



CITY OF PORTLAND  
BUILDING CODE CERTIFICATE  
389 Congress St., Room 315  
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine  
Department of Planning & Urban Development  
Division of Housing & Community Service

FROM: BRAEMAR BUILDING SYSTEMS

RE: Certificate of Design

DATE: 10-6-05

These plans and / or specifications covering construction work on:

BIL BUSINESS PARK BUILDING C

505 RIVERSIDE ST. PORTLAND, MAINE

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



Signature: G.R. Carstens

Title: Senior Engineer

Firm: GRC Engineering, Inc.

Address: 5544 W. 147th St. Oak Forest, IL

As per Maine State LAW:

\$50,000.00 or more in new construction, repair expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.



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TO: Inspector of Buildings City of Portland, Maine  
Department of Planning & Urban Development  
Division of Housing & Community Service

FROM: RICHARD M. FOULIN P.E.

RE: Certificate of Design (FOUNDATION ONLY)

DATE: DECEMBER 12, 2005

These plans and ~~or specifications~~ covering construction work on:

FOUNDATION DESIGN FOR PROPOSED BUILDING "C" 60' x 200'

PRE-ENGINEERED BUILDING • B & L BUSINESS PARK • PORTLAND, ME

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



**As per Maine State Law:**

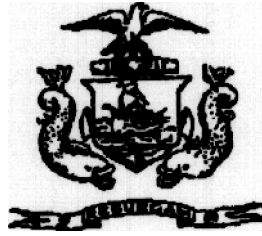
\$50,000.00 or more in new construction, repair expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.

Signature: Richard M. Foulin, P.E.

Title: PRESIDENT

Firm: RICHARD M. FOULIN ENGINEERING, P.A.

Address: 9 WATERLOOSE RD.  
GORHAM, ME 04038



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BUILDING CODE CERTIFICATE  
389 Congress St., Room 315  
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine  
Department of Planning & Urban Development  
Division of Housing & Community Service

FROM: HARVEY ESQUIER, P.E. SBM ASSOCIATES INC.

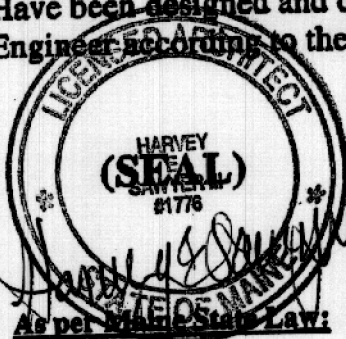
RE: Certificate of Design (ARCHITECTURAL ONLY)

DATE: 12/12/05

These plans and / or specifications covering construction work on:

B&L BUSINESS PARK BUILDING "C" 60'x200'

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



Signature: Harvey Esquier

Title: ARCHITECT

Firm: SBM ASSOCIATES INC.

Address: 14 DEER RUN DRIVE  
GORHAM, ME 04038.

\$50,000.00 or more in new construction, repair expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.





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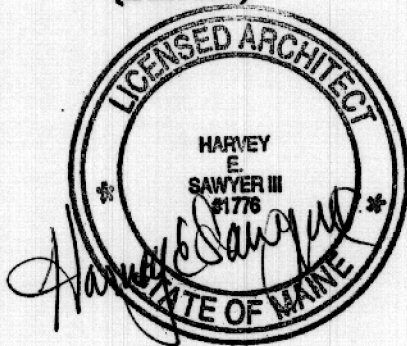
ACCESSIBILITY CERTIFICATE

Designer: HARVEY E SAWYER, III  
Address of Project: 583 RIVERSIDE STREET BUILDING "C"  
Nature of Project: B&L BUSINESS PARK BUILDING "C" 60 x 200  
LEASABLE SPACE.  
PREENGINEERED STEEL BUILDING.

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act.

Signature: Harvey E Sawyer III  
Title: ARCHITECT  
Firm: SPM ASSOCIATES INC  
Address: 14 DEER RUN DRIVE 3  
GORHAM, MAINE 04038  
Phone: 207 839 2420

(SEAL)





FROM DESIGNER: G. K. CARSTENS  
 DATE: 10-13-05  
 Job Name: B & L BUSINESS PARK BUILDING C  
 Address of Construction: 585 RIVERSIDE ST. PORTLAND, MAINE

\* IS BY OTHERS 2003 International Building Code  
 Construction project was designed according to the building code criteria listed below:

Building Code and Year IBC 03 Use Group Classification(s) \_\_\_\_\_  
 Type of Construction PRE-ENGINEERED STEEL BUILDING  
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC \*  
 Is the Structure mixed use? \* if yes, separated or non separated (see Section 302.3) \*  
 Supervisory alarm system? \* Geotechnical/Soils report required? (See Section 1802.2) \*

**STRUCTURAL DESIGN CALCULATIONS**

YES Submitted for all structural members (102.1, 102.1.1)

**DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1009)**

Uniformly distributed floor live loads (1002.1.1, 1007)

Floor Area Use	Loads Shown
<u>*</u>	<u>*</u>

**Wind loads (1002.1.4, 1002)**

ASCE 7 Design option utilized (1002.1.1, 1002.4)  
100 mph Basic wind speed (1002.3)  
1.0 Building category and wind importance factor,  $I_w$  (Table 1004.5, 1002.6)  
C Wind exposure category (1002.4)  
±0.18 Internal pressure coefficient (ASCE 7)  
+20.7, -22.4 Component and cladding pressures (1002.1.1, 1002.2.2)  
SEE CALCS Main force wind pressures (1002.1.1, 1002.2.1)

**Earthquake design data (1002.1.5, 1014 - 1023)**

ASCE 7 Design option utilized (1014.1)  
I Seismic use group (Category) (Table 1004.6, 1016.2)  
0.37 40.16 Spectral response coefficients,  $S_{DS}$  &  $S_{D1}$  (Table 1004.6, 1016.2)

No Live load reduction (1002.1.7, 1007.2, 1007.10)  
20 psf Roof live loads (1002.1.8, 1007.11)  
50 psf Roof snow loads (1002.1.9, 1008)  
50 psf Ground snow load,  $P_g$  (1002.2)  
1.0 If  $P_g > 10$  psf, flat-roof snow load,  $P_f$  (1002.4)  
1.0 If  $P_g > 10$  psf, snow exposure factor,  $C_e$  (Table 1002.3.1)  
1.0 If  $P_g > 10$  psf, snow load importance factor,  $I_s$  (Table 1004.6)  
1.0 Roof thermal factor,  $C_t$  (Table 1002.3.2)  
50 psf Sloped roof snowload,  $P_s$  (1002.4)  
C Seismic design category (1016.3)  
3D Seismic seismic-force-resisting system (Table 1017.3.2)  
3.5 Response modification coefficient,  $R$ , and deflection amplification factor,  $C_d$  (Table 1017.3.3)  
ASCE 7 Analysis procedure (1016.4, 1017.5)  
SEE CALCS Design base shear (1017.4, 1017.6.1)  
\* Flood loads (1002.1.5, 1012)  
\* Flood hazard area (1012.3)  
\* Elevation of structure  
 Other loads  
N/A Concentrated loads (1007.4)  
N/A Partition loads (1007.5)  
N/A Impact loads (1007.6)  
N/A Misc. loads (Table 1007.2, 1007.2.1, 1007.7, 1007.12, 1007.15, 1010, 1011.3.4.4)



# Commercial Building Permit Application

05/18/08

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

Location/Address of Construction: <b>585 RIVERSIDE STREET BUILDING 'C'</b>		
Total Square Footage of Proposed Structure <b>60 X 200</b> <b>12,000 SF BUILDING 'C'</b>	Square Footage of Lot <b>200,000 +/-</b>	
Tax Assessor's Chart, Block & Lot Chart# <b>304</b> Block# <b>B006</b> Lot#	Owner: <b>B&amp;L PARTNERS</b> <b>277 MILTON ROAD</b> <b>ROCHESTER, N.H.</b>	Telephone: <b>207</b> <b>878-7890</b>
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: <b>HARVEY E SAWYER JR</b> <b>14 DEER RUN DRIVE</b> <b>GORHAM, ME 04038</b> <b>207 899 2420</b>	Cost Of Work: <b>\$ 180,000.-</b> Fee: <b>\$ 1710.-</b> <b>1713/00</b>
Current Specific use: <b>EXIST'G SITE - 2 LEASABLE BUILDINGS</b>		
Proposed Specific use: <b>60 X 200 PREENGINEERED STEEL BUILDING - LEASABLE SPACE - PART OF B&amp;L BUSINESS PARK</b>		
Project description: <b>SITE PLAN HAS BEEN APPROVED</b>		
Contractor's name, address & telephone: <b>B&amp;L CONTRACTORS 75 BISHOP STREET</b> <b>PORTLAND, ME. WILLIAM BOYLE 878-7893</b>		
Who should we contact when the permit is ready: Mailing address: <b>HARVEY E SAWYER JR</b> <b>14 DEER RUN DRIVE</b> <b>GORHAM, ME 04038</b> <b>899-2420</b>		
<b>WILLIAM BOYLE</b> <b>75 BISHOP STREET</b> <b>PORTLAND, ME</b> Phone: <b>878-7890</b>		

Please submit all of the information outlined in the Residential Application Checklist. Failure to do so will result in the automatic denial of your permit.

At the discretion of the Planning and Development Department, additional information may be required prior to permit approval. For further information stop by the Building Inspections office, room 315 City Hall or call 874-8703.

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

Signature of applicant: <b>Harvey E Sawyer Jr</b>	Date: <b>12/2/05</b>
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Permit Fee: \$30.00 for the first \$1000.00 Construction Cost, \$9.00 per additional \$1000.00 cost

**This is not a Permit; you may not commence any work until the Permit is issued.**



**S.W. COLE**  
ENGINEERING, INC.

● *Geotechnical Engineering* ● *Field & Laboratory Testing* ● *Scientific & Environmental Consulting*



**BEARING CAPACITY ASSESSMENT  
PROPOSED PRE-ENGINEERED BUILDINGS  
RAINMAKER BUSINESS PARK  
RIVERSIDE STREET  
PORTLAND, MAINE**

**04-0509      August 31, 2004**

**Prepared for:**

**SBM Associates**  
Attention: **Peter Sawyer**  
14 Deer Run Drive  
Gorham, Maine 04038

**Prepared by:**



**Timothy J. Boyce, P.E.**  
286 Portland Road  
Gray, Maine 04039



**S.W. COLE**  
ENGINEERING, INC

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

04-0509

August 31, 2004

**SBM Associates**

Attn: Peter Sawyer  
14 Deer Run Drive  
Gorham, Maine 04038

Subject: Bearing Capacity Assessment  
Proposed Pre-Engineered Buildings  
Rainmaker Business Park  
585 Riverside Street  
Portland, Maine

Dear Mr. Sawyer:

In accordance with our Agreement dated June 1, 2004, we have observed test pit explorations and made a bearing capacity assessment of the subsurface soils for foundation support of the proposed buildings at the above referenced site. Our scope of work was limited to observations of test pits explorations, a bearing capacity assessment of the subsurface findings relative to the proposed construction and preparation of this report. This report summarizes our findings and recommendations and its contents are subject to the limitations set forth in Attachment A.

**PROPOSED CONSTRUCTION**

Based on information provided by SBM Associates (Project Architect), we understand that two on-grade, single-story, high-bay, pre-engineered metal buildings are planned. Building No. 1 will occupy a plan area of about 9,600 square-feet at a finish floor elevation of 74.0 feet (project datum). Building No. 2 will occupy a plan area of about 9,900 square-feet with a finish floor elevation of 73.5 feet. Based on proposed and existing site grades, we anticipate tapered fills up to 2 feet thick will be needed to prepare the building pads.

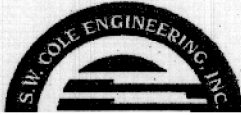
**EXPLORATION WORK**

Nine test pit explorations were made at the site on August 4, 2004 by an excavation contractor working under contract to Rainmaker (project owner). The test pit locations

GRAY, ME OFFICE

286 Portland Road, Gray, ME 04039-9586 ■ Tel (207) 657-2866 ■ Fax (207) 657-2840 ■ E-Mail [infogray@swcole.com](mailto:infogray@swcole.com) ■ [www.swcole.com](http://www.swcole.com)

Other offices in Augusta, Bangor, and Caribou, Maine & Somersworth, New Hampshire



04-0509  
August 31, 2004

were selected by S.W. COLE ENGINEERING, INC. based on a site plan prepared by Sevee & Maher Engineers, Inc. (project civil engineer) and provided by SBM Associates (project architect). Four test pits (TP-201 through TP-204) were made at proposed Building No. 1 and five test pits (TP-301 through TP-305) were made at proposed Building No. 2. The test pits were established in the field based on taped measurements from staked building corners established by others. The approximate test pit locations are shown on the "Exploration Location Plan" attached as Sheet 1. Logs of the test pits are attached as Sheets 2 through 6. A key to the notes and symbols used on the logs is attached as Sheet 7.

#### **SUBSURFACE CONDITIONS**

The test pits generally encountered a soil profile consisting of about 1-foot of forest duff overlying 1 to 3 feet of silty sand overlying hard to stiff olive silty clay. The test pits were terminated at depths of 4.5 to 7.0 feet below the ground surface.

Slight groundwater seepage was observed in the test pits to depths of about 1 to 3 feet below the ground surface. This seepage is likely a result of perched ground water above the relatively impervious olive silty clay. Actual groundwater levels could not be determined due to the shallow depth of the test pit explorations and the relatively short time that the test pits were left open. Groundwater should be expected to fluctuate seasonally and during periods of heavy precipitation or snow melt.

Refer to the attached logs for more detailed descriptions of the subsurface findings at the test pit locations.

#### **EVALUATION AND RECOMMENDATIONS**

Based on the subsurface findings, the proposed construction appears feasible from a geotechnical standpoint. Based on our understanding of the project, we anticipate spread footings will bear on at least 3 feet of native stiff to hard olive silty clay. Excavated stiff olive silty clay can be reused for compacted fill beneath buildings and paved areas provided it is at a compactable moisture content at this time of construction. Spread footings and frost walls should be backfilled with clean, free-