation Commission as significant and shall include the following:

(a) Original seawall structure located landward of Commercial Street.

(b) Inactive historic family cemetery plots.

(c) Historic railroad beds including but not limited to the Portland-Lewiston interurban railroad.

(d) Original structure and/or landforms associated with the Cumberland and Oxford Canal.

(e) Buried portions of colonial and post-colonial period structures or built features located on the Portland Peninsula predating the Great Fire of 1866.

(f) Pre-colonial occupation sites identified by shell middens or other evidence.

(g) Sites listed or eligible for listing on the National Register of Historic Places.

## There are no known state or local archaeological resources located on the project site.

(iii)Waiver Criteria: In order to preserve archeological resources, the Planning Authority may wave standards listed in the City of Portland Technical Manual where necessary if it is determined that such a waiver would not jeopardize the health, safety or welfare of the development's occupants, the public, or the natural environment.



# 6. Exterior Lighting:

## a. Site Lighting.

(i) All exterior site lighting, including lighting of building entrances, shall be City of Portland Land Use Code of Ordinances Chapter 14 Sec. 14-526 Rev. 3-22-12 14-764 full cutoff with no light emitted above the horizontal plane or spilled onto adjacent properties and streets. Illumination levels shall be adequate but not excessive for the safety, comfort and convenience of occupants and users of the site, and shall confirm to applicable standards of Section 12 of the Technical Manual. *All proposed building-mounted exterior site lighting will be full cutoff fixtures with no light emitted above the horizontal plane or spilled onto adjacent properties and streets. Proposed sidewalk lighting is consistent with site lighting specified in the City of Portland Technical manual. See sheet CG101 – Site Grading, Erosion Control and Utility plan for proposed sidewalk lighting locations (replace existing) and Site Details for site light base, pole and fixture information.* 

(ii) For major or minor site plans within or abutting a residential use or zone where light from the proposed development may adversely impact adjacent residential properties, exterior lighting shall employ house-side shielding. *The proposed project is not located within or abutting a residential use or zone where light from the proposed development may adversely impact adjacent residential properties.* 

b. Architectural and Specialty Lighting.

(i) Architectural and specialty lighting, but not up-lighting, of such features as architectural details, monuments, public art or other site features shall be designed to illuminate specific details or attributes only and shall meet the standards of Section 12 of the Technical Manual. *Architectural and specialty lighting, when and if designed, will illuminate specific details or attributes only and shall meet the standards of Section 12 of the Technical Manual.* 

(ii) Up-lighting by any method is prohibited except for public buildings and parklands, clock towers and steeples, landscape features, designated historic landmarks, flags of state, federal or national jurisdictions, and public art. *Uplighting is not proposed.* 

Such light fixtures, brackets, conduits and all other components shall be designed by a lighting professional and shall be scaled and placed to minimize their visibility and installed in accordance with the standards contained in Section 12 of the Technical Manual.

## c. Street Lighting.

(i) Municipal street lighting shall be adequate for the safety and comfort of pedestrians and motorists and, where applicable, shall conform to specific lighting district requirements, as specified in Section 10 of the Technical Manual. *No new street lighting is proposed* 



7. Noise and Vibration: Projected noise levels for all developments shall meet applicable zoning requirements.

a. HVAC and Mechanical Equipment.

(i) All heating, ventilation and air conditioning equipment (HVAC), air handling units (AHU), emergency generators, and similar equipment shall meet applicable state and federal emissions requirements and shall comply with the following:

(a) Be located to the interior of the site, away from abutting residential properties;

(b) Be screened from view from any public street and from adjacent sites by structure walls, evergreen landscaping, fencing, masonry wall or a combination thereof.

New roof-top HVAC equipment and a new roof-top emergency generator are proposed. The new HVAC equipment is set back from the edge of the new roof and will not be visible from public street level. The new emergency generator will be located on the rear portion of the existing building roof off Lancaster Lane and will not be visible from public streets. The site does not abut any residential properties. See sheet AE201 Building Perspectives for street-level views of the project. See Exhibit 2 for HVAC and generator cutsheets.

(ii) In addition to the requirements listed above, emergency generators shall not be activated for more than one hour per week for routine maintenance and testing. Noise levels shall not exceed City standards except in designated emergencies or for emergency generator testing. Emergency generator testing is permitted only between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday. *The emergency generator will not be activated for more than one hour per week for routine maintenance and testing. Noise levels will not exceed City standards except in designated emergencies or for emergency generator testing. Emergency generator testing will take place between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday.* 

8. Signage and Wayfinding:

a. All signage shall meet applicable requirements of Division 22 of the City Code, in addition to provisions listed below:

(i) Historic Preservation: Any new sign or change in appearance of an existing sign located on a designated Historic Landmark or in a Historic District or Historic Landscape District shall be subject to the standards of Article IX and shall require a Certificate of Appropriateness. *The proposed project is located in the Congress Street Historic District. Signage will require a Certificate of Appropriateness.* 

If there is a conflict between the standards of Article IX and of Division 22 or other provisions of the City Code, the stricter standards shall apply.



(ii) Commercial Signage and Directional Traffic Signage: The size, scale, proportions, design, materials, placement and source and intensity of illumination of all permanent or freestanding building signs shall be designed to complement the subject building and its immediate context, as follows:

(a) Signage shall not conceal architectural features such as window sills, lintels or cornices from view. *Proposed signage will not conceal architectural features.* 

(b) Signs shall be designed and sized to fit the scale and proportions of the building and the feature or area of the building to which it is affixed. *Proposed signage will fit the scale and proportions of the building and the feature or area of the building to which it is affixed.* 

(c) Freestanding signs shall not adversely affect visibility at intersections or access drives. *No freestanding signs are proposed.* 

(d) Sign lighting shall be downwardly directed, internally illuminated and/or shielded to avoid glare and light spillover towards the sky. *Sign lighting will be downwardly directed, internally illuminated and/or shielded.* 

(e) Signs shall not be affixed to rooftop mechanicals, mechanical penthouses or other rooftop appurtenances unless those appurtenances have been screened and integrated into the architecture of the development. *Signs will not be affixed to rooftop mechanicals, mechanical penthouses or other rooftop appurtenances.* 

The signage design package is in the process of being completed. The applicant is requesting that signage review and approval be a condition of approval.

(iii)On-site directional traffic signage may be provided to enable users to safely and easily navigate into, around and out of the site. Directional signage shall not adversely affect visibility at intersections on or off the site. *No new on-site directional traffic signage is proposed.* 

(iv) Waiver Criteria: An applicant for site plan review that was either denied for failure to comply with the requirements of or is seeking a waiver as part of their site plan application from Section 14-369.5 shall meet the following standards for approval:

(a) Signs shall meet the requirements of Section 14-526 (e) 2. - Signage and Wayfinding;

(b) The size, scale, proportions, design, materials, placement, quantity and source and intensity of illumination of any approved signage shall be designed to complement and enhance the architectural attributes of the building(s) to which they are attached or to which they are visually related. In addition, such signs shall be appropriate to the scale and character of the neighborhood in which it is located and shall be designed to suit



the conditions from which it will be viewed, especially in relation to the distance, travel speed, and mode of travel of the viewing public;

(c) The signage shall either be of special design merit or shall respond to unique circumstances or characteristics associated with the subject property;

(d) The provisions of this subsection shall be limited to commercial uses in business or industrial zones, industrial uses or institutional uses.

9. Zoning Related Design Standards:

a. Development of certain types and/or proposed in certain zones, as specified below, are subject to design standards in addition to the provisions of Section 14-526 (a) in order to ensure designs that contribute to and enhance the goals and policies for specific districts of the City. The City of Portland Design Standards is listed in the City of Portland Design Manual, which is included by reference.

If the development is located in a historic district or associated with a historic landmark, City of Portland Historic Preservation standards shall supersede:

(i) B3, B5, B5-b, B7 Zones, and B6 and EWPZ Waterfront Zones: Development in the B3, B5, B5-b, B7 business zones and in the EWPZ waterfront zone shall be designed to support the development of dense, mixed-use neighborhoods with attractive, safe and convenient street level pedestrian environments as demonstrated by compliance with all applicable design standards listed in the Design Manual. *The proposed project is located in the B-3 zoning district and is in compliance with applicable design standards listed in the Design Manual.* 

(ii) RP Zone: Development in the RP Residential Professional zone where there is a discernable architectural style or character to existing structures in the immediate vicinity in which the development is proposed shall not be incongruous to that established style or character as demonstrated by compliance with all applicable design standards listed in the Design Manual. *Not applicable. The proposed project is located in the B-3 zoning district.* 

(iii)B1, B1-b, B2, B2-b Zones: Development in the B1, B1-b, B2 and B2-b business zones shall provide an established street wall with entrances and public portions of the building oriented to and directly accessible from the public sidewalk and shall be designed and scaled to be compatible with surrounding residential and commercial development as demonstrated by compliance with all applicable design standards listed in the Design Manual. *Not applicable. The proposed project is located in the B-3 zoning district.* 

(iv) USM Overlay Zone: Development in the University of Southern Maine (USM) Overlay Zone shall be designed to support a cohesive campus environment while integrating with and respecting the residential character of surrounding neighborhoods as demonstrated by



compliance with all applicable design standards listed in the Design Manual. *Not applicable. The proposed project is located in the B-3 zoning district.* 

(v) Residential Developments: Residential developments, as listed below, shall integrate with and respect the character of surrounding residential development in terms of architectural form, landscaping and open space, façade materials, roof pitch, massing and height as demonstrated by compliance with all applicable design standards as listed in the Design Manual. *Not applicable. The proposed project is located in the B-3 zoning district.* 

(vi) Residential Development in the following districts: *Not applicable. The proposed project is not a residential development.* 

(a) Planned Residential Unit Developments (PRUDS) in the R3, R5 and R5a residential zones;

(b) Multiple family and multiplex developments in the R5 zone;

(c) Small residential lot development of single family homes in the R5 zone;

(d) Multiple family and multiplex development in the R6 zone on lots of 10,000 square feet or less.

(vii)Residential Development of the following types: *Not applicable. The proposed project is not a residential development.* 

- (a) Manufactured housing parks;
- (b) Two-family and multiple family housing not already specified in (a) above;
- (c) Special needs independent living units;
- (d) Lodging houses;
- (e) Bed and breakfasts;
- (f) Emergency shelters.
- 10. Reserved.

## (e) Conditions

1. Notwithstanding the provisions of subsections (a)through (d) of this section, the Planning Authority or Planning Board may impose any condition upon its approval of any site plan: (1) to minimize or abate any adverse impact of the proposed development on the value or utility of other private property, or on public property or facilities, to the extent feasible; or (2) to bring the development into compliance with the requirements of subsections (a) through (d); or (3) to minimize any other adverse environmental effects of the proposed development. Such conditions



may include, but are not limited to, enclosing of equipment or operations, imposing limitations upon the hours of operation, or requiring the employment of specific design technologies, modes of operation, or traffic patterns, and may also include the construction of, or financial contribution to the construction of, on- or off-premises public facilities including, without limitation, streets and sewers impacted by the development. All such conditions shall be consistent with the purposes set forth in section 14-521.

# SECTION 6 – EXISTING & PROPOSED EASEMENTS

<u>Existing Easements</u> - Existing easements are shown on the topographic survey and described in copies of the deeds located in Exhibit 1.

Proposed Easements - No new easements are proposed.

# SECTION 7 – REQUEST FOR WAIVERS

 The applicant is requesting a waiver for planting street trees. Site constraints (underground electrical utilities) prevent the planting of street trees in the City right-of-way or within the site. Therefore, the applicant will contribute to the City of Portland Tree Fund an amount proportionate to the cost of 3 street trees, which is required for approximately 150' of new street frontage on Center Street and Free Street.

# SECTION 8 – FINANCIAL AND TECHNICAL CAPACITY

## Financial Capacity

Statement of Probable Cost:

1.	Construction Costs	\$ 7,171,296
2.	Administrative Cost & Reserve	\$ 1,038,470
3.	Fees and Services	<u>\$ 926,267</u>
	Total	\$ 9,136,033

See Exhibit 4 for financial capacity information.



## Technical Capacity

Tedlum LLC and The Asylum are working with the following firms to complete this project:

1. Architecture & Civil, Structural, Mechanical, Electrical Engineering:

WBRC Architects · Engineers 30 Danforth Street Portland, Maine 04101

2. Boundary and Topographic Survey

Owen Haskell Inc. 390 US Route 1 – Unit 10 Falmouth, Maine 04105

3. Geotechnical Engineering

SW Cole Engineering Inc. 286 Portland Road Gray, Maine 04039

4. Acoustical Engineer

CAVANAUGHTOCCI 327 Boston Post Rd Sudbury, MA 0177 http://www.cavtocci.com/

See Exhibit 5 for technical capacity information.

# **SECTION 9 – TRAFFIC ANALYSIS**

Because the proposed project will result in fewer than 100 additional trips, a traffic analysis is not required.

# Section 10 – Construction Management Plan

See sheet PH101 – Site Construction Plan.



# SECTION 11 – SIGNIFICANT NATURAL FEATURES

There are no significant natural features located on the Cumberland County Civic Center site. The entire site is currently developed.

# Section 12 – Stormwater Management Plan

The existing and proposed land cover on the project parcel is entirely impervious. Therefore, pre-development and post-development stormwater peak flows from site will not change as a result of this project. The quality of stormwater runoff from the site will improve from pre-development conditions because 2520 SF of existing asphalt parking lot will be replaced with roof area. New roof drains will be tied into the catch basin at the intersection of Center Street and Free Street, which connects into the City's sanitary sewer system. When the stormwater and sanitary sewer system is separated in the future, then the roof drain will tie into the City's stormwater system.

# SECTION 13 – CONSISTENCY WITH MASTER PLANS

The proposed project is consistent with all applicable City master plans.

# SECTION 14 – UTILITY CAPACITY TO SERVE

Water Capacity: See Exhibit 3 for a copy of the letter from the Portland Water District regarding capacity to provide potable and fire protection water for this project.

Wastewater Treatment Capacity: See Exhibit 3 for a copy of the letter from the Portland Water District regarding capacity of the East End Treatment Plant to treat wastewater from this project.

Wastewater Capacity: See Exhibit 3 for a copy of the City of Portland Wastewater Capacity application.

# SECTION 15 – SOLID WASTE GENERATION AND MANAGEMENT

See Exhibit 3 for a copy of the capacity to serve letter from Pine Tree Waste Services.



# SECTION 16 – FIRE SAFETY

See Section 1 for the Portland Fire Department Site Review Checklist.

# **SECTION 17 – CONFORMITY WITH APPLICABLE DESIGN STANDARDS**

The proposed site improvements are consistent with the B-3 Downton Business Zone standards and the Downtown Urban Design Guidelines in the City of Portland Design Manual.

# SECTION 18 – EMISSIONS REQUIREMENTS

See Exhibit 2 for emergency generator and HVAC equipment information.



The Asylum Expansion & Renovation City of Portland - Site Plan Application March 25, 2016

**EXHIBIT 1 – DEEDS** 



# **QUITCLAIM DEED WITHOUT COVENANT (Release Deed)**

(Maine Statutory Short Form)

KNOW ALL BY THESE PRESENTS, that I, Valerie J. Levy of Buxton, County of York, and State of Maine, for consideration paid, RELEASE to Tedlum Associates, LLC a Maine Limited Liability Company, the mailing address of which is c/o Verrill Dana, LLP, One Portland Square, P.O. Box 586, Portland, Maine 04112, all my right, title, and interest in and to certain real estate situated on Free and Center Streets, in the City of Portland, County of Cumberland, and State of Maine, which is more particularly described in <u>Exhibit A</u> attached hereto and made a part hereof.

Meaning and intending to convey the premises conveyed to Valerie J. Levy by Quitclaim Deed with Covenant from Second Century Blues dated April 18, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13038, Page 325 and by Quitclaim Deed with Covenant from Joseph Paulin dated June 16, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13143, Page 256. Together with the right of first refusal as set forth in the Deed dated October 23, 1985 and recorded in Book 6946, Page 211, to the extent it is still in effect.

WITNESS my hand and seal this 29# day of October, 2015.

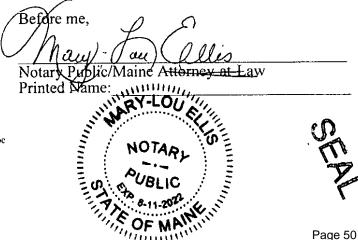
SIGNED, SEALED AND DELIVERED IN THE PRESENCE OF:

ay felletur s Raymond A. Pelletie Printed Name:

STATE OF MAINE County of Cumberland, SS.

October 29, 2015

Then personally appeared the above-named Valerie J. Levy and acknowledged the foregoing instrument to be her free act and deed.



H:\forms\Release Deed - Individual(s) to Entity (current 2003-01-15).doc

### EXHIBIT A

A certain lot or parcel of land situated at the intersection of the easterly sideline of Center Street and the Northerly sideline of Free Street, so called, in the City of Portland, County of Cumberland, State of Maine and being more particularly bounded and described as follows:

Beginning at said intersection point on the easterly sideline of Center-Street and the northerly sideline of Free Street;

Thence N68° 11' 20" E thirty-five and forty-nine hundradths feet (35.49') by and along the northerly sideline of said Free Street to a point at the southwesterly corner of other land now or formerly of John Martin Enterprises;

Thence N20° 15' 16"W one and saventy-five hundredths feet (1.75') by and along the westerly sideline of other land at said John Martin Enterprises to the southeasterly corner of the present Art Gallery Restaurant;

Thence continuing N20° 15' 16"W seventy-six and fifty-eight hundredths feet (76.58') by and along the easterly face of the present Art Gallery Restaurant to an internal corner of said Restaurant;

Thence N65° 23' 05" E twenty-six and seventy-six hundredths feet (26.76') by and along the southerly face of the present Art Gallery Restaurant to a point near an external corner of said Restaurant on the westerly sideline of land now or formerly of One City Center Associates;

Thence N24° 25' 40"W forty-two and forty-three hundredths feet (42.43') by or near the easterly face of said Restaurant and the westerly sideline of said One City Center Associates and to an angle point;

Thence N70° 34' 30"E nine and thirteen hundredths (9.13') by and along the northerly sideling of said One City Center Associates land to an angle point;

Thance N21<sup>®</sup> 48' 40"W seventeen and seventy-two hundredths faet (17.72') by and along the westerly sideline of said One City Center Associates land to an angle point;

Thence N68° 11' 20" E seventy-one and twenty-three hundredths feet (71.23') by and along the northerly sideline of said One City Center Associates to an angle point on the westerly sideline of land, now or formerly of A.H. Banoit & Company;

Thence N  $18^{\circ}$ , 15' 00" W twenty-three and fifty-two hundredths feet (23.52') by and along the westerly sideline of said Benoit land to an angle point;

Thence \$79° 41' 00" W zero and fifty hundredths feet (0.50') to an angle point;

Thence S18° 15' 00" E eight and zero hundredths feet (8.00') to an engle point;

Thence S 79<sup>d</sup> 41' W twenty and zero hundredths feet (20.00') to an anglepoint;

Thence N18° 15' 00" W five and zero hundradths feet (5.00') to an angle point on or near the southarly sideline on Lancaster Lane, so called;

Thence S76° 23' 20" W twenty-five and fifty-three hundredths feet (25.53') to an angle point in the southerly sideline of said Lancaster Lane;

Thence S66° 23' 00" W forty-six and ninaty-five hundredths feet (46.85') by and along the southerly sideline of said Lancaster Lane to an angle point;

#### EXHIBIT A Continued

Thence S65° 40' 50" W fifty-nine and five hundredths feet (59.05') by and along the southerly sideline of said Lancaster Lane to an intersection point with the easterly sideline of said Center Street;

Thence S24° 21' 10" E one hundred sixty-three and sixty-three hundredths feet (163.63') by and along the easterly sideline of said Center Street to the point of beginning.

Meaning and intending to describe a parcel of land containing 11,070 square feet, more or less, and being shown on a plan entitled "Plan of Land for Art Gallery Restaurant -- Center and Free Streets -- Portland, Maine" by Sebago Technics dated May 23, 1985 as revised and to be recorded in the Cumberland County Registry of Deeds.

Meaning and intending to convey and hereby conveying a portion of the premises described in indenture Daed from Portland Renewal Authority to SEJ Corporation (now John Martin Enterprises) dated June 24, 1977 and recorded at the Cumberland County Registry of Daeds in Book 4050, Page 238, and the premises described in Deed from Anthony's to SEJ Corporation (now John Martin's Enterprises) dated September 6, 1973 and recorded at the Cumberland County Registry of Deeds in Book 3455, Page 157.

Together with a certain essement In common with Grantor for purposes of pedestrian access, and a right to the grantee, its successors and assigns only, to construct and maintain a canopy, on and over Easement Area V as designated on "Plan of Land in Portland, Maine, Free Street, for One City Center Associates" prepared by Owen Haskell, Inc. dated June 20, 1984 and recorded in the Cumberland County Registry of Deeds in Plan Book 143, Page 27. Said Easement being further described in deed from the City of Portland to John Martin Enterprises dated June 22, 1984 and recorded at said Registry in Book 6489, Page 174, and together with the benafit of and subject to all appurtenances, additional rights, conditions, restrictions and encumbrances as referenced in said deed as affecting Easement Aros V.

And further together with a right of way in common with others in, on and over a certain alley known as Lancaster Lane adjoining the above-described premises and extending from Center Street easterly to the rear of the easterly line of the premises herein conveyed, all as more particularly shown on the above-referenced Plan by Sebago Technics as "Lancaster Lane (private passageway)". Said right of way was established by agreement dated April 11, 1913, recorded in said Registry in Book 810, Page 187, and by agreement dated September 11, 1851 and recorded in said Registry in Book 231, Page 331, and as other wise may exist.

And together with all rights, title or interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above-described premises.

The above-described pramises are conveyed subject to the following:

1. Sewer Agreement between Fred H. Dow, William H. Dow, James P. Baxter dated August 27, 1913 and recorded in said Registry in Book 915, Page 452.

2. A ten foot wide easement Identified as Easement Area II on the above-referenced Sebago Technics Plan, said easement being described in Deed of John Martin Enterprises to the City of Portland dated June 22, 1984 and recorded at said Registry in Book 6489, Page 170.

3. Terms and conditions contained and referenced in Indenture Deed from Portland Reneval Authority to S & J Corp. dated June 24, 1977 and recorded at said Registry of Deeds in Book 4050, Page 238, as the same have been modified and released by a certain Certificate of Completion and Release dated October 15, 1985, to be recorded at the Cumberland County Registry of Deeds.

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### EXHIBIT A Continued

4. Terms and Conditions of a certain party wall agreement by and between Fred H. Dow et al and James P. Baxter dated August 1, 1913 and recorded at said registry in Book 915, Page 299.

5. Terms and conditions of a certain party wall agreement by and between A. H. Benoit and Company and Anthony's dated April 2, 1969 and recorded at said Registry in Book 3083, Page 572.

6. Terms and conditions of a certain party wall agreement by and between Fred H. Dow at al and J. B. Brown & Sons dated May 17, 1910 and recorded in said Registry in Book 858, Page 81.

Reserving to the Grantor, its successors and assigns, the right to construct on adjoining land being retained by Grantor a wall abutting the two walls of the existing building on the above-described premises which adjoin the premises retained by Grantor, and Grantor covenants and agrees that said wall shall be constructed only after Grantee shall have had the opportunity to review and approve the plans of Grantor as to the structural matters only, and providing further, (1) that said wall shall not use the walls on land of Grantee for purposes of either lateral or horizontal support, (2) that such abutting wall shall be constructed in such manner so as to protect Grantee's existing walls from weather, (3) that Grantee shall have the right to construct abutting walls, (4) that Grantor in arecting any such wall and building shall do so at such times and in such manner so as not to and shall not interfere with or disrupt Grantee's use and enjoyment of the above granted premises and (5) that Grantor, its successors and assigns shall indemnify Grantee for any loss, cost or injury which Grantee may suffer by reason of the construction and/or maintenance of said abutting wall.

The above references to "Grantor" are to John Martin Enterprises in deed dated October 23, 1985 and recorded in said Registry of Deeds Book 6946, Page 211.

Received Recorded Resister of Deeds Nov 03,2015 11:50:42A Cumberland County Nancy A. Lane

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## WARRANTY DEED

This Warranty Deed (the "Agreement") is made and effective 7-21-15.

**Between:** The Surplus Store, Inc. (the "Grantor"), a corporation organized and existing under the laws of the State of Maine, County of Cumberland, with its office located at:

15 Woodville Road Falmouth, Maine 04105

AND:

Tedlum Associates, LLC (the "Grantee"), a Maine limited liability company with a mailing address of:

c/o Verrill Dana, LLP One Portland Square, 9<sup>th</sup> Floor P.O. Box 586 Portland, Maine 04112-0586

For good consideration, Grantor hereby grants, bargains, deeds and coveys, to Grantee the land legally described as a certain lot of land located on Free Street, in Portland, Maine, Lot 028, Block F, Map 027, and more fully described on Exhibit A attached hereto and made a part hereof.

### **COVENANTS**

Grantor, for itself and its heirs, successors and assigns, hereby covenants with Grantee, its heirs, successors and assigns, that Grantor is lawfully seized in fee simple of the above-described premises; that it has a good right to convey; that the premises are free from all encumbrances; that Grantor and its, successors and assigns, and all persons acquiring any interest in the property granted, through or for Grantor, will, on demand of Grantee, or its heirs, successors or assigns, and at the expense of Grantee, its heirs, successors or assigns, execute an instrument necessary for the further assurance of the title to the premises that may be reasonably required; and that Grantor and its heirs, successor sand assigns will forever warrant and defend all of the property

so granted to Grantee, its heirs, successor and assigns, against every person lawfully claiming the same or any part thereof.

Being the same property conveyed to the Grantor by deed of March 4, 1997, and recorded in the Cumberland County Registry of Deeds in Book 13038, Page 288.

IN WITNESS WHEREOF, the Grantor has caused this agreement to be executed at the Portland, Maine office of Verrill Dana, LLP on July 1, 2015.

WITNESS

THE SURPLUS STORE, INC.

By: Vertham Title: V.P.

Print Name: LARRY H. ROSE

State of Maine County of Cumberland, ss.

July 21, 2015

Personally appeared the above named <u>Larry H. Rose</u>, <u>Vice President</u> of The Surplus Store, Inc., and acknowledged the foregoing instrument to be his/her free act and deed in his/her said capacity and the free and deed of The Surplus Store, Inc.

Before me,

Notary Public/Attorney-at Law Print Name: Commission Expire ELLEN R. GUPTILL NOTARY PUBLIC, MAINE MY COMMISSION EXPIRES APRIL 23, 2021

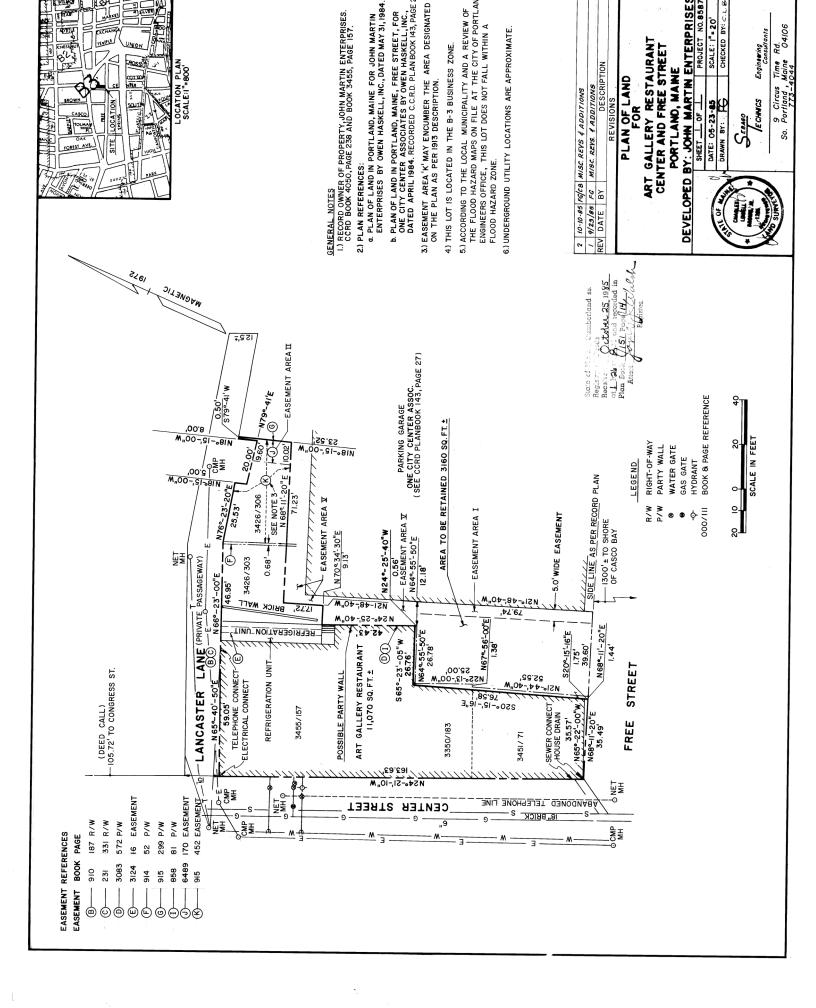
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# EXHIBIT A

A certain lot or parcel of land on the northerly side of Free Street, I the City of Portland and County of Cumberland, Maine bounded and described as follows:

The lot or land on Free Street designated as "Area To Be Retained 3160 Sq. Ft." on the plan entitled "Plan of Land for Art Gallery Restaurant, Center and Free Street, Portland, Maine", dated May 23, 1985, a copy of which plan is attached to the deed from John Martin Enterprises dated January 15, 1986 and recorded in the Cumberland County Registry of Deeds in Book 7347, Page 8.

Received Recorded Resister of Deeds Jul 23,2015 11:31:22A Cumberland Counts Nancy A. Lane



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	BOOK 6489 MAGE 174 QUITCLAIM DEED
All Solution	With Covenant
	Know all Men by these Presents,
	<b>Uhat</b> The City of Portland, Maine, a municipality and a body corporate, located in Portland, in the County of Cumberland and State of Maine, organized and existing under the laws of the State of Maine
	in consideration of One Dollar (\$1.00) and other valuable consideration
	paid by John Martin Enterprises, a Maine corporation
	whose mailing address is Portland, Maine
	the receipt whereof it does hereby acknowledge, do hereby remise, release, bargain,
	sell and convey, and forever quitrlaim unto the said John Martin Enterprises
	its successors techs and assigns forever,
	and State of
	the real estate situated in said Portland, County of Culderland and State of Maine, bounded and described as set forth in Schedule A attached hereto and made a part hereof.

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### BOOK6489PAGE 176

#### SCHEDULE A (TO DEED FROM THE CITY OF PORTLAND, MAINE TO JOHN MARTIN ENTERPRISES)

A certain lot or parcel of land situated on the Northerly side of Free Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning on the Northerly sideline of said Free Street at the Southeasterly corner of land conveyed to S & J Corp. by the Portland Renewal Authority by deed dated June 24, 1977 and recorded in the Cumberland County Registry of Deeds in Book 4050, Page 239; said corner also being a distance of 36.93 feet as measured along the Northerly sideline of said Free Street on a bearing of N68°-11'-20"E from the Easterly sideline of Center Street; thence, from said point of beginning, N21°-44'-40"W along land of said S & J Corp. a distance of 52.55 feet to a point; thence N67°-57'-00"E along land of said S & J Corp. a distance of 1.38 feet to a point; thence N22°-13'-00"W along land of said S & J Corp. a distance of 25.00 feet to a point in the southerly sideline of other land conveyed to S & J Corp. by deed of Anthony's dated September 6, 1973 and recorded in said Registry, Book 3455, Page 157; thence N64°-55'- 50"E along by said other land of said S & J Corp. and land described in the ground lease of even date herewith between the City of Portland, Maine and One City Center Associates, a distance of 38.40 feet to a point; thence S21°-48'-40"E along said land leased to One City Center Associates to a distance of 79.74 feet to the Northerly side of said Free Street; thence S68°-11'-20"W along the Northerly sideline of said Free Street a distance of 39.60 feet to the point of beginning, containing 3,078 square feet, more or less;

All bearings are magnetic in the year 1972.

Meaning and intending to convey and hereby conveying a portion of the premises described in the deed to Grantor herein from A. H. Benoit & Company of even date herewith to be recorded herewith.

Together with and also hereby conveying an easement for the purposes hereinafter described over the following area:

Easement Area V: The area westerly and northerly of the building to be constructed on the premises described in the Ground Lease of even date herewith between the City of Portland, Maine and One City Center Associates being delineated as easement area V on Plan of Land in Portland, Maine, Free Street for One City Center Associates prepared by Owen Haskell, Inc., dated June 20, 1984.

Said easement area being a portion of the premises conveyed to Grantor herein by deed of John Martin Enterprises of even date herewith to be recorded herewith and a portion of the premises conveyed to Grantor herein by deed of A. H. Benoit & Company of even date herewith to be recorded herewith.

Grantee, its successors and assigns shall have the perpetual right and easement with respect to easement area V in common with Grantor, its successors and assigns (a) for pedestrian access over said easement area V from the adjoining premises of Grantee to the public entrance at the northwesterly corner of the garage to be constructed on the premises of Grantor described in the Ground Lease of even date herewith between the City of Portland, Maine and One City Center Associates; (b) to construct and maintain thereon a canopy at the sole expense of Grantee, its successors and assigns. Said rights and easements shall be subject to

Page 60

### BODK6489PAGE 177

A REAL PROPERTY AND

the restrictive covenants, running with the land and binding on
Grantee, its successors and assigns, that Grantee, its successors
and assigns maintain said easement area V in a clean and orderly
condition, and that Grantee, its successors and assigns indemnify,
defend and hold Grantor, its successors and assigns harmless from
any liability arising from the use of said easement area V by
Grantee, its successors and assigns, including any guests, licen-
sees or business invitees thereof, or from the canopy located
therein.

Said premises herein conveyed and said easement area are subject to a Lease of even date herewith between the City of Portland and A.H. Benoit & Company, a memorandum of which is being recorded herewith and to the temporary parking easement reserved in the deed from A.H. Benoit & Company to the City of Portland, Maine of even date herewith to be recorded herewith.

Excepting and reserving to the Grantor, its successors and assign an easement, for the purpose hereinafter described over the following portion of the premises herein conveyed:

Easement Area I: An easement area on the Westerly side of the premises herein conveyed bounded and described as follows: Beginning on the Northerly side of said Free Street at the Southwesterly corner of the premises herein conveyed; thence N21°-48'-40"W along the Westerly side of the premises herein conveyed a distance of 79.74 feet to a point; thence S64°-55'-50"W a distance of 5.00 feet to a point; thence S21°- 48'-40"E a distance of 79.46 feet to the Northerly side of said Free Street; thence N68°-11'-20"E along the Northerly side of said Free Street a distance of 5.00 feet to the point of beginning, containing 309 square feet, more or less.

Said easement area being delineated as easement area I on Plan of Land in Portland, Maine, Free Street for One City Center Associates prepared by Owen Haskell, Inc., dated June 20, 1984.

Grantor, its successors and assigns shall have the right and easement with respect to said easement area I to enter with persons and equipment for construction activities and to remove earth, grade, disturb, regrade and pave such area in order to complete construction of improvements on property described in the Ground Lease between Grantor and One City Center Associates of even date herewith, a memorandum of which is being recorded herewith and to provide suitable support therefor. The easement described in this paragraph, except for the right to use such easement area for support, shall terminate on March 15, 1986.

Following the termination of the easement described in the preceding paragraph, Grantor, its successors and assigns shall have the perpetual right and easement to enter said easement area I for the purposes of repair, maintenance and replacement of improvements on the premises described in the Ground Lease of even date herewith between Grantor and One City Center Associates, a memorandum of which is recorded herewith, provided, however, that Grantee, its successors and assigns shall have the right, pursuant to a Party Wall Agreement of even date herewith to be recorded herewith, to construct improvements within said easement area I not exceeding 24 feet in height. If Grantee, its successors or assigns exercise such right to construct improvements not exceeding 24 feet in height, Grantor, its successors and assigns shall have the perpetual right and easement to enter on such improvements within said easement area I, as well as any portion thereof not occupied by said improvements including the air space above any such improvements and easement area I for the purposes of repair, maintenance and replacement of improvements constructed or to be constructed on the premises described in said Ground Lease.

JUN 2 8 1984 REGISTRY OF DEEDS CUMBERLAND COUNTY, MAINE Recoived at 3 H29 RPH, and recorded in BOOK 6489 PAGE 174 James & Walsh 84-144-004 Register

The Asylum Expansion & Renovation City of Portland - Site Plan Application March 25, 2016

EXHIBIT 2 – HVAC/GENERATOR INFORMATION









Page 63

# ENERGENCE® ADVANCES COMMERCIAL HVAC INTO A WHOLE NEW ERA.

### A NEW ERA DOESN'T JUST COME OUT OF NOWHERE. IT'S THE RESULT OF EVOLUTION.

We've expanded our industry-leading Energence® line to include ultra-high-efficiency rooftop units to deliver ultra innovation on every count. Advanced blower and compressor technologies allow these new units to perform at optimal levels throughout the year, even in extreme weather conditions. This can translate to substantial operational cost savings over the life of the system.





### ULTRA EFFICIENT.

Achieves efficiency ratings of up to 21.5 IEER and 13.9 EER—the highest on the market today.\*



### ULTRA LIGHT.

Up to 42% lighter in weight than leading competitors' units, even with a substantial array of customizable features.\*



### ULTRA QUIET.

Operates at outdoor sound levels as low as 81 dBA, making the unit the quietest in its class.\*



### ULTRA INTELLIGENT.

Engineered with the newly enhanced Prodigy<sup>®</sup> Control System, which has more than 250 adjustable parameters to meet almost any design specification.

\*Claim pertains to 7.5- to 12.5-ton units listed in the AHRI ratings directory and available manufacturer data as of May 2014.



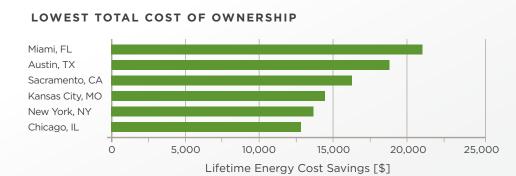
# ULTRA EFFICIENT

### BEYOND CURRENT EFFICIENCY STANDARDS. WAY BEYOND.



Ultra-high efficiencies place the new Energence® rooftop unit line in a class all its own. Industry-leading IEER ratings exceed ASHRAE 90.1-2010 minimum standards by as much as 92%.

Compared to standard-efficiency equipment, an Energence ultra-high-efficiency unit can deliver energy savings ranging in the tens of thousands of dollars over the life of the system.\*



Energence ultra-high-efficiency models may qualify for utility rebates and meet CEE Tier 2 and California Energy Code Title 24 requirements.

\*Calculations based on Lennox' Total Cost of Ownership<sup>™</sup> calculator, comparing 7.5-ton 21.5 IEER (13.9 EER) unit to a 7.5-ton 11.2 IEER (11 EER) standard-efficiency unit at a retail facility (under 25,000 square feet) and a 10:00 a.m. to 10:00 p.m. operating schedule. Lifetime energy cost savings are calculated by multiplying annual energy costs by 15 years. Actual savings may vary depending on system settings, equipment maintenance, local weather, construction, installation of equipment, duct system, hours of operation, local fuel rates and other factors. This information is intended as an example for comparison purposes only.



### PACKED WITH INNOVATION. AND ENERGY-SAVINGS POTENTIAL.

### MSAV<sup>®</sup> TECHNOLOGY.

Available on Energence® units, MSAV® (Multi-Stage Air Volume) supply fan technology uses up to seven different airflow settings to automatically adjust operating speed, optimizing efficiency and performance.

Up to **72%** IEER Improvement<sup>®</sup>

### DIRECTPLUS<sup>™</sup> BLOWER SYSTEM.

Ultra-high-efficiency models are offered with standard MSAV, along with the option of a belt drive or new patentpending beltless DirectPlus™ system. Advantages of the DirectPlus system:

- High-efficiency motor with direct-mounted impeller provides exceptional performance and low energy consumption
- Fan design eliminates belts that age over time, reducing maintenance costs and service calls
- Slide-out blower assembly combines components, making service and installation easier
- Sound-reducing grille lowers indoor sound without affecting airflow

Up to **82%** Supply Fan Power Savings\*

### ADVANCED COOLING SYSTEM.

This patent-pending configuration is designed to deliver significant year-round savings:

- Scroll compressors use the full area of the coils, rather than parts, to better match cooling capacity to demand
- Compressor compartment is isolated, allowing for easier access and servicing
- Prodigy<sup>®</sup> Control System continuously monitors and adjusts the compressors to optimize performance and cost savings

#### SUNSOURCE® SOLAR READY.

SunSource® factory-installed option makes Energence the first and only commercial HVAC system to integrate directly with solar power.

- Simple, scalable and easy to install on 3- to 12.5-ton units
- Units can achieve net-zero energy status by reaching effective efficiency levels of up to 43 IEER, 34 SEER and beyond\*\*
- Includes an optional communication module for monitoring system status in real time

\*At 55% airflow using the DirectPlus™ blower, when compared to full-load belt-drive units.

\*\*Effective SEER and IEER estimates for the SunSource\* air conditioning system are based on the U.S. Department of Energy (DOE) annual performance factor (APF) method for heat pumps and air conditioners (10CFR part 430). Estimates of annual solar energy production are calculated using National Renewable Energy Laboratory's (NREL) PVW4tts, calculated at tilt angle 10 degrees with an 180 degree azimuth. Estimates of annual cooling operating cost savings for the rooftop units are calculated using Lennox' Total Cost of Ownership Calculator, with operating hours from 10:00 am to 10:00 pm in a small retail environment in the Omaha region. Estimated SEER energy calculations were made using Energence\* LGH060H4E (5 ton/17 SEER 3-phase - 460V) and six 275DC W solar modules. IEER effective efficiency calculations were made using Energence LGH094U4E (7.5 ton/21.5 IEER 3-phase) and seven 275DC W solar modules. Note that SEER and IEER equivalents may vary by location.

## ULTRA LIGHT

#### AS LIGHT AS THE AIR IT PRODUCES. Well, Almost.



New Energence® ultra-high-efficiency models are up to 42% lighter\* in weight than leading competitors' units.

Advanced technologies and optimized cabinetry make Energence ultra-high-efficiency units lighter than other units in its class. The lighter weight makes buildings less vulnerable to structural issues, adding to your peace of mind.

Plus, they're designed to fit the same footprint as many existing Lennox<sup>®</sup> units. That means less labor and equipment is needed for setup, making replacement quick and cost effective.



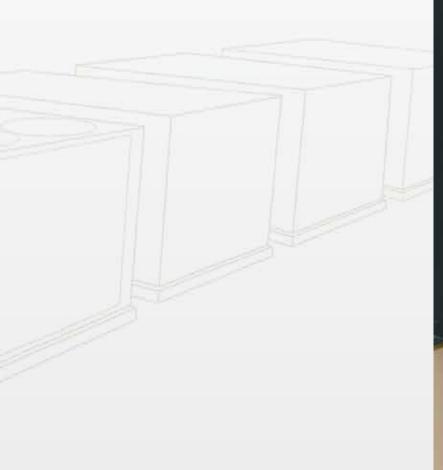
## ULTRA QUIET

# VIRTUALLY SILENT, EVEN WHEN RUNNING AT FULL CAPACITY



We've pushed the boundaries of innovation to design a rooftop unit that not only offers ultra-high efficiency, but also delivers the ultimate in quiet performance.

Technologies such as the advanced cooling system, DirectPlus<sup>™</sup> blower system and ECM outdoor fans keep outdoor sound levels at a minimum. This helps ensure customers are comfortable whenever they enter a building, particularly if it's a movie theater, church or some other facility with low sound requirements. Ultra-quiet performance can also help keep business owners in compliance with changing environmental regulations.





## ULTRA INTELLIGENT

#### A SMART IDEA THAT KEEPS GETTING SMARTER

Standard on every Energence<sup>®</sup> unit, the Prodigy<sup>®</sup> Control System helps optimize system performance with more than 250 adjustable parameters to meet almost any design specification. And with the new Prodigy 2.0 Unit Controller, monitoring and controlling the system is easier than ever before. This enhanced user interface includes additional space for a more intuitive navigation, along with access to the home screen from any point in the menu for quick, user-friendly operation.



#### **ENHANCED USER INTERFACE**

- 4-line by 20-character LCD with backlight provides more text/data, simplifying navigation in any condition
- Help button with menu-specific content simplifies operation and troubleshooting
- Clearly labeled scroll and adjustment buttons help eliminate accidental changes by users
- Menu LEDs clearly indicate your place in the menu

#### VERIFICATION WHEN AND WHERE YOU NEED IT

The USB service report makes service and troubleshooting easier than ever:

- Validates effectiveness of service and maintenance work
- Assists in making "service versus replacement" decisions based on component runtimes
- Alarm and status logs provide quick view of problem areas, speeding up maintenance
- Allows trending and verification of service and unit operation over time with time/date-stamped reports

#### **RELIABLE, COST-SAVING OPERATION**

More than 100 diagnostic codes detect operating issues to help prevent premature equipment failures and simplify troubleshooting. Plus, the Prodigy<sup>®</sup> Control System tracks the runtime of every major component and records when service or maintenance is performed, helping cut the length and cost of service calls.

#### PRODIGY APP ANSWERS ALL YOUR HOW-TO QUESTIONS

Available as a free download from iTunes or Google Play, the Prodigy mobile app speeds up service by giving you on-the-spot access to helpful resources. Features of the app include:

- Step-by-step troubleshooting guides
- Instructional videos
- Product and technical FAQs
- Searchable library of technical documents on lennoxcommercial.com



## PERFORMANCE GEARED FOR YOUR APPLICATION

#### AN INNOVATIVE SOLUTION FOR EVERY BUSINESS, EVERY BUILDING

Every building is different, from its age and location to the needs and preferences of its occupants. That's why Lennox provides near-endless opportunities for customization of every Energence® rooftop unit. With more than three million possible factory configurations, it's never been easier to fine-tune your Energence unit to deliver optimal performance for your application and budget needs.

#### LEADING THE WAY IN LEED® CERTIFICATION

Every Energence rooftop unit is designed to reduce your business's carbon footprint:

- Industry-leading efficiencies exceed LEED® minimum requirements for EA Credit 1.3
- Environ<sup>™</sup> Coil System (standard on most models) delivers exceptional performance, with up to 52% less refrigerant than typical units
- Millions of factory-installed options can add to the efficiency of units and help businesses qualify for additional LEED credits—as well as Title 24, ASHRAE 90.1 and many state and local utility rebates

#### INDOOR AIR THAT LETS EVERYONE BREATHE EASY

Improving a building's indoor air quality creates a better indoor environment, and a better indoor environment helps protect a company's productivity and profitability. Lennox' patented Humiditrol® dehumidification system removes moisture based on humidity requirements rather than temperature, making it easy and efficient to create a better indoor environment.

#### **OPTIONS AND ACCESSORIES TO MAXIMIZE SYSTEM PERFORMANCE\***

#### Factory- or Field-Installed Options:

- Condensate drain trap
- Blower proving switch
- Prodigy<sup>®</sup> BACnet<sup>®</sup> module (BTL certified)
- Prodigy LonTalk<sup>®</sup> module (LonTalk certified)
- Dirty filter switch
- Fresh air tempering
- Smoke detector (return and/or supply)

- Disconnect switch
- GFI service outlets
- Economizer
- Outdoor air dampers
- High-efficiency air filters
- UVC light kit
- Barometric relief dampers
- Low-temperature vestibule heater

#### Factory-Installed Options:

- HACR circuit breakers
- Direct-drive blower motor
- Belt-drive blower motor
- Drive kits
- Corrosion protection
- Novar® LSM
- Phase monitor
- Humiditrol
- dehumidification system
- Gas heat input
- Stainless steel heat exchanger
- SRC Electric Heat
- SunSource<sup>®</sup> ready

#### **Field-Installed Options:**

- Coil guards
- Hail guards
- L Connection<sup>®</sup> Network
- Horizontal economizer control kit
- Humidity sensor kit
- CO<sub>2</sub> sensor
- LGP/propane conversion kit

## QUALITY COMPONENTS BUILT INTO EVERY ENERGENCE<sup>®</sup> ROOFTOP UNIT

#### HINGED ACCESS PANEL:

Provides quick access to components and protects panels and roof from damage during servicing.

- 2 ISOLATED COMPRESSOR COMPARTMENT: Allows performance check during normal compressor operation without disrupting airflow.
- CORROSION-RESISTANT, REMOVABLE, DOUBLE-SLOPED DRAIN PAN: Provides application flexibility, durability and improved serviceability.
- THERMOSTATIC EXPANSION VALVES:
   Provide peak cooling performance
   across the entire application range.

#### **5** SCROLL COMPRESSOR:

Standard on all units for reliable, long-term operation.

6 HUMIDITROL® DEHUMIDIFICATION SYSTEM:

Optional patented system allows for independent control of temperature and humidity, providing enhanced comfort control.

#### **MERV 13 FILTERS:**

Optional filters provide an enhanced level of indoor air quality, and can help the building qualify for additional LEED<sup>®</sup> credits.



8 FOIL-FACED INSULATION:

On all internal surfaces that contact airflow, helps minimize airborne fibers and improve IAQ.

PRODIGY<sup>®</sup> CONTROL SYSTEM:

Standard on every Energence® rooftop unit.

MSAV<sup>®</sup> (MULTI-STAGE AIR VOLUME) SUPPLY FAN: Optional MSAV<sup>®</sup> helps achieve the highest level of energy savings and comfort control with blower speed modulation

#### **11** ENVIRON<sup>™</sup> COIL SYSTEM:

Uses less refrigerant and is lighter than traditional coils (available on select models).

#### **BLOWER BELT AUTO TENSIONER:**

Optional auto tensioner ensures blower is delivering the proper airflow for comfort, while maximizing efficiency and belt life (not shown).

#### ENERGENCE' ULTRA-HIGH-EFFICIENCY ROOFTOP UNIT PERFORMANCE SPECIFICATIONS

			COOLIN	IG DATA	HEATING INPUT			PHYSICAL DATA			
	NOM. TON	MODEL	EER	IEER	LOW	STE	<b>)</b> .	MED.	HIGH	DIMENSIONS H X W X L [INCHES]	SHIP WT. [LBS.]
GAS/	7.5	LGH094U4M/E	13.4/13.9	20.7/21.5	-	13C	)	180	240	47 x 61 x 124	1,345
ELECTRIC	10	LGH122U4M/E	12.6/13.1	19.2/20.0	_	130	)	180	240	47 x 61 x 124	1,355
UNITS	12.5	LGH152U4M/E	12.0/12.3	18.1/18.9	-	130	)	180	240	47 x 61 x 124	1,365
						KW RANGE					
ELECTRIC/	7.5	LCH094U4M/E	13.4/13.9	20.7/21.5	7.5	15	22.5	30	45	47 x 61 x 124	1,297
ELECTRIC	10	LCH122U4M/E	12.6/13.1	19.2/20.0	15	22.5	30	45	60	47 x 61 x 124	1,307
UNITS	12.5	LCH152U4M/E	12.0/12.3	18.1/18.9	15	22.5	30	45	60	47 x 61 x 124	1,317

M=Belt Drive MSAV® option E=DirectPlus™ option

#### ENERGENCE' ROOFTOP UNIT PERFORMANCE SPECIFICATIONS

		COOLING DATA			HEATING DATA				PHYSICAL DATA		
		EER	SEER OR	LOW	s <sup>.</sup>	ΓD.	MED.	нідн	DIMENSIONS H X W X L [INCHES]	SHIP WT. [LBS.]	
3	LGH036S4T	11.6	15.0	_	(	65	105	_	39 x 47 x 86	610	
3	LGH036H4E	12.7	18.0	_	(	65	105	_	39 x 47 x 86	610	
4	LGH048S4T	12.5	15.0	_	(	65	105	150	39 x 47 x 86	626	
4	LGH048H4E	12.8	17.6	_	(	65	105	150	39 x 47 x 86	626	
5	LGH060S4T	12.5	15.5	_	(	65	105	150	47 x 4º⁰6	704	
5	LGH060H4E	12.7	17.1	_	6	65	105	150	47 x 47 x 86	704	
6	LGH072H4B	12.0	13.5	-	(	65	105	150	47 x 47 x 86	781	
7.5	LGH092H4B/M	12.5	13.0/14.0	_	1	30	180	240	47 x 61 x 102	1,173	
7.5 8.5 10	LGH102H4B/M	12.2	12.9/14.0	_	1	30	180	240	47 x 61 x 102	1,180	
10	LGH120H4B/M	12.0	13.0/13.8	_	1	30	180	240	47 x 61 x 102	1,215	
	LGH150S4B/M	11.0	11.4/13.1	_	1	30	180	240	47 x 61 x 102	1,255	
12.5 13 15 17.5 20 20 25 25	LGH156H4B/M	12.0	13.6/14.1	169	2	60	360	_	55 x 91 x 108	2,135	
15	LGH180H4B/M	12.0	13.5/13.7	169	2	60	360	480	55 x 91 x 133	2,315	
17.5	LGH210H4B/M	12.0	13.0/14.0	169	2	60	360	480	55 x 91 x 133	2,440	
20	LGH240H4B/M	12.0	13.2/14.5	_	2	60	360	480	55 x 91 x 133	2,525	
20	LGH242H4V	12.3	15.5	_		60	360	480	65 x 91 x 145	3,317	
25	LGH300S4B/M	10.5	10.9/13.8	_		60	360	480	55 x 91 x 133	2,630	
25	LGH300H4B/V	11.6	12.5/14.3	_		60	360	480	65 x 91 x 145	3,317	
30	LGH360H4B/V	10.6	11.5/13.5	_		60	360	480	65 x 91 x 145	3,317	
35	LGH420S4B/V	9.8/10.0	10.2/11.0	_		00	_	800	68 x 90 x 286	6,345-8,600	
35	LGH420H4B/V	10.8	11.3/12.5	_		00	_	800	68 x 90 x 286	6,345-8,600	
40	LGH480S4B/V	9.8	10.1/11.0	_		00	_	800	68 x 90 x 286	6,345-8,600	
40	LGH480H4B/V	11.0/10.8	12.0/13.0	_		00	_	800	68 x 90 x 286	6,345-8,600	
40	LGH540S4B/V	9.8/10.0	10.5/11.7	_		00	_	800	68 x 90 x 286	6,345-8,600	
50	LGH600S4B/V	9.8	10.3/11.0	_		00	_	800	68 x 90 x 286	6,345-8,600	
	Lonocoshb, v	5.0	10.0/ 11.0		5	KW RA		000	00 x 00 x 200	0,040 0,000	
3	LCH036S4T	11.6	15.0	7.5	15	_	_	_	39 x 47 x 86	574	
3	LCH036H4E	12.7	18.0	7.5	15	_	_	_	39 x 47 x 86	574	
4	LCH048S4T	12.5	15.0	7.5	15	_	_	_	39 x 47 x 86	590	
4	LCH048H4E	12.8	17.6	7.5	15	_	_	_	39 x 47 x 86	590	
5	LCH060S4T	12.5	15.5	7.5	15	22.5	_	_	47 x 47 x 86	668	
5	LCH060H4E	12.7	17.1	7.5	15	22.5	_	_	47 x 47 x 86	668	
n 6	LCH072H4B	12.0	13.5	7.5	15	22.5	30	_	47 x 47 x 86	745	
7.5	LCH092H4B/M	12.7	13.0/14.0	7.5	15	22.5	30	45	47 x 61 x 102	1,125	
8.5	LCH102H4B/M	12.4	12.9/14.0	7.5	15	22.5	30	45	47 x 61 x 102	1,132	
	LCH120H4B/M	12.2	13.2/14.0	15	22.5	30	45	60	47 x 61 x 102	1,167	
12.5	LCH150S4B/M	11.2	11.6/13.1	15	22.5	30	45	60	47 x 61 x 102	1,207	
13	LCH156H4B/M	12.0	13.6/14.1	15	30	45	60	_	55 x 91 x 102	1,985	
15	LCH180H4B/M	12.0	13.5/13.7	15	30	45	60	_	55 x 91 x 133	2,165	
17.5	LCH210H4B/M	12.0	13.0/14.0	15	30	45	60	90	55 x 91 x 133	2,103	
20	LCH240H4B/M	12.0	13.2/14.5	15	30	45	60	90	55 x 91 x 133	2,230	
	LCH242H4V	12.5	15.5	15	50	30-12		50	65 x 91 x 145	3,207	
20	LC11242114 V	12.5	10.9/13.8	15	30	45	60	90	55 x 91 x 133	2,480	
20	I CH300S/B/M	10.5		15	30			50	65 x 91 x 145	3,207	
20 20 25 25	LCH300S4B/M	11.2					65 x 91 x 145	3,207			
20 25 25	LCH300H4B/V	11.8			30-120				UJ A JI A 140	3.207	
50	LCH300H4B/V LCH360H4B/V	10.8	11.5/13.5								
35	LCH300H4B/V LCH360H4B/V LCH420S4B/V	10.8 10.0	11.5/13.5 10.2/11.0			30-12	20		68 x 90 x 286	6,345-8,600	
35	LCH300H4B/V           LCH360H4B/V           LCH420S4B/V           LCH420H4B/V	10.8 10.0 10.8	11.5/13.5 10.2/11.0 11.3/12.5			30-12 30-12	:0 :0		68 x 90 x 286 68 x 90 x 286	6,345-8,600 6,345-8,600	
- 30 35 35 40	LCH300H4B/V           LCH360H4B/V           LCH420S4B/V           LCH420H4B/V           LCH480S4B/V	10.8 10.0 10.8 10.0	11.5/13.5 10.2/11.0 11.3/12.5 10.1/11.0			30-12 30-12 30-15	20 20 60		68 x 90 x 286 68 x 90 x 286 68 x 90 x 286	6,345-8,600 6,345-8,600 6,345-8,600	
35	LCH300H4B/V           LCH360H4B/V           LCH420S4B/V           LCH420H4B/V	10.8 10.0 10.8	11.5/13.5 10.2/11.0 11.3/12.5			30-12 30-12	20 20 30		68 x 90 x 286 68 x 90 x 286	6,345-8,600 6,345-8,600 6,345-8,600 6,345-8,600 6,345-8,600	

E=Direct Drive, T=Belt Drive, CAV (2-speed), B=Belt Drive, CAV (1-speed), M= Belt Drive MSAV<sup>®</sup>, V=Variable Air Volume Belt Drive NOTE: Due to Lennox' ongoing commitment to quality, all specifications, ratings and dimensions are subject to change. All ratings shown are for the highest-rated model in the tonnage size.

#### GROUNDBREAKING INNOVATION. GAME-CHANGING COMFORT.

Since 1895, Lennox has been on a continuous quest to reinvent indoor comfort. Today, we are proud to introduce our latest advancement in that pursuit.

The newest models in the Energence<sup>®</sup> line are our most energy-efficient rooftop units yet, and efficiency is just the beginning. Energence is engineered to deliver ultra innovation on all counts, making it an ultra-smart choice for optimal performance and total cost of ownership.

In addition, financing options through Lennox Commercial Financing<sup>™</sup> help put Energence rooftop units in reach for nearly any business.

For more information, visit us at www.lennoxcommerical.com, or contact us at 1-877-726-0024.



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# Model: 30REZG

# KOHLER. Power Systems

190-600 V

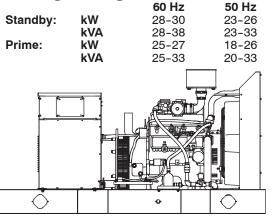
Gas



## EPA-Certified for Stationary

Applications

## Ratings Range



## **Generator Set Ratings**

## **Standard Features**

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, • factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- · A one-year limited warranty covers all systems and components. Two- and five-year extended warranties are also available.
- Alternator features:
  - The unique Fast-Response <sup>™</sup> II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.

				Natura 130°C	Rise	LP ( 130°C	Rise	105°C	al Gas C Rise	LP ( 105°C	Rise
A la	Valtava	Dh		Standby	Rating	Standby		Prime		Prime	
Alternator	Voltage 120/208	<u>Ph</u> 3	Hz 60	kW/kVA 29/36	Amps 101	kW/kVA 30/38	Amps 104	kW/kVA 26/32	<b>Amps</b> 90	kW/kVA 27/33	<b>Amps</b> 93
	120/208	3	60 60	29/30	95	30/38	98	26/32	90 85	27/33	93 88
	127/220	3	60 60	29/36 29/36	95 87	,	98 90	26/32	85 78	27/33	88
	120/240	3	60 60	29/30	117	30/38 28/28	90 117	25/25	104	25/25	104
	139/240	3	60 60	20/20 29/36	87	20/20	90	26/32	78	25/25	81
	220/380	3	60 60	29/30	67 55	30/38	90 57	26/32	78 49	27/33	51
	277/480	3	60	29/36	44	30/38	45	26/32	39	27/33	40
	347/600	3	60	29/36	35	30/38	36	26/32	39	27/33	32
4P5	110/190	3	50	25/31	95	25/31	95	21/27	82	21/27	82
	115/200	3	50	25/31	90	25/31	90	21/27	77	21/27	77
	120/208	3	50	25/31	90 87	25/31	90 87	21/27	74	21/27	74
	110/220	1	50	23/23	105	23/23	105	20/20	90	20/20	90
	110/220	3	50	25/31	82	25/31	82	21/27	70	21/27	70
	220/380	3	50	25/31	47	25/31	47	21/27	41	21/27	41
	230/400	3	50	25/31	45	25/31	45	21/27	38	21/27	38
	240/416	3	50	25/31	43	25/31	44	21/27	37	21/27	37
	120/208	3	60	30/38	104	30/38	104	27/33	93	27/33	93
	127/220	3	60	30/38	98	30/38	98	27/33	88	27/33	88
	120/240	3	60	30/38	90	30/38	90	27/33	81	27/33	81
	120/240	1	60	28/28	117	28/28	117	25/25	104	25/25	104
	139/240	3	60	30/38	90	30/38	90	27/33	81	27/33	81
	220/380	3	60	30/38	57	30/38	57	27/33	51	27/33	51
	277/480	3	60	30/38	45	30/38	45	27/33	40	27/33	40
_	347/600	3	60	30/38	36	30/38	36	27/33	32	27/33	32
4P7	110/190	3	50	26/33	99	26/33	99	23/29	88	23/29	88
	115/200	3	50	26/33	94	26/33	94	23/29	83	23/29	83
	120/208	3	50	26/33	90	26/33	90	23/29	80	23/29	80
	110/220	3	50	26/33	85	26/33	85	23/29	76	23/29	76
	110/220	1	50	25/25	114	25/25	114	22/22	100	22/22	100
	220/380	3	50	26/33	49	26/33	49	23/29	44	23/29	44
	230/400	3	50	26/33	47	26/33	47	23/29	41	23/29	41
	240/416	3	50	26/33	45	26/33	45	23/29	40	23/29	40
407	120/240	1	60	30/30	125	30/30	125	27/27	112	27/27	112
4Q7	110/220	1	50	25/25	114	25/25	114	22/22	100	22/22	100

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. *Standby Ratings:* The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. *Prime Power Ratings:* At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without notice and without policy and secondary fuels.

## **Alternator Specifications**

Specifications	Alternator
Manufacturer	Kohler
Туре	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent- Magnet
Leads: quantity, type	
4P5, 4P7	12, Reconnectable
4Q7	4, 110-120/220-240
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages be
480 V, 380 V 4P5 (12 lead)	140 (60 Hz), 98 (50 Hz)

480 V, 380 V 4P7 (12 lead) 240 V, 220 V 4Q7 (4 lead)

40 Ηz ent andby jes below) 0 Hz) 194 (60 Hz), 134 (50 Hz) 104 (60 Hz), 91 (50 Hz)

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit ۰ breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy • varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Fast-Response<sup>™</sup> II brushless alternator with brushless exciter for excellent load response.

## **Application Data**

<b>—</b>		
EN	ıgı	ne

Engine Specifications	60 Hz	50 Hz	
Manufacturer	Genera	Motors	
Engine: model, type	Industrial F		
	3.0 L, 4		
	Natural A	•	
Cylinder arrangement	4 In	line	
Displacement, L (cu. in.)	3.0 (	181)	
Bore and stroke, mm (in.)	101.6 x 91.4	(4.00 x 3.60)	
Compression ratio	8.2	2:1	
Piston speed, m/min. (ft./min.)	329 (1080)	274 (900)	
Main bearings: quantity, type	2 Bolt		
Rated rpm	1800	1500	
Max. power at rated rpm, kW (HP)	36.5 (49)	32 (43)	
Engine power at standby rating, kW (HP)	36.5 (49)	32 (43)	
Cylinder head material	Cast	Iron	
Piston type and material	High Silicor	n Aluminum	
Crankshaft material	Nodula	ar Iron	
Valve (exhaust) material	Forgeo	d Steel	
Governor type	Elect	ronic	
Frequency regulation, no-load to full-load	Isochr	onous	
Frequency regulation, steady state	±0.	5%	
Frequency	Fix	ed	
Air cleaner type, all models	D	ry	

## **Engine Electrical**

Engine Electrical System	60 Hz	50 Hz	
Ignition system	Electronic, Distributor		
Battery charging alternator:			
Ground (negative/positive)	Neg	lative	
Volts (DC)		12	
Ampere rating	7	70	
Starter motor rated voltage (DC)	1	12	
Battery, recommended cold cranking amps (CCA):			
Qty., rating for -18°C (0°F)	1,	630	
Battery voltage (DC)	1	12	
Fuel			
Fuel System	60 Hz	50 Hz	
Fuel type	Natural Gas, LP Gas, or Dual Fuel		
Fuel supply line inlet	1 N	IPTF	
Natural gas fuel supply pressure, kPa			
(in. H <sub>2</sub> O)	1.74-2.	74 (7-11)	
LPG vapor withdrawal fuel supply pressure, kPa (in. $H_2O$ )	1.24-2.74 (5-11)		
Dual fuel engine, LPG vapor withdrawal fuel supply pressure, kPa (in. H <sub>2</sub> O)	1.2	4 (5)	
Fuel Composition Limits *	Nat. Gas	LP Gas	
Methane, % by volume	90 min.		
Propane, % by volume	1.0 max.	85 min.	
Propene, % by volume	0.1 max.	5.0 max.	
C <sub>4</sub> and higher, % by volume	0.3 max.	2.5 max.	
Sulfur, ppm mass	25 max.		
Lower heating value, MJ/m <sup>3</sup> (Btu/ft <sup>3</sup> ), min.	33.2 (890)	84.2 (2260)	
	()	()	

\* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

#### Exhaust

Exhaust System	60 Hz	50 Hz	
Exhaust manifold type	Dry		
Exhaust flow at rated kW, m <sup>3</sup> /min. (cfm)	7.1 (250)	5.9 (208)	
Exhaust temperature at rated kW, dry exhaust, °C (°F)	688 (1270)		
Maximum allowable back pressure,	,	,	
kPa (in. Hg)	10.2	(3.0)	
Exhaust outlet size at engine hookup, mm (in.)	64 (2.	5) OD	

## **Application Data**

#### Lubrication

Lubricating System	60 Hz 50 Hz		
Туре	Full Pressure		
Oil pan capacity, L (qt.)	3.8 (4.0)		
Oil pan capacity with filter, L (qt.)	4.1 (4.3)		
Oil filter: quantity, type	1, Cartridge		

### Cooling

Radiator System	60 Hz	50 Hz	
Ambient temperature, °C (°F) *	50 (	122)	
Engine jacket water capacity, L (gal.)	6.8	(1.8)	
Radiator system capacity, including			
engine, L (gal.)	14.9	(3.9)	
Engine jacket water flow, Lpm (gpm)	42 (11)	35 (9)	
Heat rejected to cooling water at rated			
kW, dry exhaust, kW (Btu/min.)	34.1 (1940)	28.4 (1617)	
Water pump type	Centrifugal		
Fan diameter, including blades, mm (in.)	533 (21)		
Fan, kWm (HP)	1.5 (2.0)	1.0 (1.2)	
Max. restriction of cooling air, intake and			
discharge side of radiator, kPa (in. H <sub>2</sub> O)	0.125	5 (0.5)	

\* Enclosure with enclosed silencer reduces ambient temperature capability by 5°C (9°F).

## **Operation Requirements**

Air Requirements	60 Hz	50 Hz
Radiator-cooled cooling air,		
m <sup>3</sup> /min. (scfm) †	142 (5000)	113 (4000)
Combustion air, m <sup>3</sup> /min. (cfm)	2.1 (74)	1.75 (62)
Heat rejected to ambient air:		
Engine, kW (Btu/min.)	9.2 (522)	15.4 (860)
Alternator, kW (Btu/min.)	4.5 (259)	3.75 (216)
$\ddagger$ Air density = 1.20 kg/m <sup>3</sup> (0.075 lbm/ft <sup>3</sup> )		

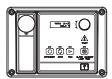
Fuel Consumption ‡	60 Hz	50 Hz		
Natural Gas, m <sup>3</sup> /hr. (cfh) at % load	Standby	Ratings		
100%	12.2 (430)	10.2 (358)		
75%	9.6 (340)	8.0 (283)		
50%	7.2 (255)	6.0 (213)		
25%	5.1 (179)	4.3 (149)		
LP Gas, m <sup>3</sup> /hr. (cfh) at % load	Standby	Ratings		
100%	5.0 (175)	4.2 (146)		
75%	4.1 (144)	3.4 (120)		
50%	3.1 (108)	2.6 (90)		
25%	2.1 (74)	1.8 (62)		
Natural Gas, m <sup>3</sup> /hr. (cfh) at % load	Prime F	Prime Ratings		
110%	12.2 (430)	10.2 (360)		
100%	11.1 (393)	9.3 (328)		
75%	8.9 (312)	7.4 (260)		
50%	6.8 (238)	5.6 (199)		
25%	4.9 (173)	4.2 (146)		
LP Gas, m <sup>3</sup> /hr. (cfh) at % load	Prime F	Ratings		
110%	5.0 (176)	4.2 (148)		
100%	4.7 (164)	3.9 (137)		
75%	3.8 (134)	3.2 (111)		
50%	2.9 (102)	2.4 (86)		
25%	2.0 (71)	1.7 (61)		
	37 MJ/m <sup>3</sup> (1000 B			

LP vapor, 93 MJ/m<sup>3</sup> (2500 Btu/ft.<sup>3</sup>)

LP vapor conversion factors:

8.58 ft.<sup>3</sup> = 1 lb. 0.535 m<sup>3</sup> = 1 kg. 36.39 ft.<sup>3</sup> = 1 gal.

### Controllers

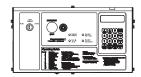


#### Decision-Maker<sup>®</sup> 3000 Controller

Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.

- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units •
- · Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection •
- NFPA 110 Level 1 capability

Refer to G6-100 for additional controller features and accessories.



#### Decision-Maker<sup>®</sup> 550 Controller

Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities.

- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation •
- Built-in alternator thermal overload protection •
- NFPA 110 Level 1 capability

Refer to G6-46 for additional controller features and accessories.

## Standard Features

- Alternator Protection
- Battery Rack and Cables
- Electronic, Isochronous Governor
- Gas Fuel System (includes fuel mixer, electronic secondary gas • regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch •
- **Oil Drain Extension**
- Operation and Installation Literature •

## **Available Options**

#### Approvals and Listings

- CSA Approval
- IBC Seismic Certification
- UL 2200 Listing

#### **Enclosed Unit**

- Sound Enclosure (with enclosed critical silencer)
- Weather Enclosure (with enclosed critical silencer)

#### **Open Unit**

- Exhaust Silencer, Critical (kit: PA-352663)  $\square$
- Flexible Exhaust Connector, Stainless Steel

#### **Fuel System**

- Dual Fuel NG/LPG (automatic changeover)
- Flexible Fuel Line
- (required when the generator set skid is spring mounted) Gas Filter
- LP Liquid Wtihdrawal (vaporizer)
- Secondary Gas Solenoid Valve

#### Controller

- Common Fault Relay
- Communication Products and PC Software (Decision-Maker® 550 controller only)
- **Customer Connection**
- (Decision-Maker® 550 controller only)
- Dry Contact (isolated alarm) (Decision-Maker® 550 controller only)
- Input/Output Module
- (Decision-Maker® 3000 controller only)
- **Remote Annunciator Panel**
- Remote Audiovisual Alarm Panel
- (Decision-Maker® 550 controller only)
- Remote Emergency Stop  $\square$
- Run Relay

#### **Cooling System**

- Block Heater, 1000 W, 110-120 V Recommended for ambient temperatures below 10°C (50°F)
- Radiator Duct Flange

#### **Electrical System**

- Alternator Strip Heater
- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater
- Line Circuit Breaker (NEMA1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)

#### Miscellaneous

- Air Cleaner Restrictor Indicator
- Certified Test Report
- ō Engine Fluids (oil and coolant) Added
- ē Rated Power Factor Testing
- Rodent Guards

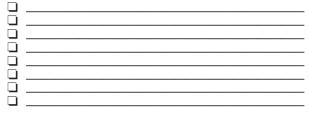
#### Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

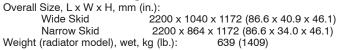
#### Warranty

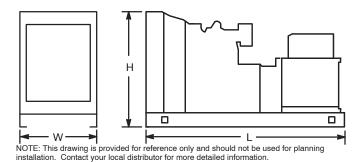
- 2-Year Basic
- 5-Year Basic
- 5-Year Comprehensive

#### **Other Options**



#### **Dimensions and Weights**





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The Asylum Expansion & Renovation City of Portland - Site Plan Application March 25, 2016

**EXHIBIT 3 – CAPACITY TO SERVE LETTERS** 





FROM SEBAGO LAKE TO CASCO BAY

March 18, 2016

WRBC 141 Preble Street Portland, ME 04101

Attn:Mr. John Kenney, PERe:121 Center Street – Portland<br/>Ability to Serve with PWD Water

Dear Mr. Kenney:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on March 7, 2016. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter.

#### Conditions of Service

The following conditions of service apply:

• A new 4-inch domestic service may be installed from the water main in Center Street. The service should enter through the properties frontage on Center Street at least 10-feet from any side property lines.

• The existing services at this site may be used by the proposed development as long as the project team determines that they will provide adequate flow and pressure for the proposed use. If any of the existing services will no longer be used as a result of the development then they must be retired per PWD standards. This includes shutting the corporation valve and cutting the pipe from the water main (for the 2-inch service) or removing the 6-inch gate valve and capping the tapping sleeve (for the 6-inch service).

• The District can confirm that the East End Wastewater Treatment plan can handle the additional capacity. Please contact the City of Portland regarding the capacity of the sewer collection system.

• Water District approval of water infrastructure plans will be required for the project prior to construction. As your project progresses, we advise that you submit any preliminary design plans to MEANS for review of the water main and water service line configuration. We will work with you to ensure that the design meets our current standards.

#### **Existing Site Service**

According to District records, the project site does currently have existing water service. A 6-inch diameter cast iron fire service line and a 2-inch copper domestic water service line, located as shown

on the attached water service cards, provide water service to this site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of these services.

#### Water System Characteristics

According to District records, there is a 12-inch diameter cast iron water main on the northeast side of Center Street and a public fire hydrant located at the site. Recent flow data is not available in this area. The most recent static pressure reading was 85 psi on October 20, 2015.

#### Public Fire Protection

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

#### Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

#### Private Fire Protection Water Needs

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

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

Sincerely, Portland Water District

Gordon Johnson, PE. Engineering Services Manager



John S Kenney Ph.D., P.E., LEED AP WBRC Architects Engineers 44 Central Street Bangor, Me 04401 March 8, 2016

RE: Ability to Serve for 407110 Asylum Project at 121 Center Street in Portland

Dear John,

This letter is to confirm that Pine Tree Waste Inc. located in Scarborough, Maine, has the capabilities to pick up, and dispose of annual volumes of (CDD) construction demolition debris as well as CDD material generated by proposed construction at the Asylum at 121 Center Street in Portland, ME. The end site for this material will be:

Juniper Ridge Landfill 2828 Bennoch Road Alton, Me 44088 MDEP Permit # S-020700-WD-N-A

Pine Tree Waste Inc can also transport volumes of non-hazardous MSW (Municipal Solid Waste). The end site for this material will be:

ECO Maine Blueberry Lane Portland, ME 04103

This letter is not a quote for service. It is a statement of capabilities. The sole purpose of this letter is to communicate the willingness and capabilities that Pine Tree Waste Inc. has towards providing this service as requested. If you have any questions or concerns, please do not hesitate to give me a call.

Sincerely,

Bill Bennett Pine Tree Waste Inc. 87 Pleasant Hill Road Scarborough, ME 04074 Office: 510-4828 Fax: 883-1954 William.bennett@casella.com



496 Congress Street, Portland Me. 04101

March 25, 2016

To Whom It May Concern:

Unified Parking Partners intends to enter into lease negotiations with The Asylum at 121 Center Street in Portland to provide exclusive surface parking for Asylum events at our managed parking lots at 51-59 Free Street and One Portland Square. Please contact me at (207) 751-1679 should you have any questions.

Sincerely,

Dan McNutt, Managing Partner

**Unified Parking Partners** 

The Asylum Expansion & Renovation City of Portland - Site Plan Application March 25, 2016

EXHIBIT 4 – FINANCIAL CAPACITY INFORMATION



121 Center Street

Option with Balcony 1/25/16

Portlanc	l, ME 04101								
Statement of Probable Costs					Total				
			Ft <sup>2</sup>	\$\$	per ft <sup>2</sup>		Q	2-Q3 2016 Constr.	
CONSTR	UCTION COSTS								
1	New Construction - Expansion		10,960	\$	335.00	CONESTCO	\$	3,671,600	
2	Renovations to existing space		8,305	\$	150.00	3rd		1,245,750	
3	Additional Cost Offset Lump Sum			\$	-	Party		1,949,875	
4	Increased project difficulty factor			\$	-	Estimate		125,000	
5	Kitchen/Bar/Walk-in Cooler Equipment		C. Capr	rara Foo	od Service l	Lump Sum Estima	ate	179,071	
		Subtotal					\$	7,171,296 \$	298.8
ADMINI	STRATIVE COST & RESERVE								per.
6	Moveable Equipment & furnishings						3.0%	209,767	
7	Specialty Light/Sound/Rigging		Wate	erfront (	Concerts Lu	ump Sum Estimat	e	250,000	
8	Advertising / Insurance / Legal					Lump Sum Estim	ate	5,000	
9	Bid Contingency						3.0%	215,139	
10	Design & Construction Contingency						5.0%	358,565	
		Subtotal					\$	1,038,470	
EES AN	D SERVICES								
11.1	Architect/Engineer - SD-CD earned as of 1/25/1	.6						132,248.00	
11.2	Architect/Engineer credit for work earned to da	ate						(88,606.00)	
11.3	Architect/Engineer - Balcony Concept							2,700.00	
11.4	Architect/Engineer - SD-CD @ 12.1% x .70							607,408.77	
12	Architect/Engineer - Bid-CA @ 12.1% x .30							260,318.04	
13	A/E Reimbursable (printing)					Lump Sum Estim		3,000.00	
14	A/E - Permitting (SFM)					Lump Sum Estim		800.00	
15	A/E - Permitting (Local PB, Historic)					Lump Sum Estim		14,500.00	
16	Historic Consultant					Lump Sum Estim		-	
17	Specialty Consultant (acoustics, kitchen)					Lump Sum Estim		7,000.00	
18	Survey / Soils					Lump Sum Estim		12,600.00	
19	Hazardous Materials Testing and Abatement					Lump Sum Estim		4,700.00	
20	Cost consultant					Lump Sum Estim		7,440.00	
21	Construction Testing					Lump Sum Estim		8,500.00	
22	Owners Representative/Clerk	Subtatal				Lump Sum Estim			
		Subtotal					\$	926,267	
TOTAL							\$	9,136,033 \$	380.6



The Northern Trust Company 600 Brickell Avenue, Suite 2400 Miami, Florida 33131 (305) 372-1000



March 25, 2016

To Whom it May Concern:

Northern Trust is currently working with The Asylum and Valerie Levy to provide financing for the construction project on the property located at 121 Center Street Portland, Maine. Financing is subject to certain conditions yet to be finalized, but we are optimistic, as the group has the capacity to complete the project.

The current loan request is subject to full underwriting by Northern Trust and therefore is not a commitment to lend.

We value our relationship with The Asylum and Valerie Levy and to work with them on this project. Should you have any questions, please feel free to contact me at 305-789-1129.

Sincerely, Northern Trust

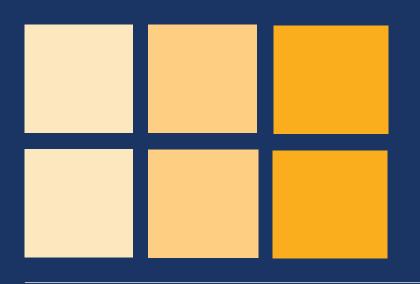
Candace Falsetto

Candace Falsetto Vice President

The Asylum Expansion & Renovation City of Portland - Site Plan Application March 25, 2016

**EXHIBIT 5 – TECHNICAL CAPACITY INFORMATION** 





# STATEMENT OF QUALIFICATIONS

**ENGINEERING SERVICES** 



## WBRC's Professional Disciplines

#### LAND USE PERMITTING

WBRC has been providing professional land use designing and permitting services for over a century. Many projects require planning, design, and construction, as well as public presentation, collaboration with city officials, and state and federal agency reviews. Often these projects also require calibration with outside interest groups to obtain feedback on the proposed concepts (roadway, sidewalk and trail locations, etc.) during public forums and other informational meetings administer by WBRC on behalf of clients. WBRC's land use team has extensive experience in the areas of site due diligence, urban streetscape design, urban planning, environmental planning and permitting, stormwater master planning, roadway design, wetland analysis and mitigation, surveying/GIS, public presentation, facilitation of project meetings, regulatory assistance and fundraising/referendum support.

#### **ARCHITECTURAL DESIGN**

While WBRC's architectural designs have been recognized by many third-party accolades, the best "award" is a great space that occupants love. Creating such spaces require a combination of listening skills, creative talent, and technical acumen. WBRC architects are trained and skilled in BIM, Sketch Up, the Adobe products suite, Autodesk 3ds, and Revit. When a project warrants it, WBRC also regularly partners with other A/E professionals to create branded and niche facility solutions.

#### **INTERIOR DESIGN**

A well-designed interior will enhance everything from safety to productivity to the perceived value of your brand. WBRC's interior design team is experienced with space planning across many sectors, allowing us to "cross-pollinate" new ideas and best practices. The firm's interior design team is also well-versed in construction documentation, finish material and color selection, and specification of furniture, fixtures, equipment and accessories.

#### LANDSCAPE ARCHITECTURE

Landscape architecture is critical to communicating a client's presence in the fabric of a community. WBRC's approach to landscape architecture combines the owner's vision, site history, and current context to create a unique presence—in a manner that also factors in practicalities from long-term horticultural growth patterns to ADA compliance to wayfinding.

#### SITE/CIVIL ENGINEERING

WBRC's site and civil engineering team brings ingenuity, practicality, and diverse expertise to its work, producing high quality, customized site and civil engineering design options. Through clarity and communication, WBRC's site/civil team has earned a reputation for making the permitting process quick and efficient.

#### **STRUCTURAL ENGINEERING**

WBRC's structural engineering team has diverse experience in the structural analysis, design, and detailing of projects that leave both small and large footprints—from multistory structures to multi-facility campuses.

#### **MECHANICAL ENGINEERING**

Energy conservation, occupant comfort, indoor air quality, noise abatement, and acoustic control are among the many challenges tackled by WBRC's mechanical engineers. From plumbing, heating, ventilation, and air conditioning to fire protection and safety systems, our mechanical engineers have a track record for creating solutions that seamlessly integrate into new or existing facilities.

#### **ELECTRICAL ENGINEERING**

WBRC's electrical engineering team incorporates innovative and energy-efficient solutions for a wide range of systems including power, electrical distribution, fire alarm, security, lighting, and computer data systems.

#### Committed to Ongoing Professional Education

The WBRC project team members proposed to stay on top of best project management practices by their participation in these and other professional organizations.





## WBRC Architects • Engineers Administrative Expertise and Project Management Methods

#### **Document Distribution and Communication Plan**

It is critically important that the right people know when and how decisions are made. WBRC works with the project team to draft a document distribution and communication plan.

WBRC uses Citrix ShareFile, a web-based project information exchange to handle file transfers, however, some clients prefer email, while others favor phone conversations or face-to-face meetings with documentation that follows. Regardless of the method, your WBRC team understands the importance of keeping you informed in a way that makes sense to you and your organization.

#### **Quality Assurance**

WBRC has a robust quality control system in place to ensure the best product is provided to every client. In addition to the oversight of the principal-in-charge, project manager, and studio director, experienced professionals from each discipline, not directly involved with the project, review the documents for constructability, code compliance, and coordination.

#### **Detailed Cost Estimating**

A comprehensive and accurate cost estimate is often a critical component of any project. WBRC contracts with experienced third-party cost estimators, and the project is reviewed at multiple stages throughout the design. Additionally, we consult our data bank of cost analytics, architects' schedule of values, project cost balancing, and project economics. These help ensure that the design remains within budget as it progresses, all the way through to the bidding process.

#### **Project Closeout and Post Occupancy**

This step in the process of completing the project helps to ensure the finished product is delivered as expected by everyone involved. WBRC also works with the General Contractor to ensure that any incomplete or deficient work is corrected in a timely manner, and that operations and maintenance manuals and record drawings of the project are complete and provided to the owner.

# A Track Record of Maintaining Budgets and Controlling Costs

Your WBRC team understands that the selected firm will be entrusted to determine the best way to invest limited dollars into meaningful renovations. We take this responsibility very seriously with full commitment for your success.

WBRC has versatile experience in delivering similarly sized projects within the local Maine economic environment as it relates to a project's proposed construction budget and size. WBRC's cost-control approach of detailed cost estimating at each phase of design has a proven track record of success.

The projects listed below are a representative sample of our renovation and new projects competitively bid by a general contractor or by sub-contractors.

WBRC successfully managed the budget to deliver these projects, which were all constructed within the strict limitations of the available funds or grants.

WBRC Project	Construction Cost	On Schedule	On Budget
AASF Building 260, Parking Lot Lighting Improvements	\$13,400	•	•
AASF Building 260, Wash Bay	\$42,000	•	•
AASF Building 260, Hangar A & C Lighting	\$46,000	•	•
AASF Building 260, Boiler Room	\$50,000	•	•
AASF Building 260, Energy Improvements	\$100,000	•	•
USM Hill Gym HVAC Upgrades, Gorham	\$132,500	•	•
USM Brooks Dining Hall Chiller Plant	\$170,000	•	•
Weatherbee School Renovations	\$568,000	•	•
Northern Penobscot Tech Region III	\$1.5 Million	•	•
Northern Penobscot Tech Region III - Lincoln	\$1.9 Million	•	•
Fairchild Semiconductor Building at 82 Running Hill Rd	\$2.8 Million	•	•
Old Town High School Science and Arts Expansion	\$3.9 Million	•	•
MDI Biological Laboratory: Davis Center for Regenerative Biology and Medicine	\$3.9 Million	•	•
UMaine Aubert Hall Renovations	\$4.5 Million	•	•
NMCC Wellness and Student Center	\$5.1 Million	•	•
MDI Biological Laboratory: Morris Center for Environmental Health Sciences	\$5.6 Million	•	•
UMaine Offshore Wind Laboratory	\$13.6 Million	•	•
Bigelow Lab for Ocean Sciences: Center for Ocean Health	\$26.2 Million	•	•
Cross Insurance Arena Renovation - Portland	\$33.0 Million	•	•











## Projects that Demonstrate Capabilities:

The following projects, some of which are profiled later in this document, demonstrate WBRC's range of services.

All projects listed required the Site Location of Development Application and Permit.

## GOVERNMENT/NON-PROFIT

Joint Force Headquarters, Augusta, ME Cross Insurance Center, Bangor, ME Dirigo Pines, Orono, ME Pine Tree Camp, Rome, ME

#### HEALTHCARE/LABORATORY

Bigelow Laboratory for Ocean Sciences, West Boothbay, ME Acadia Hospital Campus Plan Updates, Bangor, ME Parking Garage/Office Expansion, Eastern Maine Medical Center, Bangor, ME Sussman House Hospice, Rockport, ME Pen Bay Medical Center Master Plan, Rockport, ME

#### EDUCATION

Emera Astronomy Center, University of Maine, Orono, ME Offshore Wind Laboratory, University of Maine, Orono, ME Northern Maine Community College Wellness Center, Presque Isle, ME Hampden Academy, Hampden, ME Brewer Community School, Brewer, ME Lewiston Hall, University of Maine at Augusta, Bangor Campus, Bangor, ME Public Safety Building, Eastern Maine Community College Bangor, ME Captain Stevens Elementary School, Belfast, ME Peninsula School, Gouldsboro, ME Husson University Campus Plan, Bangor, ME Eastern Maine Community College Campus Plan, Bangor Maine Maritime Academy Master Plan, Castine, ME

#### COMMERCIAL

Macy's, Bangor Mall, Bangor, ME Bangor Savings Bank Operations Center, Bangor, ME Hollywood Hotel & Casino, Bangor, ME Residence Inn, Bangor, ME The Grove, Orono, ME Orchard Trails, Orono, ME The Avenue, Orono, ME Bangor Parkade, Bangor, ME



CONTACT: Warren Caruso Executive Director of Development Husson University One College Circle Bangor, Maine 04401 (207) 992-1963

carusow@husson.edu

## Husson University Master Plan & Permitting

Husson University | Bangor, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/Army Corps, MDOT, City of Bangor, SPCC Plan Update

This update of the 1991 master plan included site inventory and analysis, as well as, identifying campus growth areas. For this project, WBRC worked closely with the City of Bangor, MDEP, and ACOE to streamline permitting efforts.

In recent years, WBRC was responsible for programming, design, environmental permitting of several significant Husson facilities including Beardsley Meeting House/Gracie Theater, O'Donnell Commons, Furman Student Center renovations, three NCAA athletic fields, stormwater detention system and treatment areas and wetland mitigation, the university's southern Maine campus in Westbrook, and the forthcoming Husson School of Business.



#### **CONTACT:**

Dan Belyea Director of Administrative, Student Services and Auxiliary Enterprises Eastern Maine Community College 354 Hogan Road Bangor, ME 04401

Bangor, ME 04401 (207) 974-4664 dbelyea@emcc.edu

## **EMCC Campus Plan & Permitting**

Eastern Maine Community College | Bangor, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT, SPCC Plan Update

WBRC prepared a Site Location of Development Permit for all post-1975 development on the campus, and continues to provide permit modifications for additional campus improvements. The site is located in a DEPdesignated Urban Impaired Stream watershed (Penjajawoc) Other projects include the EMCC Campus-wide master planning, master permitting (SLODA, NRPA, and Local) for 10-year buildout of local community college campus. Project included development of a new main entrance boulevard, new student quad, 550 space satellite parking area, reconfigured access and pedestrian routes, and stormwater management planning for development of additional buildings and impervious area.



#### **CONTACT:**

Evan Richert Town Planner Town of Orono 59 Main Street Orono, ME 04473 (207) 866-2556 evanr@orono.org

## Orchard Trails Site Design & Permitting

Orono, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT, Town of Orono

The Orchard Trails project consisted of a master planned residential community consisting of 12 three-story buildings, containing 144 fourbedroom living units and a community center on a sixty-one acre parcel in Orono, Maine. The WBRC-led design team provided architecture, site master planning, engineering, permitting and construction document assistance to the owner in navigating tiers of local, state, and federal site plan review issues such as stormwater quality, wetland impact, vernal pool mitigation, visual impact, lighting impact, and traffic impacts. Full construction documents and oversight were provided for the 576 bed facility, including a centrally located community building for tenants of the client, GMH Communities Trust (now American Campus Communities).



CONTACT: John Rauen Vice President Penn National Gaming 825 Berkshire Boulevard Wyomissing, PA 19610 (610) 373-2400

john.rauen@pngaming.com

## Hollywood Slots Site Plan & Permitting

Bangor, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA, MDOT, City of Bangor, SPCC Plan Update

After several years of legal preparation, in late 2005 Penn National Gaming was ready to begin the process of permitting and constructing the proposed Hollywood Hotel and Casino on Main Street in Bangor. Located across from Bass Park, the project consisted of a gaming area with 1,500 slot machines, a seven-story 150 room hotel, a 1,500 space parking garage, and a 249 space employee parking lot. WBRC provided site design, environmental permitting, and landscape architecture for the \$130 million facility. Stormwater treatment for the project was provided by a new on-site retention pond. Working with several different consultants from across the country, WBRC was able to obtain project approval from the Maine DEP in less than three months.



CONTACT: Jim Ring Owner Representative City of Bangor 73 Harlow Street Bangor, ME 04401 (207) 478-8247 j.ring@bangormaine.gov

# Cross Insurance Center Site Plan & Permitting

Bangor, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA, MDOT, City of Bangor, SPCC Plan Update

For Cross Insurance Center, WBRC teamed with stadium expert Sink Combs Dethlefs, providing alternative site evaluation and design, permitting, and construction administration services, as well as landscape architecture, civil engineering, environmental permitting, fire protection engineering, and plumbing. Site improvements included on-site parking, drives/circulation areas, on site utilities, reconstruction of stormwater treatment measures, reconstruction of 2,500 LF of roads and grinding/overlay of 3,000 LF of roads on Main, Dutton, and Buck streets, which included drainage, lighting, and streetscape improvements that followed the design guidelines of Bangor Waterfront. The WBRC team subsquently provided site evaluation and design services for an adjacent property, Residence Inn, which opened this summer.



CONTACT:

Paul Levine Executive Vice President Park7 Group 461 Park Avenue South, Floor 4 New York, NY 10016 (203) 246-7474 plevine@park7group.com

## The Avenue Site Plan & Permitting

Orono, ME

Permits Required: MDEP Site Location of Development, Stormwater, MDOT, Town of Orono

WBRC provided site development, planning, and permitting for The Avenue, a 870-bed student residential community in Orono, Maine, for New York-based developer Park7 now under construction. The project comprises mixed-housing units, recreational buildings and facilities, a Dunkin Donuts outlet, gas station, and pedestrian/cycling path.

WBRC worked closely with the Town of Orono, Park7, and Orono Land Trust to mitigate any impact of the development on the area's natural habitat. A volleyball court, maintenance and housing units were relocated to create a buffer zone around the major vernal pools.

#### **D** LIST OF RECENTLY COMPLETED SIMILAR PROJECTS



CONTACT: Emil Genest Assistant Superintendent MSAD #22 24 Main Road North Hampden, ME 04444 (207) 862-3255 egenest@sad22.us

## Hampden Academy Site Design & Permitting

Hampden Academy | Hampden, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/Army Corps, MDOT, SPCC Plan Update

As part of the new \$46.9-million, 175,000 SF Hampden Academy, WBRC designed the site for the building, associated parking lots, drives, walkways, athletic track, tennis courts, and multipurpose fields on a 36-acre parcel in Hampden, Maine. Site improvements include clearing/grubbing, site preparation, and utilities (water, sanitary sewer, stormwater, three-phase electric, telecommunications, extension and construction of 1,800 LF road).

The project, located in both the Reeds Brook and the Souadabscook Stream watersheds, achieved both stormwater quality and quantity requirements using only Low-Impact Development (LID) BMPs consisting of seven soil filters at various locations around the project site.



CONTACT: William Webster Superintendent Lewiston Public Schools 36 Oak Street Lewiston, ME 04240 (207) 795-4100 bwebster@lewistonpublicschools.org

## Peninsula School Site Design & Permitting

Peninsula School | Gouldsboro, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT, Town of Gouldsboro

WBRC led the site design and permitting as part of the \$12M, 41,000 square foot K-8 school project build on a 21-acre parcel. Site improvements included clear/grubbing, blasting, and construction of a 2,800 LF road within sensitive habitat areas (wetland/vernal pools), parking lot, utilities, three phase electric distribution line, and well and wastewater disposal area. Site design included several LID methods in order to effectively treat the quality and quantity of stormwater runoff. The site design was able to achieve a Tier II wetland alteration permit despite the existence of several acres of wetland on the site. WBRC worked closely with the MDEP, Army Corps of Engineers (ACOE) and US Department of Fish and Wildlife to permit the impact of vernal pools.



**CONTACT:** 

Alex Eyssen VP of Development Campus Crest Development 2100 Rexford Road, Suite 414 Charlotte, NC 28211 (704) 496-2500 alex.eyssen@campuscrest.com

## The Grove Site Design & Permitting

Orono, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT, Town of Orono

The Grove at Orono project consists of a new residential development located on Park Street. WBRC was contracted to provide site design and permitting services for the proposed construction of site improvements associated with the development of a variety of student housing types along with a clubhouse/peasing office, pool, pool house and patio, barbeque patio area, and basketball and sand volleyball courts. The development has a total of 620 beds and associated parking areas. Stormwater quality and quantity treatment is provided by two wet retention ponds. WBRC and applicant Campus Crest worked with neighbors and interest groups to come to an agreement on land area and the location of the development, as well as land swap and trail easement agreements.



CONTACT:

#### Normand G. Michaud

Directorate of Facilities & Engineering Department of Defense, Veterans and Emergency Management DFE, Building #8, Camp Keyes Augusta, ME 04333 (207) 626-7887

## Joint Force HQ Site Design & Permitting

Camp Keyes | Augusta, ME

Permits Required: MDEP Site Location of Development, NRPA/Army Corps, MDOT, City of Augusta

Maine Army National Guard retained WBRC to assist with the design of a 107K SF Joint Force Headquarters building with 200+ associated parking areas, access drive and vehicle/pedestrian circulation areas, associated utilities, site lighting and landscaping, to be located on a 43+ acre parcel, off of Civic Center Drive. The WBRC-led design team provided architecture as well as MEP engineering. WBRC's site/civil/landscape group provided site planning options and implemented the preferred site design, executed the various required permitting and construction documents, and provided construction administration and oversight. Features of the site design include stormwater management of quality and quantity, wetland impact, vernal pool mitigation, stream protection and crossing, visual impact, lighting impact, and traffic impacts.



#### CONTACT:

Louis Dinneen Director of Facilities Pen Bay Medical Center 6 Glen Cove Drive Rockport, ME 04856 (207) 596-8000 fdinneen@penbayhealthcare.org

# Pen Bay Medical Center Master Plan & Permitting

Pen Bay Medical Center | Rockport, ME

Permits Required: MDEP Site Location of Development, NRPA/Army Corps, MDOT, SPCC Plan Update

Permitting for a proposed four-phase Pen Bay Medical Center campus improvement project included two new medical office buildings, a new hospice care facility, renovations to the boiler plant and wastewater treatment plant, several new parking areas, and a new access road. WBRC worked closely with the Maine DEP to ensure project objectives were met during the concept design phase. Additionally, WBRC's role as lead designer in several previous campus improvement projects facilitated preparation of the permit documents for boiler room expansion, additions to the hospital, main entrance improvements, and a pharmacy expansion.



#### **CONTACT:**

Jerry Goss Board of Trustees Brewer School Department 80 North Main Street Brewer, ME 04412 (207) 989-7050 jgbrw@aol.com

# Brewer Community School Site Design & Permitting

Brewer, ME

Permits Required: MDEP Site Location of Development, Stormwater, NRPA/Army Corps, MDOT, City of Brewer

Brewer Community School is a \$33.4M 156,000 SF LEED Silver certified Pre-K to Grade 8 school that replaced five aging schools. Nearly 20 potential sites were reviewed within for lot size/shape, topography, community identity, town/city growth area, water/sewer/power/data, essential services, proximity to library/schools/town center, soils, identification of wetlands/vernal pools onsite, traffic, bus routes, pedestrian routes and requirement of offsite roadway improvements. The project achieved stormwater quality and quantity requirements using only LID BMPs consisting of three soil filters and one landscaped biofilter. Site improvements included a 277-space parking lot, student drop-off areas, drives/circulation areas, onsite utilities, new eight-lane sports track, new multi-purpose fields, and playgrounds.



**EDUCATION** Washington University in St. Louis, M. Arch.

#### PROFESSIONAL CERTIFICATIONS

Licensed Professional Architect Maine No. ARC4238 DC No. ARC102289 LEED Accredited Professional

#### AFFILIATIONS

American Institute of Architects NCARB Portland Society for Architecture

## Jocelyn Boothe AIA, LEED Green Associate

Architect Project Role: Project Architect

#### Architect

#### **RELATED PROJECT EXPERIENCE:**

- Asylum Dance Club Renovation, Portland, ME
- TAMC Country Dialysis Center, Presque Isle, ME
- Cary Medical Center ACU Renovation, Caribou, ME
- Avesta Housing Office Renovation, Portland, ME
- VA Medical Center Providence Building 9, Providence, RI
- VA Medical Center Providence Building 6, Providence, RI
- LeDroit Park Residence Historic Renovation, Washington, DC
- Saint Agnes Hospital Medical Group Catonsville Renovation, Baltimore, MD





#### EDUCATION

University of Maine, B.S., Civil Engineering, with Distinction University of Minnesota, PhD, Conservation Biology

#### PROFESSIONAL CERTIFICATIONS

Professional Engineer Maine No. 11676 LEED Accredited Professional

#### AFFILIATIONS

Maine Society of Civil Engineers American Society of Civil Engineers Chi Epsilon Civil Engineering Honor Society

## John Kenney P.E., Ph.D., LEED AP

Firm Associate, Maine Licensed Professional Engineer Project Role: Civil Engineer

Firm Associate and Civil Engineer specializing in: site planning and design; Federal, State, and local permit preparation; stormwater management, analysis and evaluation; utility infrastructure; LEED project accreditation; and project management.

#### **RELATED PROJECT EXPERIENCE:**

- Lewiston Middle School Addition/Renovations, Lewiston, Maine
- Peninsula School, Gouldsboro, Maine
- Hampden Academy, Hampden, Maine
- Brewer Community School, Brewer, Maine
- Old Town High School Science and Arts Expansion, Old Town, Maine
- Herman Middle School, Herman, Maine
- Cross Insurance Center, Bangor, Maine
- Cross Insurance Arena, Portland, Maine
- Husson University Campus Plan, Bangor, Maine
- Eastern Maine Community College Site Improvements, Bangor, Maine
- The Avenue Apartments, Orono, Maine
- Joint Force Headquarters, Camp Keyes, Augusta, Maine





**Owen Haskell, Inc.** Professional Land Surveyors

390 US Route One – Unit 10 Falmouth, ME

# Owen Haskell, Inc.

*OWEN HASKELL, INC.*, founded in 1964, is a privately owned Maine corporation specializing in all types of land surveying and is one of New England's largest full-service surveying companies. Over the years, we acquired the personnel and records of three land surveying firms. The largest firm acquired was H.I. & E.C. Jordan, Surveyors, a Portland, Maine based firm, which had been providing survey services to clients throughout Northern New England since 1873.

With more than 100 years of experience, we are able to provide quality surveying services for all types of engineering and design projects. This includes highways, bridges, airports, pipelines, transmission lines, paper mills, industrial and commercial developments, and a full spectrum of services to waterfront developments, pier facilities and related rehabilitation projects, as well as photo and geodetic control. We can provide a full range of surveying services, including boundary, land title, topographic, hydrographic, and geodetic control, as well as in-house GPS (Global Positioning System) services.

We provide a wide variety of surveying and support services to the engineering and environmental communities.

We currently have three survey crews on staff and each crew has been properly equipped, including being able to provide backup for equipment failures. Our in-house Leica GPS equipment includes both 1200 receivers for control surveys and Pathfinder PRO XR receivers for data collection and sub-meter location and mapping.

Our AutoCAD and Carlson Survey software enable us to provide detailed site condition plans to our clients on electronic medium. Computer systems are continually updated and refined in order to meet our clients' needs in the most efficient manner and to support all aspects of the engineering field.

With financial support and encouragement, our employees are urged to take every opportunity available to learn the latest technology by attending seminars and classes. Owen Haskell, Inc. firmly believes that in today's environment, employees need every advantage possible in order to make a company successful.

## **Our Mission:**

Owen Haskell, Inc. has been in the surveying business for over 40 years and has built a reputation on providing a quality product at a fair price, and is dedicated to fulfilling the objectives of a wide range of projects. We take pride in our ability to respond quickly and effectively to our client's needs, and have a proven reputation for providing quality, client-oriented services.

## <u>Owen Haskell, Inc.</u>

Professional Land Surveyors

## John C. Schwanda, PLS Principal

**EDUCATION** 

Bachelor of Science/Forestry University of Maine

#### **ACTIVE REGISTRATIONS**

Professional Land Surveyor Professional Land Surveyor Professional Land Surveyor Professional Land Surveyor Professional Forester Maine #1252 New Hampshire #826 Massachusetts #31322 Connecticut #70004 Maine #881

### PROFESSIONAL EXPERIENCE

Owen Haskell, Inc – 1985 to Present Principal

Mr. Schwanda has over 35 years of experience in this field. He serves as project manager and performs and supervises all phases of boundary, topographic, engineering and construction surveys.

### **PROFESSIONAL MEMBERSHIP**

Maine Society of Land Surveyors (MSLS) National Society of Professional Surveyors (NSPS)

# Project Experience John C. Schwanda, PLS

<u>CSO Project</u>	Engineering Survey- Dorothy, DiBiase and Hicks Street
Portland, ME	Woodard & Curran, Inc. Barry Sheff 207-774-2112
	Review right of way information, supervise field survey, performed computations to make determination of right of way lines, supervise plan preparation.
<u>Hall School</u>	Boundary and Topographic Survey for School Redesign
Portland, ME	Oak Point Associates, Jacques Gagnon 207-283-0193
	Surveyor of record. Performed record research, field reconnaissance of boundary and control points, supervised field work, computations to make boundary line determinations, supervision of plan preparation.
<u>Mercy Hospital</u>	ALTA/ACSM Land Title Survey
Portland, ME	Preti Flaherty Beliveau & Pachios, LLP, 207-791-3000
	Surveyor of record for boundary surveys at sites on Spring and Winter Streets in Portland and Park Road, Westbrook.
<u>Portland Public Library</u>	Existing Conditions/Boundary Survey
Portland, ME	Scott Simons Architects, Stephen Fraser 207-772-4656
	Surveyor of record. Deed and plan research, computations to make boundary line determination, supervision of plan preparation.
Seaside Rehabilitation &	Boundary, Topographic and As-Built Surveys
Healthcare Center	First Atlantic Healthcare, Craig Coffin 207-874-2700
Portland, ME	Surveyor of record. Deed and plan research, computations to make boundary line determination, supervision of plan preparation.
<u>Long Creek Watershed</u>	Engineering and Topographic Survey for storm drain and
<u>Project</u>	culvert improvements - Philbrick Road - South Portland, ME
South Portland, ME	Gorrill-Palmer, Al Palmer 207-657-6910

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## <u>Owen Haskell, Inc.</u>

Professional Land Surveyors

Ellen C. Brewer, PLS Project Manager

**EDUCATION** 

B.S. Natural Resources/Soil & Water Conservation University of Maine, Orono

A.S. Civil Engineering Technology Vermont Technical College

ACTIVE REGISTRATIONS

Professional Land Surveyor Maine #2367

PROFESSIONAL EXPERIENCE

Owen Haskell, Inc – 1995 to Present Director of Field Operations

Mrs. Brewer has over 25 years of experience in the surveying field. Her duties and responsibilities include scheduling and assisting field crews with computations and problem solving; researching and obtaining information from utility companies and municipalities and interfacing with field crews, clients and management to assure surveys are completed in a timely manner.

PROFESSIONAL MEMBERSHIP

Maine Society of Land Surveyors (MSLS) National Society of Professional Surveyors (NSPS)

# Project Experience Ellen C. Brewer, PLS

Hall School- Portland, ME	Boundary and Topographic Survey for School Redesign Oak Point Associates, Jacques Gagnon 207-283-0193
	Responsible for coordinating surveying needs between client, school and other environmental professionals. Coordinate access to the project site. Manage survey crews. Deed and plan research at the City and County. Assist in boundary computations.
<u>Midtown- Portland, ME</u> Subdivision	Boundary & Topographic Survey for 8 Lot Amended Fay, Spoffard & Thorndike, William Hoffman 207-775-1121
	Manage survey crews. Research with the City. Compilation of plans, lot and easement calculations as well as composing of legal descriptions.
<u>Long Creek Watershed</u> Project South Portland, ME	Topographic and Property Survey for storm drain improvements - Maine Mall Plaza - Maine Mall Road South Portland, ME Fay, Spoffard & Thorndike, Joe Laverriere 207-775-1221
<u>Mercy Hospital</u> <u>Fore River Campus</u> Portland, ME	ALTA/ACSM Land Title Survey Preti Flaherty Beliveau & Pachios, LLP, 207-791-3000
	Manage survey crews. Interface with client, attorneys and Title Company. Deed and plan research at the City and County. Boundary and easement computations, plotting and interpretation of Title documents.
<u>CSO Project</u> Portland, ME	Engineering survey Commonwealth, West Commonwealth and Belfort Streets Woodard & Curran, Inc. Barry Sheff 207-774-2112
	Manage survey crews and field data. Deed and plan research with the City and utility companies. Research horizontal and vertical control of record.
<u>CSO Project</u> Portland, ME	Engineering survey College Street Woodard & Curran, Barry Sheff 1-800-426-4262
	Manage survey crews and field data. Research horizontal and vertical control. Deed and plan research with the City and utility companies. Right of way computations.
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## <u>Owen Haskell, Inc.</u>

Professional Land Surveyors

Randy R. Loubier, PLS Staff Surveyor

**EDUCATION** 

B.S. Spatial Information Engineering University of Maine - 2001

ACTIVE REGISTRATION

Professional Land Surveyor Maine #2407

#### PROFESSIONAL EXPERIENCE

Owen Haskell, Inc - 2003 to Present

Mr. Loubier has been in the surveying field since 2002. Randy works on all phases of engineering, route, construction, topographic, utility, property, and boundary surveys. His office duties include: client contact, deed and plan research, plan compilation, survey calculations, client contracts and job estimates. Mr. Loubier is in charge of both survey and mapping grade GPS operations for Owen Haskell, Inc.

PROFESSIONAL MEMBERSHIP

Maine Society of Land Surveyors (MSLS) National Society of Professional Surveyors (NSPS)

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# Project Experience Randy R. Loubier, PLS

<u>Canal Landing</u> Portland, ME	ALTA/ACSM Land Title Survey on Portland waterfront Portland Yacht Club, Robert Flight 207-774-1067
	Surveyor of record. Deed and plan research at the City and County. Plotting and interpretation of Title documents. Boundary, easement and right of way computations.
<u>Bayside Village</u> Portland, ME	Boundary, Topographic and Construction Survey for Student Housing and Parking Garage Federated Companies, Brian Connell 203-434-0850
	Field Surveyor. Establish horizontal and vertical control for construction layout. Interpret construction documents. Lot calculations as well as composing of legal descriptions.
<u>Mercy Hospital</u> <u>State Street</u> Portland, ME	ALTA/ACSM Land Title Survey Preti Flaherty Beliveau & Pachios, LLP, 207-791-3000
Fortialiu, ME	Field surveyor. Establish horizontal and vertical control. Boundary and easement computations, plotting and interpretation of Title documents.
<u>Town of Scarborough</u>	Engineering Survey Pleasant Hill Rd Fay, Spofford & Thorndike, Steve Bushey 207-775-1211
	Surveyor of record. Manage field data. Deed and plan research with the City and ME DOT. Determination of right of way lines.
<u>CSO Project</u> Portland, ME	Engineering Survey Dorothy, DiBiase and Hicks Street Woodard & Curran, Inc. Barry Sheff 207-774-2112
	Field surveyor. Establish horizontal and vertical control. Deed and plan research with the City and utility companies. Right of way computations.
<u>Sewer Extension Project</u> Peaks Island, Portland, ME	Engineering Survey Island Ave and Winding Way Fay, Spoffard & Thorndike, Joe Laverriere 207-775-1211
rortianu, ME	Project surveyor. Establish horizontal and vertical control using GPS for aerial photography. Deed and plan research. Layout baselines for construction.
390 US Route 1 - Unit 10, Fa	lmouth, ME 04105 p207-774.0424 www.owenhaskell.com

# Why suited for this Project:

OWEN HASKELL, INC. is currently a twelve-person firm operating three (3) fully equipped survey crews throughout New England.

Many of our projects have required multiple survey crews completing several different aspects of data collection simultaneously under the direction of a project manager and a field supervisor.

Our staff includes five (5) licensed or registered professional land surveyors capable of completing all aspects of land surveying, both in the office and in the field, complimented by our support staff selected for outstanding personal achievements and accomplishments. We have collectively completed hundreds of control networks for a variety of large and small projects, including aerial mapping projects, throughout our service area. Many of these networks were completed by global positioning systems.

The fieldwork is processed systematically through strict office procedures meeting the expectations of internal quality assurance checks and established quality control programs.

## **Relationships with other Firms:**

Although OWEN HASKELL, INC. has provided professional services as a prime contractor on many projects; the vast majority of our success and reputation has been gained through teamwork and long- term professional association with established professional firms complimenting areas of technical expertise.

These firms include National and New England based Engineering and Design firms, Waste Management firms, Hazardous Waste Remediation firms, Architects, Lending Institutions, and Commercial and Retail Developers.

Due to our in-house Global Positioning Systems capability, many of our projects are completed as a sub-consultant to other well-established Civil Engineering and Land Surveying firms.

Equally important have been the objective, grass roots approach undertaken to solve the primary objective. Many times this has been achieved as the result of previously established long-standing relationships between our firms' professionals and individuals in key positions within those firms requiring the services.

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## <u>Owen Haskell, Inc.</u>

Professional Land Surveyors

#### **CLIENT REFERENCES**

#### MAINE

Clean Harbors Inc. Gordon Pott 207.799.8111

Greater Portland Development Group Peter Kennedy 207.797.4234

Verrill Dana William Knowles 207.774.4000

Deluca-Hoffman Associates William G. Hoffman 207.775.1121

Archetype Bill Hopkins 207.772.6022

JB Brown & Sons Vincent Veroneau 207.774.5908

Wishcamper Properties Joe Wishcamper 207.774.6989

Housing Initiatives of NE Corp Cindy Taylor 207.774.8812

City of Portland William Scott 207.874.8801

#### AND BEYOND

Vanasse, Hangen, Brustlin, Glen Johnson 617.924.1770

Westwood Professional Services Chris Moehrl, PE, PLS 952.906.7443

Republic National Land Surveyors Bryan Mitchell 407.862.4200

Burns & McDonnell Engineering John Kayser 860.209.2651

McDonald's Corporation Christina Amate 781.461.4723



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# Geotechnical Engineering, Construction Materials Testing and GeoEnvironmental Services Since 1979

#### **COMPANY OVERVIEW**

S. W. Cole Engineering, Inc. (S.W.COLE) was established in 1979 in Bangor, Maine to provide geotechnical engineering, geology, environmental consulting and construction quality assurance testing services. In addition to our corporate office, our firm includes three branch offices in Maine, two in New Hampshire and one in Vermont to more effectively provide services to our clients throughout northern New England.

#### **ABOUT OUR FIRM**

S.W.COLE provides services in the following major areas: geotechnical engineering, construction materials testing and special inspections, and geoenvironmental services. We are a team of more than 80 engineers, scientists and technicians which annually provides services on more than 1,800 projects. In our history of more than 35 years, we have worked with a wide variety of complex geologic and subsurface conditions throughout New England. We have had the opportunity to work with a varied clientele, including architectural and engineering firms, contractors, healthcare providers, public and private educational institutions, governmental agencies and municipalities, and commercial, industrial and individual clients. Our engineers, geologists and construction materials technicians take a hands-on approach and understand the impact of subsurface conditions on construction budgets and schedules. Seven regional offices give us the ability to utilize the knowledge and experience of all our professionals with ease as well as the flexibility to schedule services in a responsive manner.

As a geotechnical engineering, geosciences consulting and construction materials testing firm, S.W.COLE serves our clients' needs with a multi-disciplined staff of professional engineers and scientists as well as laboratory and field testing services. We are known for bringing creative, practical alternatives to difficult challenges for more than 35 years, and our clients have come to rely on our professional expertise and our ability to provide service both reliably and promptly.



Augusta, ME • Bangor, ME • Caribou, ME • Gray, ME Manchester, NH • Somersworth, NH • White River Junction, VT

The Asylum Expansion & Renovation City of Portland - Site Plan Application March 25, 2016

EXHIBIT 6 – GEOTECHNICAL INFORMATION



# REPORT

December 17, 2015

15-1166

Explorations and Geotechnical Engineering Services

Proposed Renovation & Expansion The Asylum Dance Club 121 Center Street & 41 Free Street Portland, Maine

Prepared For: The Asylum Dance Club c/o WBRC Architects & Engineers Attention: John Kenney, P.E. 44 Central Street Bangor, Maine 04401

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



#### Geotechnical Engineering

- Construction Materials Testing and Special Inspections
- GeoEnvironmental Services
- Test Boring Explorations

### www.swcole.com

1.0 INTRODUCTION	. 1
1.1 Scope and Purpose	. 1
1.2 Site and Proposed Construction	. 1
2.0 EXPLORATION AND TESTING	.2
2.1 Explorations	. 2
2.2 Testing	
3.0 SITE AND SUBSURFACE CONDITIONS	
3.1 Surficial	
3.2 Subsurface	
3.2.1 Soil and Bedrock	
3.2.2 Existing Foundations	.4
3.3 Groundwater	
3.4 Frost and Seismic	. 4
4.0 EVALUATION AND RECOMMENDATIONS	
4.1 General Findings	
4.2 Site and Subgrade Preparation	. 6
4.3 Excavation and Dewatering	. 6
4.4 Foundations	
4.5 Foundation Drainage	
4.6 Slab-On-Grade	. 8
4.7 Entrance Slabs and Sidewalks	
4.8 Backfill and Compaction	. 8
4.9 Weather Considerations	10
4.10 Design Review and Construction Testing	10
5.0 CLOSURE	10

#### TABLE OF CONTENTS

Attachment A	Limitations
Sheet 1	Exploration Location Plan
Sheets 2 - 13	Exploration Logs
Sheet 14	Key to the Notes and Symbols
Sheet 15	Foundation Underdrain Detail
Appendix A	Historical Subsurface Data





15-1166

December 17, 2015

The Asylum Dance Club c/o WBRC Architects & Engineers Attention: John Kenney, P.E. 44 Central Street Bangor, Maine 04401

Subject: Explorations and Geotechnical Engineering Services Proposed Renovations & Expansion The Asylum Dance Club 121 Center Street & 41 Free Street Portland. Maine

Dear John:

In accordance with our Agreement, dated October 30, 2015, we have performed subsurface explorations for the subject project. This report summarizes our findings and geotechnical recommendations and its contents are subject to the limitations set forth in Attachment A.

#### **1.0 INTRODUCTION**

#### 1.1 Scope and Purpose

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

#### **1.2 Site and Proposed Construction**

The site is located at The Asylum Dance Club at 121 Center Street & 41 Free Street in Portland, Maine. We understand development plans call for a new 3-story building addition on the southeast corner of the existing building and a new single-story addition

286 Portland Road, Gray, ME 04039-9586 • P: (207) 657.2866 • F: (207) 657.2840 • E: infogray@swcole.com



on the northeast corner. We understand the 3-story addition will have a basement level which will extend approximately 5 feet below existing site grade to match the basement floor elevation of the existing building. Existing and proposed site features are shown on the "Exploration Location Plan" attached as Sheet 1.

#### 2.0 EXPLORATION AND TESTING

#### 2.1 Explorations

Ten test borings (B-101 through B-110) were made at the site on October 23, 2015 by a drilling company working under subcontract to S. W. Cole Engineering, Inc. (S.W.COLE). Two test pits (TP-101 and TP-102) were made at the site on October 23, 2015 by an excavating company working under subcontractor to S.W.COLE. The exploration locations were selected and established in the field by S.W.COLE based on measurements from existing site features. The approximate exploration locations are shown on the "Exploration Location Plan" attached as Sheet 1. Logs of the explorations are attached as Sheets 2 through 13. A key to the notes and symbols used on the logs is attached as Sheet 14.

Additionally, we obtained historical subsurface exploration data for the adjacent parking garage structure from our archives. A historical Exploration Location Plan and pertinent boring logs are attached as Appendix A

#### 2.2 Testing

The test borings were made using solid and hollow stem auger drilling techniques. Soil samples were obtained at the borings at 2 to 5 foot intervals using a split-spoon sampler and Standard Penetration Testing (SPT) methods. SPT blow counts are shown on the logs.

Soil samples obtained from the explorations were returned to our laboratory for further visual classification. Preliminary photoionization detector (PID) screening was performed on a sample of soil from B-103 noted to have a petroleum-like odor. PID results are noted on the log for B-103.



#### 3.0 SITE AND SUBSURFACE CONDITIONS

#### 3.1 Surficial

The site is relatively flat and generally slopes down from north to south, towards Free Street. The proposed 3-story building addition is currently occupied by paved parking and alley areas on the east side of the existing Asylum Dance Club building. The proposed 1-story addition is currently occupied by a raised concrete patio.

#### 3.2 Subsurface

#### 3.2.1 Soil and Bedrock

The explorations generally encountered a soils profile consisting of uncontrolled fill overlying a relic organic layer overlying native granular soils and glacial till. Not all the strata were encountered at each exploration; refer to the attached logs for more detailed subsurface information.

<u>Uncontrolled Fill and Relic Organics</u>: Underlying a surficial layer of asphalt, the explorations encountered up to 11 feet of uncontrolled fill consisting of very loose to medium dense sand with varying portions of silt, gravel, and debris (wood, brick and concrete rubble).

Relic foundations, walls, and slabs were penetrated at several borings. Boring B-109 encountered refusal on probable concrete at a depth of 9.8 feet.

An approximate 1.5 foot thick layer of black and dark brown silty sand with fibrous organics (relic organics) was encountered below the fill layer at boring B-101.

A petroleum-like odor was noted in the fill soil cuttings obtained from the augers at B-103. Ash was sporadically encountered within the uncontrolled fill.

<u>Native Granular Soils</u>: Underlying the uncontrolled fill, the explorations generally encountered a layer of loose to medium dense brown to gray sandy silt or sand with varying portions of silt and gravel. The native silts and sands were up to approximately 7 feet thick where encountered and penetrated at the explorations.



<u>Glacial Till</u>: Underlying the uncontrolled fill and native granular soils, the explorations encountered loose to medium dense glacial till consisting of brown, orange-brown, and gray sand with varying portions of silt and gravel.

<u>Bedrock</u>: The historical borings made for the adjacent parking garage structure encountered bedrock at depths 21.6 to 27.2 feet below pre-development ground surface. Bedrock was not encountered within the depths explored at the explorations made for the proposed building additions associated with The Asylum Dance Club.

#### 3.2.2 Existing Foundations

The existing foundations were exposed at two locations along walls adjoining the proposed 3-story addition. The attached test pit logs contain dimensional information of foundations, where exposed, as well as soil conditions observed. There was a layer of concrete backfill against the footings that terminated excavation to observe the footing bearing conditions.

#### 3.3 Groundwater

Wet to saturated soils were encountered at depths varying from about 9 to 12 feet. Groundwater likely becomes perched in the uncontrolled fills and on the relatively impervious silts and glacial till encountered at the explorations. Long term groundwater information is not available. It should be anticipated that seasonal groundwater levels will fluctuate, particularly in response to snowmelt, precipitation, and changes in site use.

#### 3.4 Frost and Seismic

The 100-year Air Freezing Index for the Portland, Maine area is about 1,407-Fahrenheit degree-days, which corresponds to a frost penetration depth on the order of 4.5 feet. Based on the subsurface findings, we interpret the site soils to correspond to Seismic Soil Site Class D according to 2012 IBC/ASCE 7.



#### 4.0 EVALUATION AND RECOMMENDATIONS

#### 4.1 General Findings

Based on the subsurface findings, the proposed construction appears feasible from a geotechnical standpoint but does present some challenges. The principle geotechnical considerations are as follows:

- The building addition footprint is underlain by a layer of uncontrolled fill and relic organics which extends as deep as 11 feet at the exploration locations. New footings for the 3-story building addition must penetrate the uncontrolled fill and relic organics. The uncontrolled fill may remain below the basement floor slab, as well as the proposed 1-story addition footings and slab, but must be densified with a vibratory compactor prior to casting foundations and floor slabs.
- Removal of the uncontrolled fills below the 3-story addition footings will require overexcavation below footing grade that will undermine existing foundations, sidewalks and utilities. Where overexcavation depths extend below the existing Asylum building foundations, we recommend underpinning pits backfilled with structural concrete to support existing and new foundations. We anticipate that shoring, such as sheetpiles or steel casing, may be necessary along Free Street to support the sidewalk and utilities.
- The existing uncontrolled fill and native soils are unsuitable for reuse as fill and backfill.
- Excavated soils and material must be properly handled and disposed of. A petroleum-like odor was noted in the auger cuttings at B-103. Ash was encountered within the uncontrolled fill. Environmental screening and characterization will be necessary for proper off-site disposal of environmentally impacted soils and excavated materials.



#### 4.2 Site and Subgrade Preparation

We recommend site preparation begin with the construction of an erosion control system to protect adjacent drainage ways and areas outside the construction limits. As much pavement should remain outside the construction areas as possible to lessen the potential for erosion and site disturbance.

Existing pavement must be removed from beneath the proposed building additions. Uncontrolled fill, relic organics, relic foundations, and utilities must be completely removed from beneath the proposed 3-story building footing until undisturbed native non-organic soils are encountered. Overexcavations backfilled with compacted Structural Fill should extend 1 foot laterally outward from edge of footing for every 1-foot of excavation depth (1H:1V bearing splay). Overexcavations backfilled with structural concrete should be oversized considering a 0.5H:1V bearing splay. Where overexcavation will undermine existing footings, we recommend underpinning pits backfilled with structural concrete to support the existing and new footings.

It is anticipated that the proposed basement slab and 1-story building addition subgrades will consist of uncontrolled fill. The uncontrolled fill subgrade should be densified with 3 to 5 passes of a vibratory plate compactor weighing at least 600 pounds. Any voids in the uncontrolled fill subgrade must be choked with crushed stone prior to densification. Areas which become soft or yielding during densification should be overexcavated and replaced with compacted Structural Fill. Any relic foundations should be removed to at least 2 feet below subgrade and backfilled with compacted Structural Fill.

#### 4.3 Excavation and Dewatering

Excavation work will generally encounter existing pavement, uncontrolled fill, and native granular soils. Care must be exercised during construction to limit disturbance of the bearing soils. Earthwork and grading activities should ideally occur during drier, non-freezing months of Spring, Summer and Fall. Final cuts to subgrade in the native soils should be performed with a smooth-edged bucket to reduce strength loss associated with soil disturbance.

Sumping and pumping dewatering techniques should be adequate to control groundwater in excavations. Controlling the water levels to at least one foot below planned excavation depths will help stabilize subgrades during construction.



Excavations must be properly shored or sloped in accordance with OSHA regulations to prevent sloughing and caving of the sidewalls during construction. Underpinning of the adjoining building will be required and shoring along Free Street is recommended. Shoring and underpinning contractors should anticipate the need to penetrate rubble fills, as well as relic foundations and slabs. The design and planning of excavations, excavation support systems, and dewatering is the responsibility of the contractor.

It should be noted that a petroleum-like odor was observed on auger cuttings at B-103 and ash was encountered within the uncontrolled fills. Environmentally impacted soils and ash will likely be encountered during construction. Environmental screening and characterization will be necessary for proper handling and disposal of impacted soils.

#### 4.4 Foundations

Based on the subsurface findings, the proposed building may be supported on conventional spread footings. For foundations bearing on properly prepared subgrades, we recommend the following geotechnical parameters for design consideration:

Geotechnical Parameters for Spread Footings and Foundation Walls					
Design Frost Depth	4.5 feet				
Net Allowable Bearing Pressure (3-story addition)	2.0 ksf				
Net Allowable Bearing Pressure (1-story addition)	1.0 ksf or less				
Base Friction Factor	0.35				
Total Unit Weight of Backfill	130 pcf				
Internal Friction Angle of Backfill	30°				
At-Rest Lateral Earth Pressure Coefficient	0.5				
Active Lateral Earth Pressure Coefficient	0.3				
Seismic Soil Site Class (2012 IBC/ASCE 7)	D				

#### 4.5 Foundation Drainage

We recommend an underdrain system be installed on the outside edge of perimeter footings. The underdrain pipe should consist of 4-inch diameter, slotted HDPE pipe bedded in Underdrain Sand. The underdrain pipe must have a positive gravity outlet protected from freezing, clogging and backflow. Surface grades should be sloped away from the building for positive surface water drainage. General underdrain details are illustrated on Sheet 15.



#### 4.6 Slab-On-Grade

On-grade floor slabs in heated areas may be designed using a subgrade reaction modulus of 100 pci (pounds per cubic inch) provided the slab is underlain by at least 8-inches of compacted Structural Fill placed over properly prepared subgrades. The structural engineer or concrete consultant must design steel reinforcing and joint spacing appropriate to slab thickness and function.

We recommend a sub-slab vapor retarder particularly in areas of the building where the concrete slab will be covered with an impermeable surface treatment or floor covering that may be sensitive to moisture vapors. The vapor retarder must have a permeance that is less than the floor cover or surface treatment that is applied to the slab. The vapor retarder must have sufficient durability to withstand direct contact with the sub-slab base material and construction activity. The vapor retarder material should be placed according to the manufacturer's recommended method, including the taping and lapping of all joints and wall connections. The architect and/or flooring consultant should select the vapor retarder products compatible with flooring and adhesive materials.

The floor slab should be appropriately cured using moisture retention methods after casting. Typical floor slab curing methods should be used for at least 7 days. The architect or flooring consultant should assign curing methods consistent with current applicable American Concrete Institute (ACI) procedures with consideration of curing method compatibility to proposed surface treatments, flooring and adhesive materials.

#### 4.7 Entrance Slabs and Sidewalks

Entrance slabs and sidewalks adjacent to the building must be designed to reduce the effects of differential frost action between adjacent pavement, doorways, and entrances. We recommend non-frost susceptible Structural Fill be provided to a depth of at least 4.5 feet below the top of entrance slabs. This thickness of Structural Fill should extend the full width of the entrance slab and outward at least 4.5 feet, thereafter transitioning up to the bottom of the adjacent sidewalk or pavement gravels at a 3H:1V or flatter slope. General details of this frost transition zone are attached as Sheet 15.

#### 4.8 Backfill and Compaction

The granular portion of uncontrolled fill encountered in the test pits appears suitable for reuse as Granular Borrow. Uncontrolled fills with debris are unsuitable for reuse in



building and paved areas, but may be reused in landscape areas. For building and paved areas, we recommend the following fill and backfill materials:

<u>Structural Fill</u>: Backfill for overexcavations, backfill for foundations, slab base material and material below exterior entrances and sidewalks should be clean, non-frost susceptible sand and gravel meeting the gradation requirements for Structural Fill as given below:

Structural Fill						
Sieve Size	Percent Finer by Weight					
4 inch	100					
3 inch	90 to 100					
1¼ inch	25 to 90					
#40	0 to 30					
#200	0 to 5					

<u>Crushed Stone</u>: Crushed Stone used as choke stone over uncontrolled fill should meet the requirements of 2014 MaineDOT Standard Specification 703.22 Underdrain Aggregate Type C. A nominally sized <sup>3</sup>/<sub>4</sub>-inch washed crushed stone usually meets this requirement.

<u>Underdrain Sand</u>: Sand around slotted foundation underdrain pipes should meet the requirements of 2014 MaineDOT Standard Specification 703.22 Underdrain Aggregate Type B.

<u>Concrete Backfill</u>: Concrete backfill for overexcavations below footings should have a 28 day compressive strength of 2,500 psi.

<u>Placement and Compaction</u>: Fill should be placed in horizontal lifts and compacted such that the desired density is achieved throughout the lift thickness with 3 to 5 passes of the compaction equipment. Loose lift thicknesses for grading, fill and backfill activities should not exceed 12 inches. We recommend that fill and backfill in building and paved areas be compacted to at least 95 percent of its maximum dry density as determined by ASTM D-1557. Crushed Stone should be compacted with 3 to 5 passes of a vibratory plate compactor having a static weight of at least 600 pounds.



#### **4.9 Weather Considerations**

Construction activity should be limited during wet and freezing weather and the site soils may require drying before construction activities may continue. The contractor should anticipate the need for water to temper fills in order to facilitate compaction during dry weather. If construction takes place during cold weather, subgrades, foundations and floor slabs must be protected during freezing conditions. Concrete and fill must not be placed on frozen soil; and once placed, the concrete and soil beneath the structure must be protected from freezing.

#### 4.10 Design Review and Construction Testing

S.W.COLE should be retained to review the construction documents to determine that our foundation and earthwork recommendations have been properly interpreted and implemented.

A soils and concrete testing program should be implemented during construction to observe compliance with the design concepts, plans, and specifications. S.W.COLE is available to observe footing and slab bearing surfaces, underpinning and earthwork activities, as well as testing services for soils, concrete, masonry, asphalt, steel and spray-applied fireproofing construction materials.

#### 5.0 CLOSURE

It has been a pleasure to be of assistance to you with this phase of your project. We look forward to working with you during the construction phase of the project.

Sincerely,

#### S. W. Cole Engineering, Inc.

Evan M. Walker, P.E. Geotechnical Engineer

Timothy J. Boyce, P.E. Senior Geotechnical Engineer

EMW:tjb

#### Attachment A Limitations

This report has been prepared for the exclusive use of The Asylum Dance Club c/o WBRC Architects & Engineers for specific application to the proposed Renovation & Expansion at The Asylum Dance Club located at 121 Center Street & 41 Free Street in Portland, Maine. S. W. Cole Engineering, Inc. (S.W.COLE) has endeavored to conduct our services in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

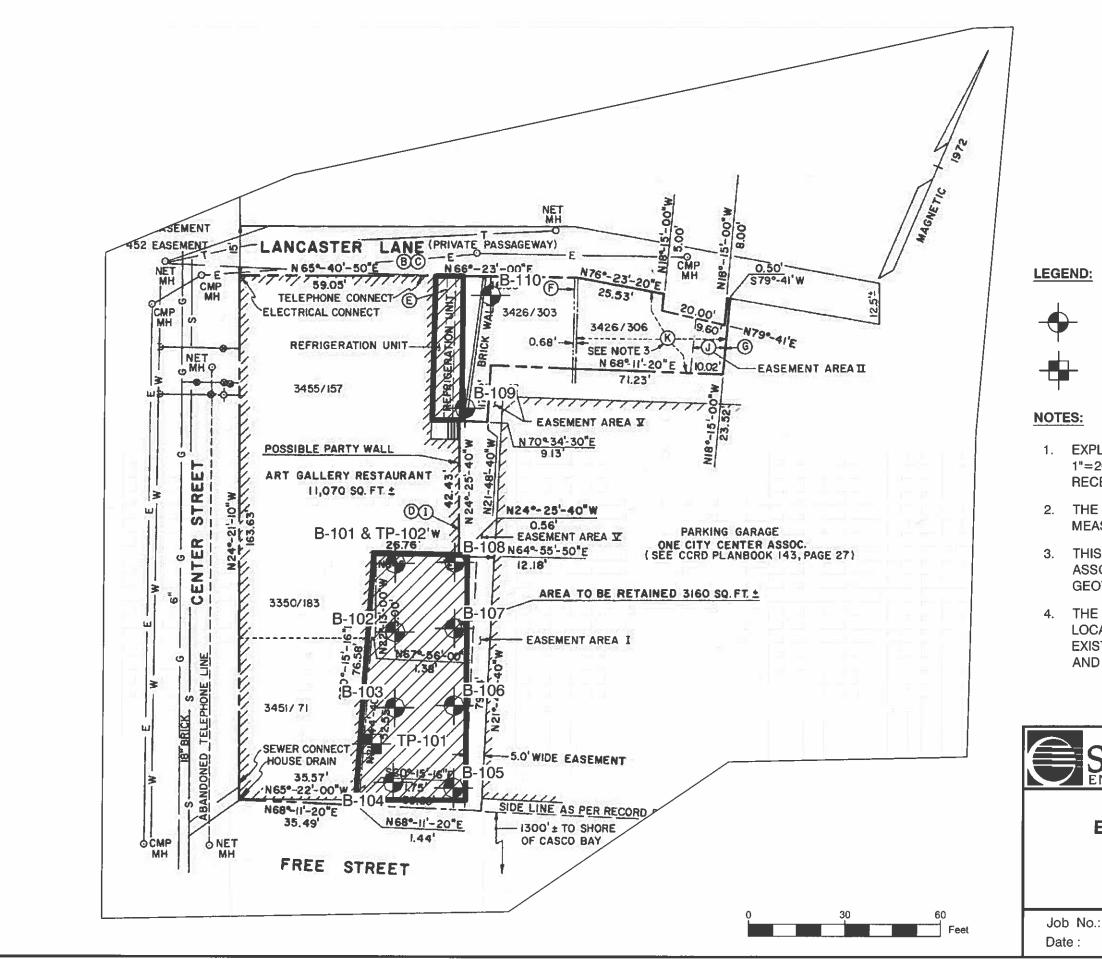
The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

S.W.COLE's scope of services has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S.W.COLE should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S.W.COLE.



#### APPROXIMATE BORING LOCATION

#### APPROXIMATE TEST PIT LOCATION

1. EXPLORATION LOCATION PLAN WAS PREPARED FROM A 1"=20' SCALE PLAN OF THE SITE PROVIDED BY WBRC, RECEIVED 10/21/2015.

2. THE EXPLORATIONS WERE LOCATED IN THE FIELD BY MEASUREMENTS FROM EXISTING SITE FEATURES.

3. THIS PLAN SHOULD BE USED IN CONJUNCTION WITH THE ASSOCIATED S. W. COLE ENGINEERING, INC. GEOTECHNICAL REPORT.

4. THE PURPOSE OF THIS PLAN IS ONLY TO DEPICT THE LOCATION OF THE EXPLORATIONS IN RELATION TO THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION AND IS NOT TO BE USED FOR CONSTRUCTION.

#### W .COLE ENGINEERING, INC.

THE ASYLUM DANCE CLUB

**EXPLORATION LOCATION PLAN** 

**PROPOSED ADDITION 41 FREE STREET** PORTLAND, MAINE

o.:	15-1166	Scale:	1" = 30'±
	11/20/2015	Sheet:	1



SSA

SS

PROPOSED RENOVATION AND EXPANSION

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

4" O.D.

1 3/8"

## **BORING LOG**

BOB MARCOUX

DRILLER:

30"

BORING NO .:	B-101
SHEET:	1 OF 1
PROJECT NO .:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	
SWC REP.:	E. WALKER

SWC	REP.:

WATER LEVEL INFORMATION

SOILS SATURATED BELOW 9' +/-

SAMPLER:

PROJECT:

LOCATION:

DRILLING FIRM:

CLIENT :

CASING:

CASING BLOWS		SAN	IPLE		SAMF	PLER BL	OWS F	PER 6"		
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	EPTH STRATA & TEST DATA
				0.001					2"	ASPHALT
									-	
									-	BROWN SAND, TRACE SILT, TRACE GRAVEL WITH BRICK AND CONCRETE RUBBLE (FILL)
									-	
	1D	24"	16"	11.0'	8	5	3	2	<u>9.2'</u> 10.5	BLACK AND DARK BROWN SILTY SAND WITH FIBROUS ORGANICS ~ LOOSE ~
		24	10	11.0	0	5	5	2	10.5	GRAY SANDY SILT ~ LOOSE ~
									-	BOTTOM OF EXPLORATION @ 11.0
									-	
									-	
									-	
									-	
									-	
									1	
SAMPLES: SOIL CLASSIFIED BY:		REMAR	KS:							
	17.000									
D = SPL C = 3" S				Х		LLER - L TECH			STRATIFICATION LINES REPRESENT THE 2	
U = 3.5"						ORATO				AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-101
L									1	



HSA

SS

PROPOSED RENOVATION AND EXPANSION

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

2 1/4"

1 3/8"

## **BORING LOG**

BOB MARCOUX

DRILLER:

30"

BORING NO .:	B-102
SHEET:	1 OF 1
PROJECT NO .:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	

E. WALKER

SWC	REP.:
-----	-------

WATER LEVEL INFORMATION

SOILS SATURATED BELOW 9' +/-

SAMPLER:

PROJECT:

LOCATION:

DRILLING FIRM:

CLIENT :

CASING:

CASING BLOWS		SAN	<b>/IPLE</b>		SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEFIN	STRATA & TEST DATA
									1.5"	ASPHALT
	40	24"	8"	4.01	2	2	2	4		BROWN MEDIUM SAND, TRACE SILT, TRACE GRAVEL (FILL)
	1D	24	8	4.0'	2	3	2	1	-	~ LOOSE ~
	2D	24"	12"	6.0'	2	5	7	6	5.5'	~ 20032 ~
							-	-		BRICK AND CONCRETE RUBBLE (FILL)
									8.0'	~ MEDIUM DENSE ~
										DARK GRAY-BROWN GRAVELLY SILT SAND WITH WOOD AND BRICK (FILL)
									10.0'	~ LOOSE ~
	3D	24"	14"	11.0'	4	3	4	7	-	
									-	BROWN TO GRAY-BROWN SILT SAND, SOME GRAVEL ~ LOOSE TO MEDIUM DENSE ~
									14.0'	~ LOOSE TO MEDIUM DENSE ~
										GRAY SILTY GRAVELLY SAND (GLACIAL TILL)
	4D	24"	14"	16.0'	10	8	6	4		~ MEDIUM DENSE ~
									-	BOTTOM OF EXPLORATION @ 16.0
									-	
									-	
									-	
									-	
									-	
									-	
									-	
SAMPLI	ES:	1	1	SOIL C	LASSI	FIED B	Y:	1	REMAR	KS:
										$\frown$
D = SPL						LLER -				STRATIFICATION LINES REPRESENT THE (3)
C = 3" S				Х						APPROXIMATE BOUNDARY BETWEEN SOIL TYPES
U = 3.5"	SHELL				LAE	ORATO		31		AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-102



SSA

PROPOSED RENOVATION AND EXPANSION

4" O.D.

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

## **BORING LOG**

BOB MARCOUX

DRILLER:

B-103 BORING NO .: SHEET: 1 OF 1 PROJECT NO .: 15-1166 DATE START: 11/13/2015 DATE FINISH: 11/13/2015 ELEVATION: E. WALKER

SWC	REP.:

WATER LEVEL INFORMATION

CASING: SAMPLER:

PROJECT:

LOCATION:

DRILLING FIRM:

CLIENT :

CASING BLOWS		SAN	<b>NPLE</b>		SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	SIRATA & TEST DATA
									1.5"	ASPHALT
									_	BROWN SAND, SOME SILT AND GRAVEL (FILL)
										<< PETROLEUM ODOR NOTED>>
									-	PID READING 34 PPM ON AUGER CUTTINGS @ 5' +/-
									8.5'	BRICK CONCRETE RUBBLE 1.5' - 8.5'
									<b>[</b>	PROBABLE GRANULAR SOILS
									-	
									-	BOTTOM OF EXPLORATION @ 9.0'
										NOTE: NO SAMPLING - AUGER PROBE
									-	NOTE. NO SAMPEING "AUGENTROBE
									-	
									-	
									_	
									-	
									-	
									-	
									-	
									-	
									1	
									-	
									1	
	-									
SAMPLI	ES:			SOIL C	LASSI	FIED B	Y:		REMAR	KS:
D = SPL				V			VISUAI			STRATIFICATION LINES REPRESENT THE
C = 3" S U = 3.5"				Х			I VISI DRY TE			APPROXIMATE BOUNDARY BETWEEN SOIL TYPES
								51	1	AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-103



TYPF

HSA

SS

2 1/4"

1 3/8"

## **BORING LOG**

BOB MARCOUX

BORING NO .:	B-104
SHEET:	1 OF 1
PROJECT NO.:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	
SWC REP.:	E. WALKER

SVV		
	J I V	

WATER LEVEL INFORMATION

SOILS SATURATED BELOW 9' +/-

SAMPLER: CORE BARREL:

CASING:

PROJECT: CLIENT :

LOCATION:

DRILLING FIRM:

CASING SAMPLE SAMPLER BLOWS PER 6" BLOWS **STRATA & TEST DATA** DEPTH PER DEPTH NO. PEN. REC. 0-6 6-12 12-18 18-24 FOOT @ BOT ASPHALT 1.5" 2.0' BROWN SAND, TRACE SILT (FILL) 1D 24" 4.0' 1-12" 6" 1 1 BRICK AND CONCRETE RUBBLE WITH SOME BROWN SILTY SAND (FILL) 2D 24" 6' 6.0' 1 1 10 11 ~ VERY LOOSE ~ 8.0' BROWN GRAVELLY SILT AND SAND 9.5' ~ MEDIUM DENSE ~ 3D 24" 18" 11.0' 4 6 6 7 GRAY GRAVELLY SILT AND SAND (GLACIAL TILL) 4D 24" 14" 16.0' 9 9 8 10 ~ MEDIUM DENSE ~ 20.0' 5D 24" 14" 21.0 32 30 ORANGE-BROWN GRAVELLY SILT AND SAND (GLACIAL TILL) ~ VERY DENSE ~ 16 27 BOTTOM OF EXPLORATION @ 21.0' SOIL CLASSIFIED BY: REMARKS: SAMPLES: 5 D = SPLIT SPOON **DRILLER - VISUALLY** STRATIFICATION LINES REPRESENT THE C = 3" SHELBY TUBE Х SOIL TECH. - VISUALLY APPROXIMATE BOUNDARY BETWEEN SOIL TYPES U = 3.5" SHELBY TUBE LABORATORY TEST AND THE TRANSITION MAY BE GRADUAL. BORING NO .: B-104

PROPOSED RENOVATION AND EXPANSIO	N
THE ASYLUM DANCE CLUB	
121 CENTER STREET & 41 FREE STREET,	PORTLAND, MAINE
S.W.COLE EXPLORATIONS, LLC	DRILLER:

30"

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.



## **BORING LOG**

BORING NO .:	B-105
SHEET:	1 OF 1
PROJECT NO .:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	

PROJECT:	PROPOSED RENOVATION AND EXPANSION							
CLIENT :	THE ASYLUM DANCE CLUB							
LOCATION:	121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE							
DRILLING FIRM:	S.W.COLE EX	<b>VPLORATION</b>	IS, LLC	DRILLER:	BOB MARCOUX	_		
	TYPE	SIZE I.D.	HAMMER WT	HAMMER FALL				
CASING:	HSA	2 1/4"						
SAMPLER:	SS	1 3/8"	140 LBS.	30"				
	-							

S CORE BARREL:

CASING SAMPLE SAMPLER BLOWS PER 6" BLOWS **STRATA & TEST DATA** DEPTH PER DEPTH NO. PEN. REC. 0-6 6-12 12-18 18-24 FOOT @ BOT ASPHALT 1.5" 1.0' BROWN SAND, SOME GRAVEL, SOME SILT (FILL) GRAY-BROWN AND BLACK SILTY SAND, SOME GRAVEL WITH BRICK AND CONCRETE RUBBLE (FILL) 1D 24" 4" 6.0' 1 3 5 4 ~ LOOSE ~ 9.5' 2D 24" 16" 11.0' 7 7 7 8 GRAY SILT AND SAND, SOME GRAVEL ~ MEDIUM DENSE ~ 14.0' GRAY SILTY SAND. SOME GRAVEL 3D 24" 7 16" 16.0' 4 5 6 ~ MEDIUM DENSE ~ BOTTOM OF EXPLORATION @ 16.0' SAMPLES: SOIL CLASSIFIED BY: REMARKS: 6 D = SPLIT SPOON DRILLER - VISUALLY STRATIFICATION LINES REPRESENT THE C = 3" SHELBY TUBE Х SOIL TECH. - VISUALLY APPROXIMATE BOUNDARY BETWEEN SOIL TYPES U = 3.5" SHELBY TUBE LABORATORY TEST AND THE TRANSITION MAY BE GRADUAL. BORING NO .: B-105

SWC REP.: WATER LEVEL INFORMATION

SOILS SATURATED BELOW 10'



SSA

PROPOSED RENOVATION AND EXPANSION

4" O.D.

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

## **BORING LOG**

BOB MARCOUX

DRILLER:

 BORING NO.:
 B-106

 SHEET:
 1 OF 1

 PROJECT NO.:
 15-1166

 DATE START:
 11/13/2015

 DATE FINISH:
 11/13/2015

 ELEVATION:
 SWC REP.:

3		г	⊏.	VVF
WATER	LEVEL	INFOR	MATI	ON

CASING:

SAMPLER:

PROJECT:

LOCATION:

DRILLING FIRM:

CLIENT :

CASING BLOWS					SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPIN	STRATA & TEST DATA
1001				© DOT					1.5" +/-	ASPHALT PAVEMENT
										BROWN SAND, SOME SILT AND GRAVEL (FILL) CONCRETE/BRICK RUBBLE 2.5' - 5' +/-
									8.5'	RUBBLE OR POSSIBLE CONCRETE SLAB 8' - 8.5' +/-
									/	PROBABLE GRANULAR SOILS
										BOTTOM OF EXPLORATION @ 9.0'
										NOTE: NO SAMPLING - AUGER PROBE
SAMPLE				SOIL C	LASSII	FIED B'	Y:		REMAR	RKS:
C = 3" S	D = SPLIT SPOON C = 3" SHELBY TUBE U = 3.5" SHELBY TUBE		SHELBY TUBE X SOIL TECH VISUALLY				I VISU	JALLY		STRATIFICATION LINES REPRESENT THE       7         APPROXIMATE BOUNDARY BETWEEN SOIL TYPES       7         AND THE TRANSITION MAY BE GRADUAL.       BORING NO.:         B-106



HSA

SS

PROPOSED RENOVATION AND EXPANSION

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

2 1/4"

1 3/8"

## **BORING LOG**

BOB MARCOUX

DRILLER:

30"

BORING NO .:	B-107
SHEET:	1 OF 1
PROJECT NO .:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	

E. WALKER

SWC	REP.:

WATER LEVEL INFORMATION

SOILS SATURATED BELOW 9' +/-

SAMPLER:

PROJECT:

LOCATION:

CLIENT :

CASING:

CORE BARREL:

DRILLING FIRM:

CASING BLOWS				'ER 6"						
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	STRATA & TEST DATA
FUUI				@ BUT					1.5	ASPHALT
										BROWN SAND, SOME GRAVEL, TRACE SILT (FILL)
									3.0'	~ MEDIUM DENSE ~
	1D	24"	16"	4.0'	5	4	8	35		
	2D	24"	16"	5.4'	28	32	50-5"			CONCRETE AND BRICK RUBBLE WITH OCCASIONAL LAYERS OF BROWN SILTY SAND
	20	27	10	5.4	20	52	30-3			(FILL)
										( /
									8.5'	
										BROWN SILT AND SAND, TRACE GRAVEL
	3D	24"	18"	11.0'	6	6	11	11	10.8'	~ MEDIUM DENSE ~
										GRAY SILTY SAND, SOME GRAVEL (GLACIAL TILL)
										~ MEDIUM DENSE ~
	4D	24"	18"	16.0'	6	8	11	17		
										BOTTOM OF EXPLORATION @ 16.0'
SAMPL	SAMPLES: SOIL CLASSIFIED BY:				REMAR	KS:				
	_0.				_,		••			$\sim$
D = SPL	D = SPLIT SPOON DRILLER - VISUALLY			LY		STRATIFICATION LINES REPRESENT THE (8)				
C = 3" S				Х		L TECH				APPROXIMATE BOUNDARY BETWEEN SOIL TYPES
U = 3.5" SHELBY TUBE		LABORATORY TEST					AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-107			



TYPF

HSA

SS

PROPOSED RENOVATION AND EXPANSION

2 1/4"

1 3/8"

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

## **BORING LOG**

BOB MARCOUX

DRILLER:

30"

BORING NO .:	B-108
SHEET:	1 OF 1
PROJECT NO .:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	

SWC REP.:

SOILS WET BELOW 12' +/-

SOILS SATURATED BELOW 14' +/-

SAMPLER:

PROJECT:

LOCATION:

DRILLING FIRM:

CLIENT :

CASING:

CORE BARREL:

CASING SAMPLE SAMPLER BLOWS PER 6" BLOWS **STRATA & TEST DATA** DEPTH PER DEPTH NO. PEN. REC. 0-6 6-12 12-18 18-24 FOOT @ BOT ASPHALT 2" BROWN GRAVELLY SAND, SOME SILT, WITH COBBLES 3.0' 1D 9" 6" 4.8' 50-3" BLACK SILTY SAND, SOME GRAVEL, 17 WITH ASH AND BRICK/CONCRETE RUBBLE (FILL) 2D 4" 4" 9.3' 50-4" 11.0' GRAY SILT AND SAND, SOME GRAVEL ~ LOOSE ~ 3D 24" 18" 14.0' 4 3 3 5 14.0' 4D 24" 20" 16.0' 6 10 17 17 GRAY SILTY SAND, SOME GRAVEL, WITH OCCASIONAL COBBLES (GLACIAL TILL) ~ MEDIUM DENSE ~ 5D 24" 18" 21.0 14 8 8 14 BOTTOM OF EXPLORATION @ 21.0' SAMPLES: SOIL CLASSIFIED BY: REMARKS: 9 D = SPLIT SPOON DRILLER - VISUALLY STRATIFICATION LINES REPRESENT THE C = 3" SHELBY TUBE Х SOIL TECH. - VISUALLY APPROXIMATE BOUNDARY BETWEEN SOIL TYPES U = 3.5" SHELBY TUBE LABORATORY TEST AND THE TRANSITION MAY BE GRADUAL. BORING NO .: B-108

E. WALKER

WATER LEVEL INFORMATION



## **BORING LOG**

BORING NO .:	B-109
SHEET:	1 OF 1
PROJECT NO .:	15-1166
DATE START:	11/13/2015
DATE FINISH:	11/13/2015
ELEVATION:	

PROJECT:	PROPOSED RENOVATION AND EXPANSION						
CLIENT :	THE ASYLUM		_				
LOCATION:	121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE						
DRILLING FIRM:	S.W.COLE EX	PLORATION	IS, LLC	DRILLER:	BOB MARCOUX		
	TYPE	SIZE I.D.	HAMMER WT	HAMMER FALL			
CASING:	HSA	2 1/4"					
SAMPLER:	SS	1 3/8"	140 LBS.	30"			

S CORE BARREL:

CASING SAMPLE SAMPLER BLOWS PER 6" BLOWS **STRATA & TEST DATA** DEPTH PER DEPTH NO. PEN. REC. 0-6 6-12 12-18 18-24 FOOT @ BOT ASPHALT 2" 2.0' BROWN SAND SOME GRAVEL, SOME SILT (FILL) BRICK AND CONCRETE RUBBLE (FILL) 1D 24" 0" 6.0' 4 5 7 5 ~ MEDIUM DENSE ~ 2D 24" 10" 8.0' 2 4 6 31 3D 5" 5" 9.4' 50-5" REFUSAL @ 9.8' PROBABLE CONCRETE SOIL CLASSIFIED BY: SAMPLES: REMARKS: 2 D = SPLIT SPOON DRILLER - VISUALLY STRATIFICATION LINES REPRESENT THE C = 3" SHELBY TUBE Х SOIL TECH. - VISUALLY APPROXIMATE BOUNDARY BETWEEN SOIL TYPES U = 3.5" SHELBY TUBE LABORATORY TEST AND THE TRANSITION MAY BE GRADUAL. BORING NO .: B-109

E. WALKER

SWC REP.: WATER LEVEL INFORMATION

NO FREE WATER OBSERVED



HSA

SS

PROPOSED RENOVATION AND EXPANSION

121 CENTER STREET & 41 FREE STREET, PORTLAND, MAINE

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.

THE ASYLUM DANCE CLUB

S.W.COLE EXPLORATIONS, LLC

2 1/4"

1 3/8"

## **BORING LOG**

BOB MARCOUX

DRILLER:

30"

 BORING NO.:
 B-110

 SHEET:
 1 OF 1

 PROJECT NO.:
 15-1166

 DATE START:
 11/13/2015

 DATE FINISH:
 11/13/2015

 ELEVATION:
 SWC REP.:

WATER LEVEL INFORMATION

CASING: SAMPLER:

PROJECT:

LOCATION:

DRILLING FIRM:

CLIENT :

CASING BLOWS		SAN	/IPLE		SAMPLER BLOWS PER 6"				DEDTU	STRATA & TEST DATA	
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	SIRATA & TEST DATA	
									2 1/4"	ASPHALT PAVEMENT	
										BROWN SAND & GRAVEL TRACE SILT WITH BRICK (FILL)	
										~ MEDIUM DENSE ~	
	1D	24"	9"	6.0'	6	5	5	7	6'		
										OLIVE BROWN SANDY SILT WITH TAN-OXIDE FINE SAND PARTINGS	
	2D	24"	15"	8.0'	9	7	6	9		$\sim$ STIFF $\sim$ q <sub>P</sub> = 4.5 ksf	
	-								9'		
		o ("				10		10		BROWN SILTY SAND SOME GRAVEL	
	3D	24"	17"	11.0'	5	10	11	16		~ MEDIUM DENSE ~	
									13'		
									10	GRAY SILTY SAND (ABLATION TILL)	
										~ LOOSE ~	
	4D	24"	17"	16.0'	1	2	2	5			
										BOTTOM OF EXPLORATION @ 16.0	
	-										
SAMPLES: SOIL CLASSIFIED BY:					FIED B	Y:	1	REMAR	IKS:		
D = SPL	IT SPC	DON			DRI	LLER -	VISUAI	LLY		STRATIFICATION LINES REPRESENT THE	
C = 3" S				Х			I VISI			APPROXIMATE BOUNDARY BETWEEN SOIL TYPES	
		LABORATORY TEST					AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-110				



## **TEST PIT LOG**

CLIENT/PROJECT: THE ASYLUM DANCE CLUB / PROPOSED RENOVATIONS & ADDITIONS LOCATION: 41 FREE STREET, PORTLAND, MAINE

PROJECT NO. 15-1166

		TEST PIT TP-101	
	DATE:	11/13/15 SURFACE ELEVATION: LO	OCATION: SEE SHEET 1
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO. DEPTH	(FT)	STRATOW DESCRIPTION	
		TOP OF FNDN WALL	
		GROUND SURFACE	
		2" ASPHALT PAVEMENT 6" CRUSHED STONE	
		7' - 6 1/2" 4' - 8" TAN SAND, SOME GRAVEL	
		(BACKFILL) RELIC CONC	
		FNDN	
		6" WALL	
		CONC FNDN WALL 10" CONCRETE FILL	
		AND FOOTING	
CC	OMPLETI	ON DEPTH:5'-6" DEPTH TO WATER: NO FREI	E GROUNDWATER

12



## **TEST PIT LOG**

CLIENT/PROJECT: THE ASYLUM DANCE CLUB / PROPOSED RENOVATIONS & ADDITIONS LOCATION: 41 FREE STREET, PORTLAND, MAINE

PROJECT NO. 15-1166

DATE: 11/13/15       SURFACE ELEVATION: LOCATION: SEE S         SAMPLE       DEPTH       CFT)       STRATUM DESCRIPTION       TEST RESUL         NO.       DEPTH       (FT)       TOP OF FNDN WALL       Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" Imag	HEET 1 . <b>TS</b>
NO.     DEPTH     (FT)     STRATUM DESCRIPTION     TEST RESUL	.TS
NO.     DEPTH     (FT)     STRATUM DESCRIPTION     TEST RESUL	.TS
NO. DEPTH (")	
TOP OF FNDN WALL	
GROUND SURFACE GROUND SURFACE 3' ASPHALT PAVEMENT 8' GRAVELLY SAND (FILL) 8' 3' 4' - 8' TAN SAND, SOME GRAVEL (BACKFILL) CONC FNDN WALL CONC FNDN WALL AND FOOTING ?? CONCRETE FILL SUBJECT	
COMPLETION DEPTH: <u>4'-8"</u> DEPTH TO WATER: <u>NO FREE GROUNDWATER</u>	

13



• Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

#### KEY TO NOTES & SYMBOLS Test Boring and Test Pit Explorations

All stratification lines represent the approximate boundary between soil types and the transition may be gradual.

#### Key to Symbols Used:

- w water content, percent (dry weight basis)
- qu unconfined compressive strength, kips/sq. ft. laboratory test
- S<sub>v</sub> field vane shear strength, kips/sq. ft.
- L<sub>v</sub> lab vane shear strength, kips/sq. ft.
- q<sub>p</sub> unconfined compressive strength, kips/sq. ft. pocket penetrometer test
- O organic content, percent (dry weight basis)
- W<sub>L</sub> liquid limit Atterberg test
- W<sub>P</sub> plastic limit Atterberg test
- WOH advance by weight of hammer
- WOM advance by weight of man
- WOR advance by weight of rods
- HYD advance by force of hydraulic piston on drill
- RQD Rock Quality Designator an index of the quality of a rock mass.
- $\gamma_T$  total soil weight
- $\gamma_{\rm B}$  buoyant soil weight

#### Description of Proportions:

#### **Description of Stratified Soils**

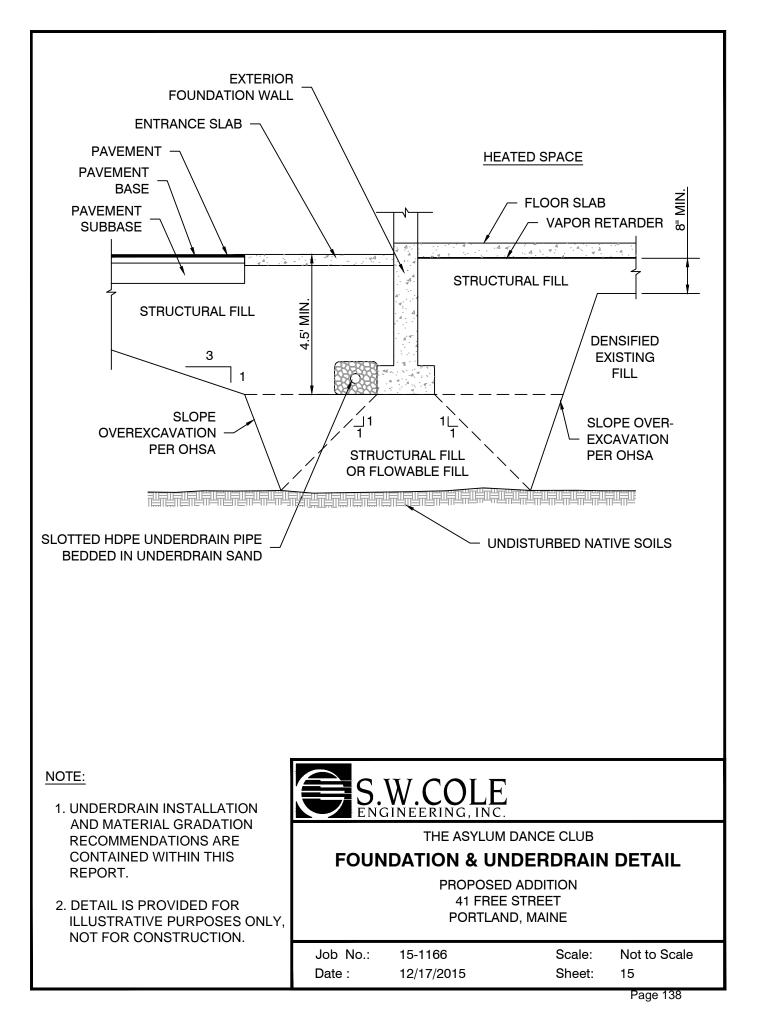
		Parting:	0 to 1/16" thickness
Trace:	0 to 5%	Seam:	1/16" to 1/2" thickness
Some:	5 to 12%	Layer:	½" to 12" thickness
"Y"	12 to 35%	Varved:	Alternating seams or layers
And	35+%	Occasional:	one or less per foot of thickness
With	Undifferentiated	Frequent:	more than one per foot of thickness

**REFUSAL:** <u>Test Boring Explorations</u> - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

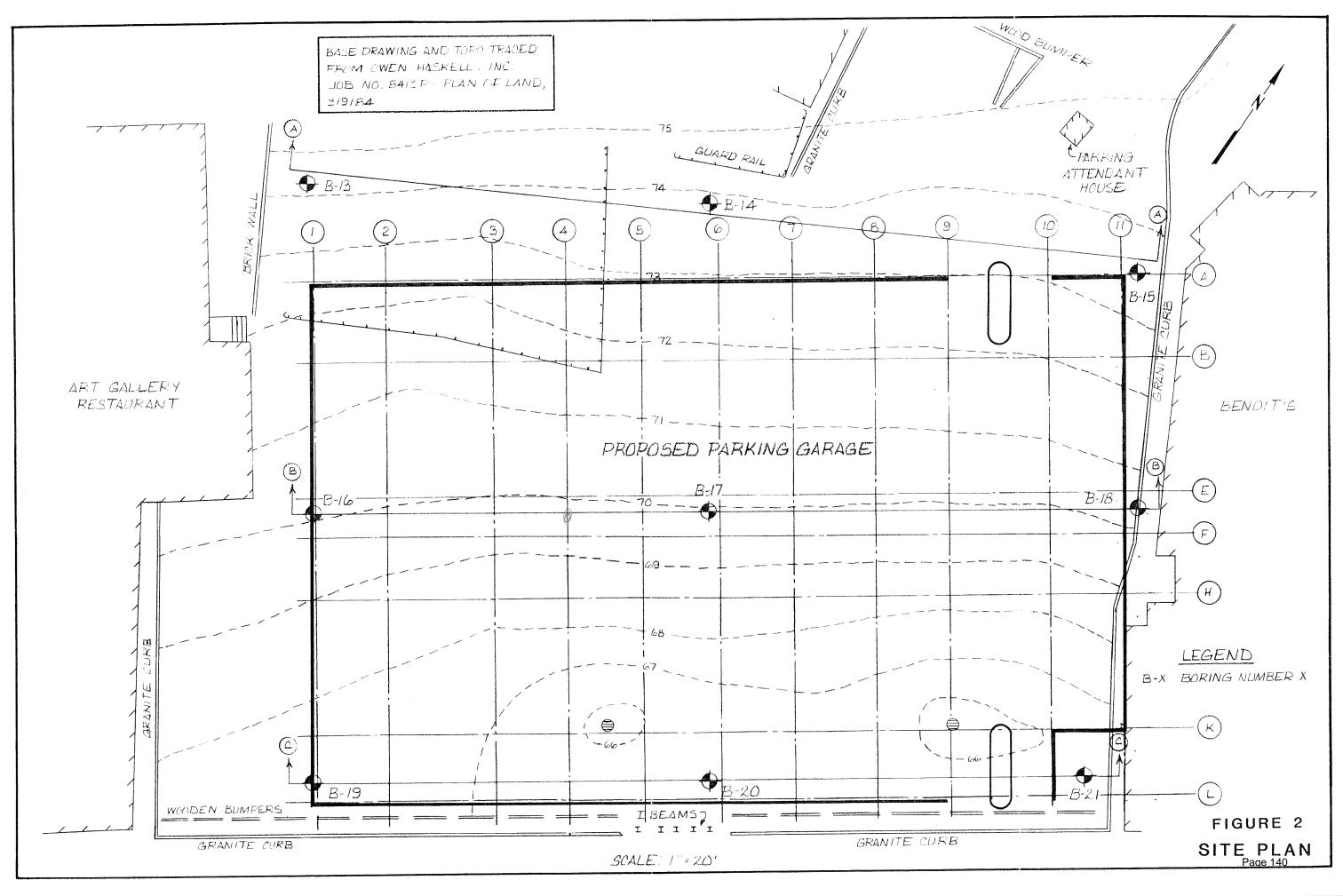
**REFUSAL:** <u>Test Pit Explorations</u> - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.





## **APPENDIX A**



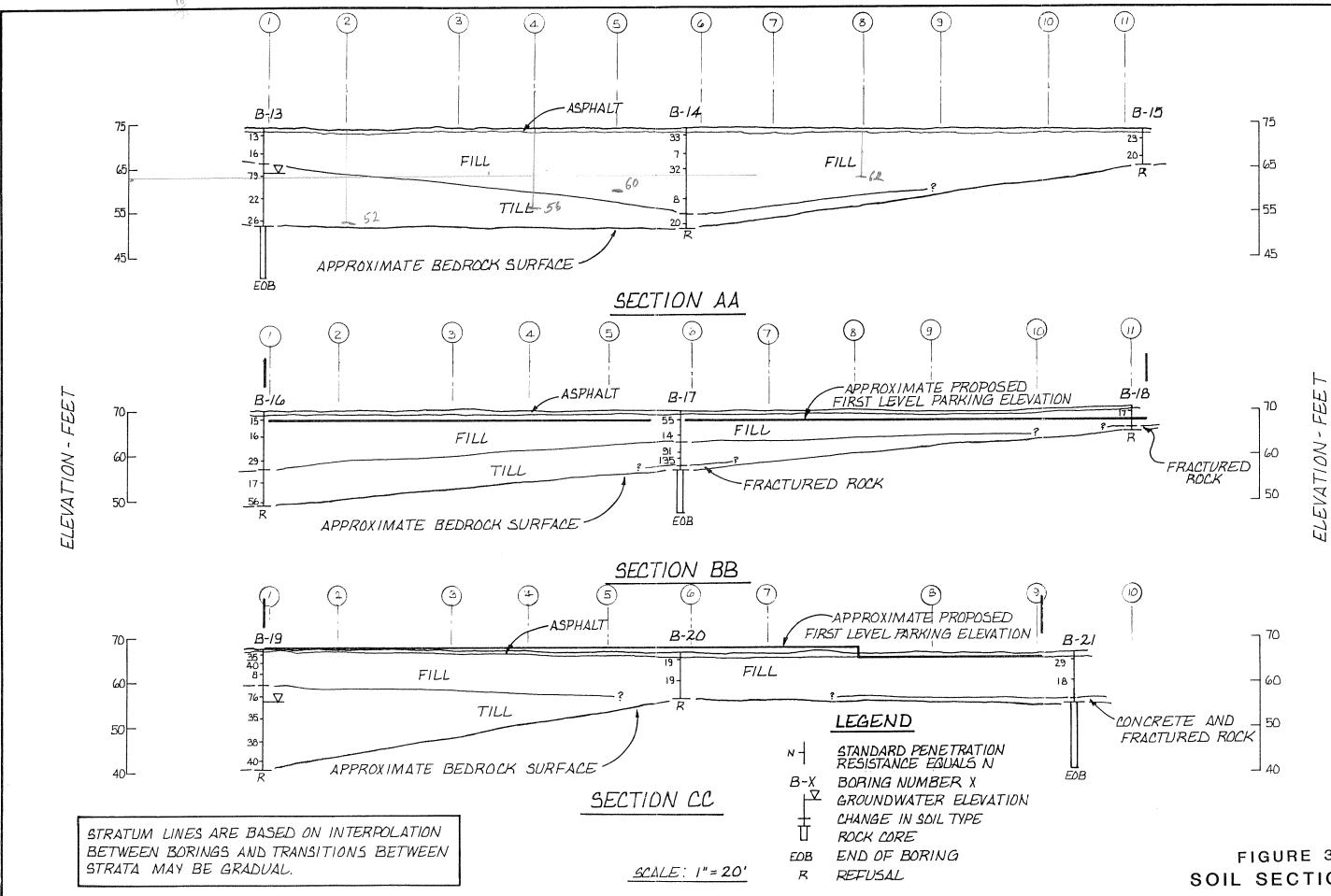
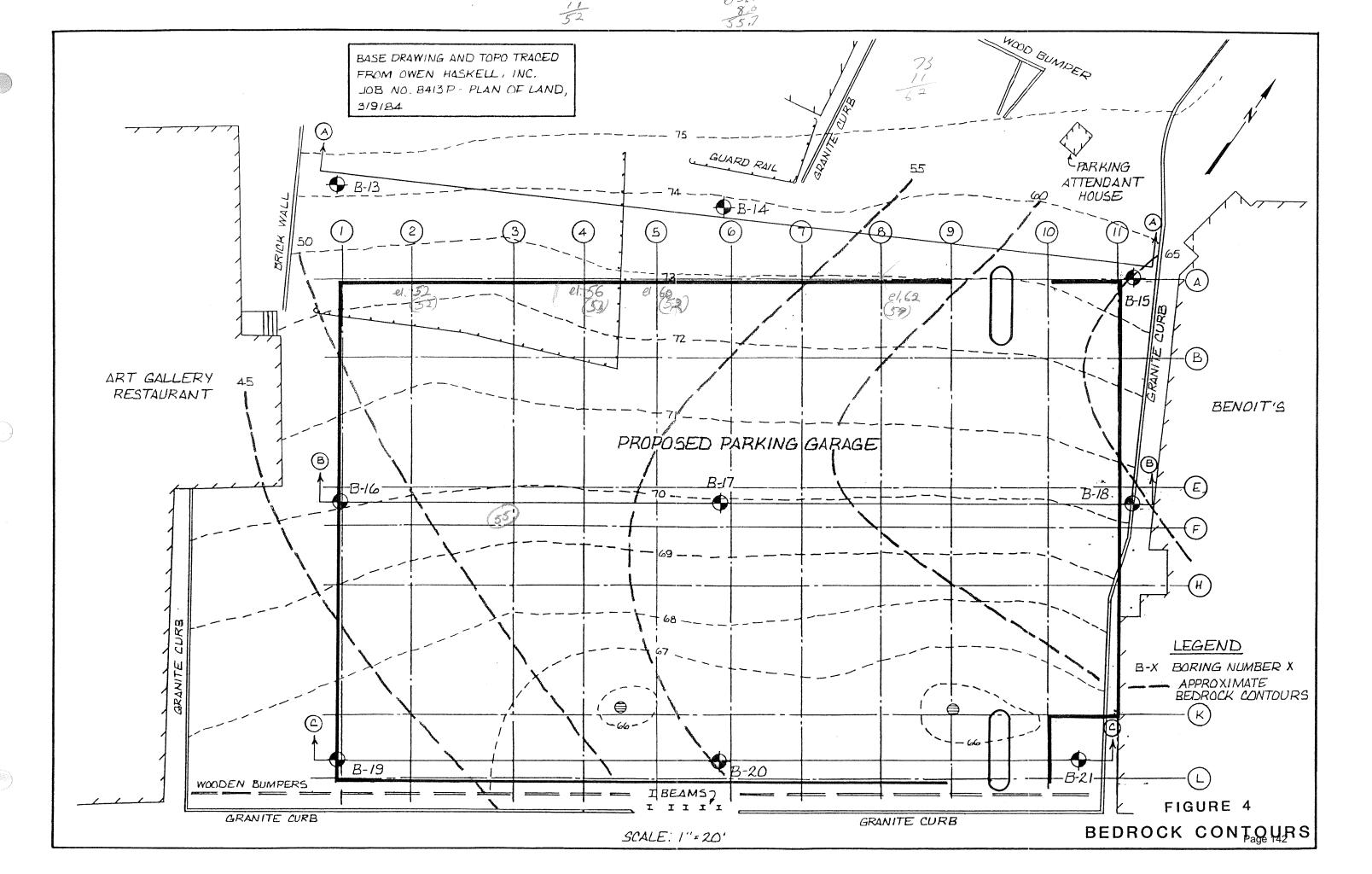
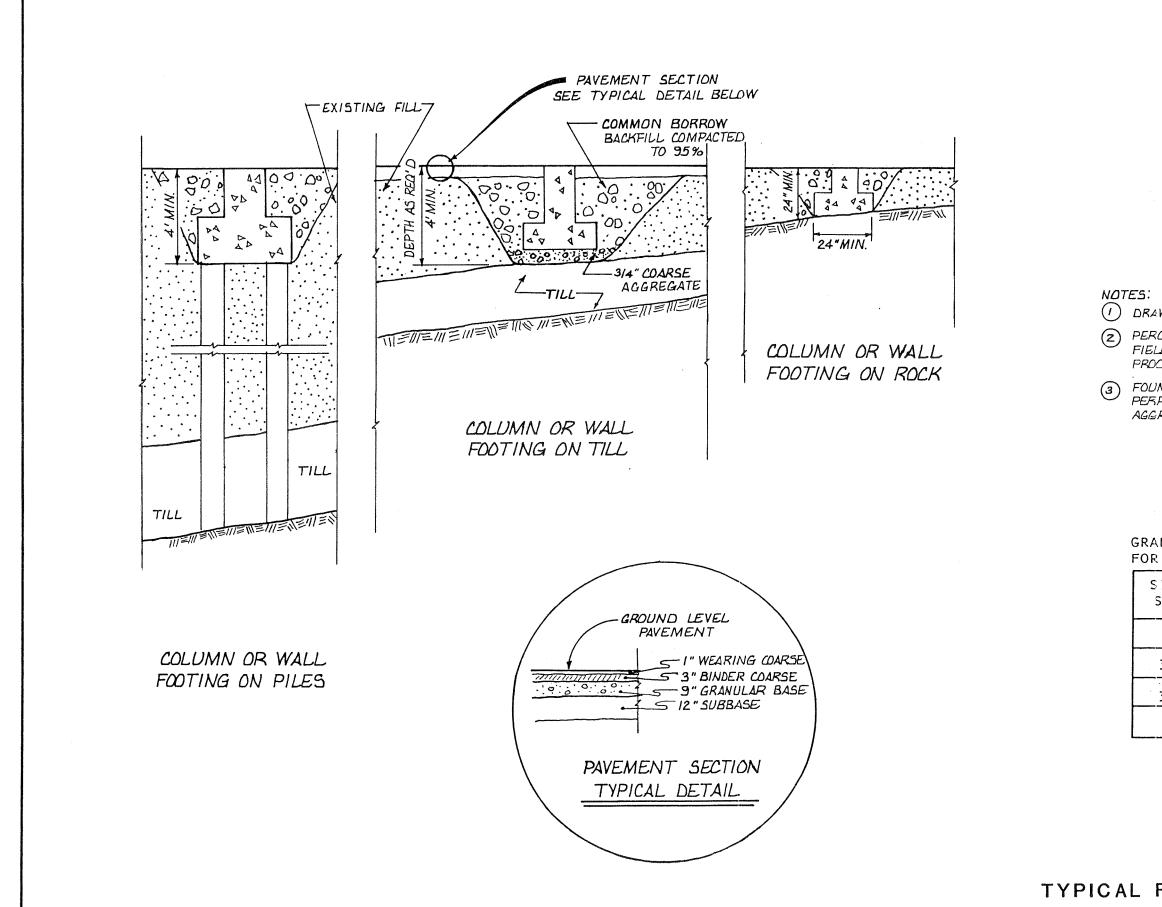


FIGURE 3 SOIL SECTIONS





## TYPICAL FOUNDATION DETAILS

### FIGURE 7

SIEVE SIZE	PERCENTAGE BY WEIGHT PASSING
1"	100
3/4"	90 - 100
3/8"	20 - 50
#4	0 - 10

GRADATION RECOMMENDATIONS FOR 3/4".COARSE AGGREGATE

FOUNDATION DRAIN SHALL BE 4" DIAMETER PERFORATED PIPE WITH A" MINIMUM COARSE AGGREGATE COVER WITH FREE DRAINING OUTLET.

PERCENT COMPACTION IS THE RATIO OF THE FIELD DRY DENSITY TO THE MAXIMUM MODIFIED PROCTOR DENSITY.

DRAWING NOT TO SCALE.