

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 04-1461	Issue Date: PERMIT ISSUED JAN - 3 2005	CDL: 306 B006001
-----------------------	---	---------------------

Location of Construction: 585 Riverside St	Owner Name: B & L Partners Llc	Owner Address: 277 Milton Rd	Phone:
Business Name:	Contractor Name: Stephen Sanders	Contractor Address: 57 Clark St. Apt #1 Portland	Phone: 2074500004
Lessee/Buyer's Name	Phone:	Permit Type: Commercial	Zone: IM

Past Use: Commercial / Sani Clean	Proposed Use: Commercial / Showroom office Warehouse/ Tenant fit-up / add loading dock	Permit Fee: \$528.00	Cost of Work: \$48,000.00	CEO District: 5
Proposed Project Description: Warehouse/ Tenant fit-up / add loading dock		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: S1 Type: 2B 12/30/04	
		Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)				
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied				
Signature: _____ Date: _____				

Permit Taken By: Idobson	Date Applied For: 09/28/2004	Zoning Approval		
-----------------------------	---------------------------------	------------------------	--	--

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..</p>	<p>Special Zone or Reviews</p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetland</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/></p> <p><i>ok with condit</i> Date: <i>12/13/04</i></p>	<p>Zoning Appeal</p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input checked="" type="checkbox"/> Denied</p> <p>Date: <i>[Signature]</i></p>	<p>Historic Preservation</p> <p><input checked="" type="checkbox"/> Not in District or Landmark</p> <p><input type="checkbox"/> Does Not Require Review,</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: <i>[Signature]</i></p>
---	--	--	---

CERTIFICATION

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

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

City of Portland, Maine - Building or Use Permit

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

Permit No: 04-1461	Date Applied For: 09/28/2004	CBL: 306 B006001
------------------------------	--	----------------------------

Location of Construction: 585 Riverside St	Owner Name: B & L Partners Llc	Owner Address: 277 Milton Rd	Phone:
Business Name:	Contractor Name: Stephen Sanders	Contractor Address: 57 Clark St. Apt#1 Portland	Phone (207) 450-0004
Lessee/Buyer's Name	Phone:	Permit Type: Commercial	

Proposed Use: Commercial / Showroom office Warehouse/ Tenant fit-up / add loading dock	Proposed Project Description: Warehouse/ Tenant fit-up / add loading dock
--	---

Dept: Building **Status:** Approved **Reviewer:** Mike Nugent **Approval Date:** 12/30/2004
Note: **Ok to Issue:**

Dept: Fire **Status:** Approved **Reviewer:** Lt. MacDougal **Approval Date:** 10/19/2004
Note: **Ok to Issue:**

Comments:

12/17/2004-ldobson: customer dropped additional plans off 12117/2004

09/28/2004-ldobson: Customer told he would need additional information-loading docks, landlord letter,

Applicant: Rainmaker Business Park Date: 6/18/04

Address: 585 Riverside St C-B-L: 306-B-006
312-B-004

(581-583) CHECK-LIST AGAINST ZONING ORDINANCE

Date - Existing Dev.

Zone Location - IM

Interior or corner lot -

12,000 sq ft → Proposed New Loading Dock

Proposed Use/Work - existing Bldg - anstrcty 2 New Bldgs 80' x 120' ea
City Wholesale dist - indust machine shop moving & Storage Co
Sewage Disposal - Rainmaker Inc. - 2 similar tenants

Lot Street Frontage - 60' min - 78.44' shown

Front Yard - 1' for every 1' of height - setback 100' + from Riverside
20' high

Rear Yard - 1' for every 1' of height - 20' req over 270' to rear
20' high

Side Yard - 1' for every 1' of height - 20' req 25' & 25' shown

Projections - front entries

Width of Lot - N/A

Height - 75' MAX height - 20' high

Lot Area - NO min req - 197,756 sq ft

9600 sq ft
9900 sq ft
12000 sq ft

31500
288 - New Dock

31788

Lot Coverage/Impervious Surface - 75% MAX - 50% given 3,1788

Area per Family - N/A

Off-street Parking - 54 spaces shown ÷ 5,400 sq ft given for office: 400 = 13.5 or 14 spc

Loading Bays - 5 loading BAYS (3,788 - 5400) given for indust ÷ 1000 = 26.39 or 26 spc
26,388

Site Plan - minor # 2004-0082

Shoreland Zoning/ Stream Protection - N/A

Flood Plains - panel 6 - Zone X

pavement setback from boundary lines - 10' min - 10' shown

12/13/04 - received revised stamped plans

minor # 2004-0082

40 sq ft

FROM DESIGNER: GR. CARTEAS PE.
 DATE: 12-21-04
 Job Name: BEL BUSINESS PARK
 Address of Construction: 585 RIVERSIDE ST. PORTLAND, ME 04103

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 BLDG.

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC NO

Is the Structure mixed use? YES If yes, separated or non separated (see Section 302.3) SEPARATED

Supervisory alarm systems? _____ Geotechnical/Soils report required? (See Section 1802.2) YES

STRUCTURAL DESIGN CALCULATIONS

Submitted for all structural members (102.1, 108.1.1)

DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1603)

Uniformly distributed floor live loads (1603.1.1, 1607)

Floor Area Use Loads Shown

Floor Area Use	Loads Shown
<u>slab on grade by others</u>	
_____	_____
_____	_____
_____	_____
_____	_____

Wind loads (1603.1.6, 1609)

100mph Design option utilized (1609.1.1, 1609.6)

Basic wind speed (1609.5)

_____ Exposing category and wind importance factor, I_w (Table 1609.6, 1609.8)

C Wind exposure category (1609.4)

_____ Internal pressure coefficient (ASCE 7)

_____ Component and cladding pressures (1609.1.1, 1609.8.2.2)

_____ Main force wind pressure (1609.1.1, 1609.8.2.1)

Earthquake design data (1603.1.5, 1614 - 1625)

C Design option utilized (1614.1)

_____ Seismic use group (Category) (Table 1604.5, 1614.5)

_____ Spectral response coefficients, S_{DS} & S_{D1} (1615.1)

NO

Live load reduction (1608.1.1, 1607.8, 1607.10)

SO

Roof live loads (1608.1.2, 1607.11)

Roof snow loads (1608.1.3, 1608)

SO

Ground snow load, P_g (1608.2)

_____ If $P_g > 10$ psf, flat-roof snow load, P_f (1608.3)

_____ If $P_g > 10$ psf, snow exposure factor, C_e (Table 1608.3.1)

_____ If $P_g > 10$ psf, snow load importance factor, I_s (Table 1608.4)

_____ Roof thermal factor, C_t (Table 1608.5.2)

_____ Sloped roof snowload, P_s (1608.4)

_____ Seismic design category (1613.2)

_____ Basic seismic-force-resisting system (Table 1617.8.2)

_____ Response modification coefficient, R , and deflection amplification factor, C_d (Table 1617.8.2)

_____ Analysis procedure (1618.2, 1617.4)

_____ Design base shear (1617.4, 1617.6.1)

Flood loads (1603.1.2, 1612)

N/A

Flood hazard area (1612.2)

_____ Elevation of structure

Other loads

N/A

Concentrated loads (1607.4)

N/A

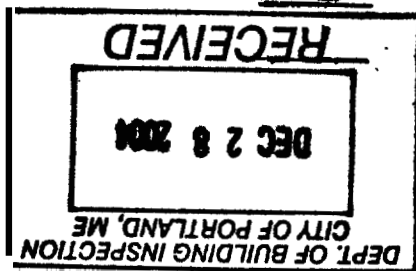
Partition loads (1607.6)

N/A

Impact loads (1607.8)

N/A

_____ Misc. loads (Table 1607.4, 1607.8.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 1604)



ELECTRICAL PERMIT

City of Portland, Me.



To the Chief Electrical Inspector, Portland Maine:
 The undersigned hereby applies for a permit to make electrical installations
 in accordance with the laws of Maine, the City of Portland Electrical Ordinance,
 National Electrical Code and the following specifications:

Date 10-25-07
 Permit # _____
 CBL# 1.53 AA 11

LOCATION: 34 Berry Ave. 04103 METER MAKE & # _____
 CMP ACCOUNT # _____ OWNER BRANKO GLUIC
 TENANT _____ PHONE # 797 5066

							TOTAL EACH FEE	
OUTLETS	<u>4</u>	Receptacles	<u>2</u>	Switches		Smoke Detector		.20
FIXTURES	<u>2</u>	Incandescent	<u>2</u>	Fluorescent		Strips		.20
SERVICES		Overhead		Underground		TTL AMPS <800		15.00
		Overhead		Underground		>800		25.00
Temporary Service		Overhead		Underground		TTL AMPS		25.00
							25.00	
METERS		(number of)						1.00
MOTORS		(number of)						2.00
RESID/COM		Electric units						1.00
HEATING		oil/gas units		Interior		Exterior		5.00
APPLIANCES		Ranges		Cook Tops		Wall Ovens		2.00
		Insta-Hot		Water heaters		Fans		2.00
		Dryers		Disposals		Dishwasher		2.00
		Compactors		Spa		Washing Machine		2.00
		Others (denote)						2.00
MISC. (number of)		Air Cond/win						3.00
		Air Cond/cent				Pools		10.00
		HVAC		EMS		Thermostat		5.00
		Signs						10.00
		Alarms/res						5.00
		Alarms/com						15.00
		Heavy Duty(CRKT)						2.00
		Circus/Carnv						25.00
		Alterations						5.00
		Fire Repairs						15.00
	E Lights						1.00	
	E Generators						20.00	
PANELS		Service		Remote		Main		4.00
TRANSFORMER		0-25 Kva						5.00
		25-200 Kva						8.00
		Over 200 Kva						10.00
							TOTAL AMOUNT DUE	
							MINIMUM FEE/COMMERCIAL 45.00	MINIMUM FEE 35.00

CONTRACTORS NAME MARIO BRKIC MASTER LIC. # _____
 ADDRESS 81 MASS AVE LIMITED LIC. # LM 50016958
 TELEPHONE 650-3879

SIGNATURE OF CONTRACTOR Mario Brkic

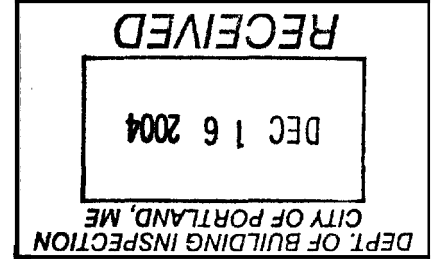
JETS	
Total Square footage of Proposed Structure 112,672	Square Footage of Lot
6 Lot# 6	Owner: BE'L LLC 277 Milton Rd. Rochester, NH 03868
	Sanders 57 Clark St Portland, ME 04102
	Fee: \$ 528⁰⁰/00
Current use: <u>Showroom/Office - Warehouse</u>	
If the location is currently vacant, what was prior use: _____	
Approximately how long has it been vacant: _____	
Proposed use: <u>Showroom/Office - Warehouse</u>	
Project description: <u>Re-fit Office Showroom. Addition of 20'x24' Loading dock and 16'x12' OH Door, 12'x12' OH Door, 36" x 7'0" Walk Door. Loading Dock will be sprinkled.</u>	
Contractor's name, address & telephone: <u>Stephen Sanders SJS Construction</u> <u>57 Clark St. Portland, ME 04102</u>	
Who should we contact when the permit is ready: <u>Same</u>	
Wailing address: _____	
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE: <u>450-0004</u>	

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.

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:  Date: 9/28/04

This is NOT a permit, you may not commence ANY work until the permit is issued. If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall



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: _____

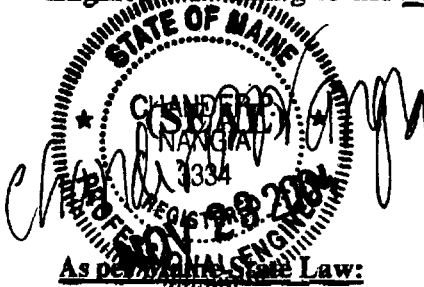
RE: Certificate of Design

DATE: _____

These plans and / or specifications covering construction work on:

585 Riverside St 20x24 Loading Dock
80x80 Steel Building

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: Chandar P. Nangia 11/23/2004

Title: Chief Engineer

Firm: CHANDER P. NANGIA

Address: 7423 HOLLOW RIDGE DR
HOUSTON, TX 77095

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,



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

ACCESSIBILITY CERTIFICATE

Designer: _____

Address of Project: 585 Riverside St.

Nature of Project: 20 x 24 LOADING DOCK COVER

80 x 80 WAREHOUSE.

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: Chander P Nangia 11/23/2004

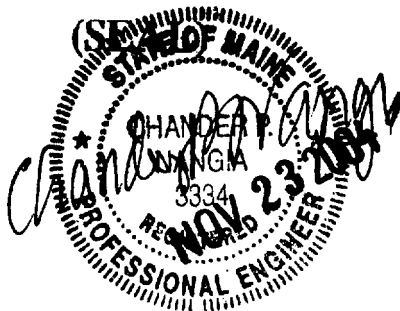
Title: Chief Engineer

Firm: CHANDER P NANGIA

Address: 7423 HOLLOW RIDGE DR.

HOUSTON, TX 77095

Phone: 281-859-1421



BRAEMAR BUILDING SYSTEMS LTD.
925 WEST KENYON AVENUE, SUITE
ENGLEWOOD, COLORADO

STRUCTURAL DESIGN CALCULATIONS
FOR
B & L CONSTRUCTION
277 MILTON RD
ROCHESTER, NEW HAMPSHIRE

PROPOSED BUILDING

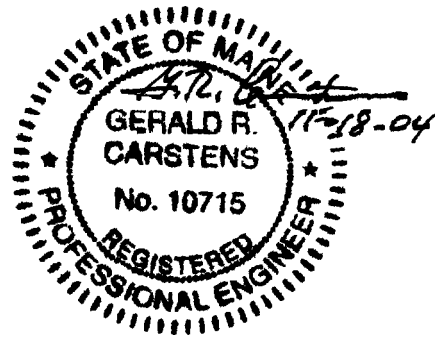
PORTLAND, MAINE
D4-917

BUILDING DATA

Width (ft) = 20.0
Length (ft) = 24.0
Eave Height (ft) = 17.7/ 19.2
Roof Slope (rise/12) = 0.90
Dead Load (psf) = 3.0
Live Load (psf) = 50.0
Collat. Load (psf) = 0.0
Snow Load (psf) = 50.0
Wind Speed (mph) = 100.0
Wind Code = IBC 00
Closed/Open = P
Exposure = C
Importance - Wind = 1.00
Importance - Seismic = 1.20
Seismic Coeff (Fa*Ss) = 0.05

Designer = 207-878-2652

11/09/04



STATEMENT OF SPECIAL INSPECTIONS

PROJECT: 585 Riverside Street, Loading Dock Addition

PERMIT APPLICANT: B&L Partners

APPLICANT'S ADDRESS: 70 Bishop Street
Portland, ME 04103

STRUCTURAL ENGINEER OF RECORD: Chander P. Nangia, PE (Maine Registration 3334)

CONTRACTOR: **SAS** Construction

This statement of Special Inspections is submitted in accordance with Section 1704.0 of the 2003 International Building Code. It includes a listing of special inspections applicable to this project, as well as the name of the Special Inspector, and the names of other agencies intended to be retained for conducting these inspections.

The Special Inspector shall keep records of all inspections listed herein, and shall furnish inspection reports to the Registered Design Professional of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the Registered Design Professional of Record. Interim reports shall be submitted to the Registered Design Professional of Record monthly, unless more frequent submissions are requested.

Job site safety is solely the responsibility of the Contractor. Materials and activities to be inspected are not to include the Contractor's equipment and methods used to erect or install the materials listed.

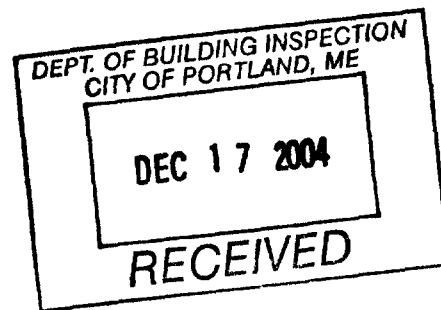
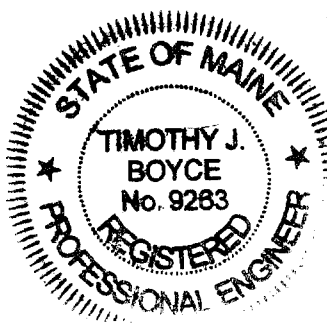
Prepared By:

TYPED NAME Timothy J. Boyce



SIGNATURE

12/16/04
DATE



Applicant's Authorization



SIGNATURE

DATE

12/16/04

LIST OF AGENTS

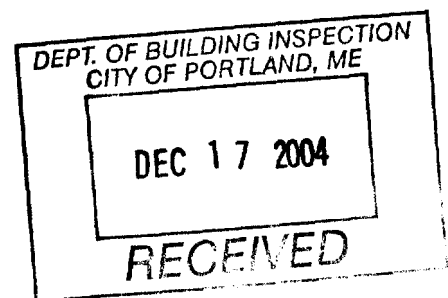
PROJECT: 585 Riverside Street, Loading Dock Addition

STRUCTURAL ENGINEER OF RECORD: Chander P. Nangia, PE (Maine Registration 3334)

Following is the List of Agents selected for performance of Special Inspections for this project.

FIRM

- | | | |
|----|--------------------|------------------------------------|
| 1. | Special Inspector | S.W. Cole Engineering, Inc. |
| 2. | Testing Laboratory | S.W. Cole Engineering, Inc. |



**Table 1704.3
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION**

Verification and Inspection	Extent of Inspection	Agent	Date Completed	Comments
1. Material verification of high-strength bolts, nuts and washers:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Periodic	2		
b. Manufacturer's certificate of compliance	Periodic	1,3		SER to verify shop drawings
2. Inspection of high strength bolting	Periodic	2		
3. Material verification of structural steel				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	All	3		SER to verify shop drawings
b. Manufacture's certified mill test reports	All	3		SER to verify shop drawings
4. Material verification of weld filler materials				
b. Identification markings to conform to AWS specification in the approved construction documents.	All	3		SER to verify shop drawings
b. Manufacturer's certificate of compliance	All	3		SER to verify shop drawings
i. Inspection of steel framing				
a. Bracing connections	Periodic	2		
b. Member location	Periodic	2		
c. Application of joint details	Periodic	2		

**Table 1704.4
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION**

Verification and Inspection	Extent of Inspection	Agent	Date Completed	Comments
1. Inspection of reinforcing steel for compliance with size, grade, spacing, location and embedment	Periodic	2,3		SER to verify shop drawings
2. Verify use of required mix design	Periodic	2,3		SER to review and approve mix design prior to installation
3. Sample fresh concrete for strength tests, perform slump and air content tests, and determine temperature of concrete	Continuous	2		
4. Inspection for maintenance of specified curing temperature and techniques	Periodic	2		



Verification and Inspection	Extent of Inspection	Agent	Date Completed	Comments
1. Review subgrade condition prior to placement of any fill or concrete in accordance with geotechnical report	Continuous	2		
2. Verify use of required fill material	Periodic	2		
3. Observe placement and fill lift thickness of foundation and sub-slab fill	Periodic	2		
4. Perform compaction tests on foundation and sub-slab fill	Periodic	2		



BRAEMAR Building Systems

MANUFACTURING GENERAL NOTES

PRODUCT CERTIFICATIONS

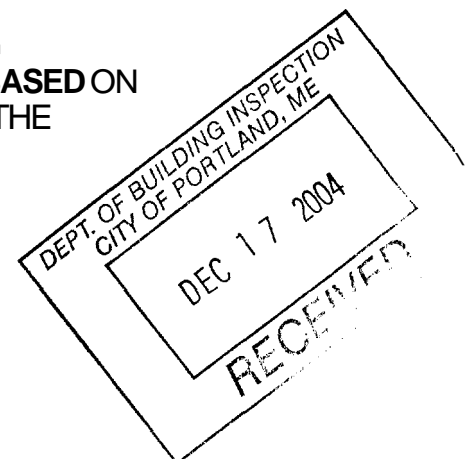
THE BUILDING MANUFACTURER IS A MEMBER OF THE METAL BUILDING MANUFACTURERS ASSOCIATION. THE BUILDING MANUFACTURED'S FABRICATION AND PRODUCTS ARE COVERED BY ONE OR MORE OF THE FOLLOWING CERTIFICATIONS:

1. APPROVED FABRICATOR OF PREFABRICATED BUILDING AND COMPONENTS. REFERENCE ICBO REPORT NO. FA-337
2. SBCCI COMPLIANCE REPORT NO. 9461A
3. AISC METAL BUILDING CERTIFICATION PROGRAM
4. CITY OF HOUSTON APPROVED FABRICATOR (REGISTRATION NO. 164)
5. WISCONSIN PRODUCT APPROVAL NUMBER 200231-M
6. CLARK COUNTY, NEVADA APPROVED FABRICATOR
7. CITY OF LOS ANGELES, CALIFORNIA APPROVED TYPE 1 FABRICATOR (LA#1604)
8. CANADIAN WELDING BUREAU CERTIFICATION TO CSA STANDARD W47.1 IN DIVISION 1 (SYMBOL PY72 (HOUSTON, TX))
9. TEXAS DEPT. OF INSURANCE PRODUCT EVALUATION RC-15

GENERAL NOTES

THE STRUCTURE UNDER THIS CONTRACT HAS BEEN DESIGNED AND DETAILED FOR THE LOADS AND CONDITIONS STIPULATED IN THE CONTRACT AND SHOWN ON THESE DRAWINGS. ANY ALTERATIONS TO THE STRUCTURAL SYSTEM OR REMOVAL OF ANY COMPONENT PARTS, OR THE ADDITIONS OF OTHER CONSTRUCTION MATERIALS OR LOADS MUST BE DONE UNDER THE ADVICE AND DIRECTION OF A REGISTERED ARCHITECT, CIVIL OR STRUCTURAL ENGINEER. THE BUILDING MANUFACTURER WILL ASSUME NO RESPONSIBILITY FOR ANY LOADS NOT INDICATED.

THIS METAL BUILDING IS DESIGNED WITH THE BUILDING MANUFACTURER'S STANDARD PRACTICES WHICH ARE BASED ON PERTINENT PROCEDURES AND RECOMMENDATIONS OF THE FOLLOWING ORGANIZATIONS AND CODES.



1. AMERICAN INSTITUTE OF STEEL CONSTRUCTION: "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING"
2. AMERICAN IRON AND STEEL INSTITUTE: "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS"
3. AMERICAN WELDING SOCIETY: "STRUCTURAL WELDING CODE" AWS D01.1.
4. METAL BUILDING MANUFACTURER'S ASSOCIATION: "LOW RISE BUILDING SYSTEMS MANUAL"
5. INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS: "UNIFORM BUILDING CODE"
6. SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL: "STANDARD BUILDING CODE"
7. BUILDING OFFICIAL AND CODE ADMINISTRATORS INTERNATIONAL: "BOCA NATIONAL BUILDING CODE"
8. NATIONAL BUILDING CODE OF CANADA.
9. INTERNATIONAL BUILDING CODE (IBC)

MATERIALS PROPERTIES OF STEEL PLATE USED IN THE FABRICATION OF PRIMARY RIGID FRAMES, AND OTHER PRIMARY STRUCTURAL EXCLUSIVE OF COLD-FORMED SECTIONS, CONFORM TO ASTM-A529 OR A-572. FLANGES WITH THICKNESS OF 1" OR LESS AND WIDTH OF 12" OR LESS CONFORM TO A-529 WITH A MINIMUM YIELD POINT OF 55,000 psi. FLANGES GREATER THAN 1" IN THICKNESS OR 12" IN WIDTH CONFORM TO A-572 WITH A MINIMUM YIELD POINT OF 50,000 psi. FLANGES WITH THICKNESS OF 2" OR LESS AND A WIDTH GREATER THAN 12" CONFORM TO A36 WITH A MINIMUM YIELD POINT OF 42,000 psi. WEB MATERIAL CONFORMS TO ASTM-A36 MODIFIED WITH A MINIMUM YIELD POINT OF 46,000 psi OR ASTM-A101, GR 50.

MATERIAL PROPERTIES OF PIPE SECTION CONFORM TO ASTM-A53 TYPE E, GRADE B WITH A MINIMUM YIELD POINT OF 35,000 psi.

MATERIAL PROPERTIES OF HOT ROLLED STEEL MEMBERS CONFORM TO THE REQUIREMENTS OF ASTM-A992 WITH A MINIMUM YIELD POINT OF 50,000 psi.

MATERIAL PROPERTIES OF COLD FORMED LIGHT GAGE STEEL MEMBERS CONFORM TO ASTM-A1011 GRADE 55 MODIFIED WITH A MINIMUM YIELD POINT OF 57,000 psi.

MATERIAL PROPERTIES OF ROOF/WALL SHEETING, BASE METAL CONFORM TO ASTM-A792 GRADES 50 OR 80 WITH MINIMUM YIELD POINTS 50,000 psi AND 80,000 psi RESPECTIVELY, AS REQUIRED BY DESIGN, COATING OF BASE MATERIAL IS 55% ALUMINUM-FINE ALLOY IN ACCORDANCE WITH AZ55 FOR UNPAINTED OR AZ50 FOR PAINTED SPECIFICATIONS.

CABLES UTILIZED FOR BRACING CONFORMS TO ASTM A475. CABLE BRACING IS TO BE INSTALLED TO A TAUT CONDITION WITH ALL SLACK REMOVED,

ROD AND ANGLE UTILIZED FOR BRACING MEMBERS CONFORM TO ASTM A36.

STRUCTURAL JOINTS WITH A.S.T.M. A-325 HIGH STRENGTH BOLTS, WHERE INDICATED ON THE DRAWINGS, SHALL BE ASSEMBLED AND THE FASTENERS TIGHTENED IN ACCORDANCE WITH THE "TURN-OF-NUT" METHOD AS DESCRIBED IN THE SPECIFICATION FOR STRUCTURAL JOINTS USING A.S.T.M. A-325 OR A-490 BOLTS (11-13-85), UNLESS OTHERWISE NOTED. ALL JOINTS WILL BE ASSEMBLED WITHOUT WASHERS UNLESS OTHERWISE NOTED.

ALL STEEL MEMBERS EXCEPT BOLTS, FASTENERS AND CABLE SHALL RECEIVE ONE SHOP COAT OF IRON OXIDE CORROSION INHIBITIVE PRIMER, MEETING THE PERFORMANCE REQUIREMENTS OF TTP-636.

SHOP AND FIELD INSPECTIONS AND ASSOCIATED FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS STIPULATED OTHERWISE IN THE CONTRACT

WARNING: IN NO CASE SHOULD GALVALUME STEEL PANELS BE USED IN CONJUNCTION WITH LEAD OR COOPER. BOTH LEAD AND COOPER HAVE HARMFUL CORROSION EFFECTS ON THE ALUMINUM ZINC ALLOY COATING WHEN THEY ARE USED IN CONTACT WITH GALVALUME STEEL PANELS. EVEN RUN-OFF FROM COOPER FLASHING, WIRING OR TUBING ONTO GALVALUME SHOULD BE AVOIDED.

CONTACT US

US OFFICE

925 WEST KENYON AVE. SUITE 6
ENGLEWOOD, CO 80110

PHONE 888-480-5552

FAX 303-788-9996

EMAIL braemar@braemarbuildings.com

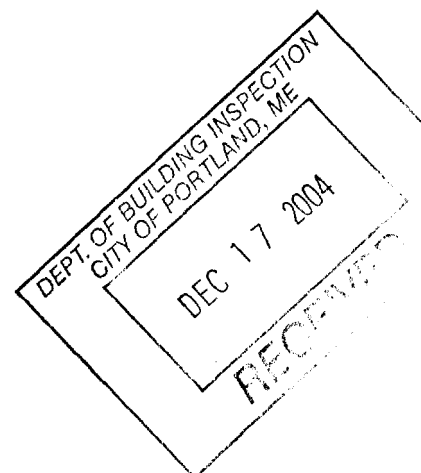
CANADIAN OFFICE

3149 REGIONAL ROAD #9
YORK, ONTARIO N0A1R0
CANADA

PHONE 800-215-1996

FAX 905-772-3422

EMAIL braemar@braemarbldg.com





Manual: Quality Control

Page: P-1

Section: Chapter 4 - Purchasing

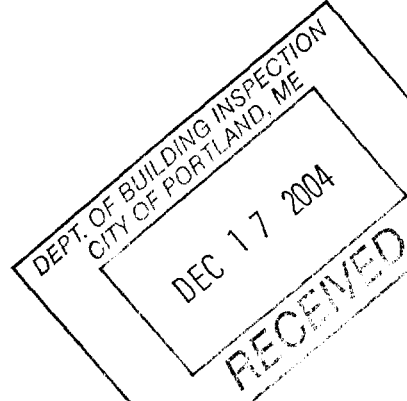
Of: 13

Chapter 4 Purchasing

NCI Building Systems, L.P.
7301 Fairview, Houston, TX 77041
713-466-7788

Table of Contents

Chapter 4 Purchasing	P-1 — 13
Table Of Contents	P-1
Section A Built-Up Plate	P-2
Section B Cold Form Shapes	P-3
Section C Hot Roll Shapes	P-4
Section D Sheeting	P-8
Section E Trim	P-12
Section F Anchor Bolts	P-13



Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-2

Section: Chapter 4 - Purchasing

Of: 13

Section A
Built-Up Plate
Purchasing Specification

Use	Material Description	Specification
BUILT-UP SECTION		
Flanges (5" to 12" wide)	Thickness 3/16" to 1"	ASTM A529 - Gr. 55 55 ksi min. Yield 70 ksi min. Tensile
Flanges (5" to 12" wide)	Thickness >1" to 2"	ASTM A572 - Gr. 50 50 ksi min. Yield 65 ksi min. Tensile or ASTM A36 - 42 42 ksi min. Yield 60 ksi min. Tensile
Flanges (> 12" wide)	Thickness 3/8" to 2"	ASTM A36 - 42 42 ksi min. Yield 60 ksi min. Tensile
Webs (Any Width)	Thickness 1/8", 8 gauge, 5/32", and 10 gauge	ASTM A36 - 46 46 ksi min. Yield 78 ksi min. Tensile or ASTM A1011-Gr. 50 50 ksi min. Yield 65 ksi min. Tensile
	Thickness 3/16" to 1/2"	ASTM A36 - 46 46 ksi min. Yield 78 ksi min. Tensile
	Thickness > 1/2"	ASTM A572 - Gr. 50 50 ksi min. Yield 65 ksi min. Tensile

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-3

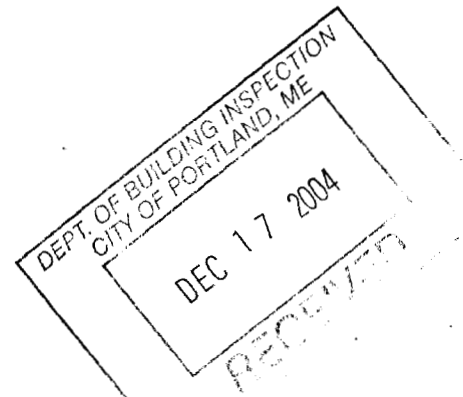
Section: Chapter 4 - Purchasing

Of: 13

Section B
Cold Form Shapes
Purchasing Specification

Use	Material Description	Specification
ZEE & CEE Shapes 4", 6", 7", 8", 9", 10" and 12" Deep	0.581 (16 Ga.) HR COIL*	ASTMA1011 - Gr. 55 (Old #A607 & A570) 57 ksi min. Yield 70 ksi min. Tensile
	0.618 (15 Ga.) HR COIL*	
	0.685 (14 Ga.) HR COIL*	
	0.0808 (13 Ga.) HR COIL*	
Eave Struts 8", 8", 10" and 12" Deep	0.0998 (12 Ga.) HR COIL*	ASTMA1011 - Gr. 55 (Old #A607 & A570) 57 ksi min. Yield 70 ksi min. Tensile
	0.0665 (14 Ga.) HR COIL*	
	0.0998 (12 Ga.) HR COIL*	

* IF ANY OF THESE MATERIALS ARE PURCHASED AS FLAT SHEETS, THE SAME SPECIFICATIONS APPLY. THE THICKNESS INDICATED ABOVE IS THE MINIMUM ACCEPTABLE UNCOATED THICKNESS.



Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control
 Section: Chapter 4 - Purchasing

Page: P-4
 Of: 13

Section C
Hot Roll Shapes
Purchasing Specification

Use	Material Description	Specification
Hot Roll Beams	WF Shapes W8 X 10 thru W24 X 75	ASTM A36/A572 Gr. 50 or A992 50 ksi min. Yield 65 ksi min. Tensile
	WF Shapes Larger Than W24 X 76	ASTM A36 36 ksi min. Yield 58 ksi min. Tensile 80 ksi max. Tensile
	"S" Shapes	ASTM A36 36 ksi min. Yield 58 ksi min. Tensile 80 ksi max. Tensile
Hot Roll Channels	C8 X 11.5 thru C15 X 33.4	ASTM A36/A572 Gr. 50 or A992 50 ksi min. Yield 65 ksi min. Tensile
	Misc. Channels	ASTM A36 36 ksi min. Yield 58 ksi min. Tensile 80 ksi max. Tensile

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-5

Section: Chapter 4 - Purchasing

Of: 13

Section C
Hot Roll Shapes
Purchasing Specification

Use	Material Description	Specification
Pipe Section	Round Pipes 3" Diameter and Larger	ASTM A53 Type "E" Gr. B 35 ksi min. Yield 60 ksi min. Tensile
Hot Roll Angle Shapes	L 2" X 2" X 1/8" and Greater L 2 1/2" X 2" X 3/16" and Greater	ASTM A36 36 ksi min. Yield 58 ksi min. Tensile 80 ksi max. Tensile
Hot Roll Rod	1/2" Diameter and Greater	ASTM A36 36 ksi min. Yield 58 ksi min. Tensile 80 ksi max. Tensile

DEPT. OF BUILDING INSPECTION
 CITY OF PORTLAND, ME
 DEC 17 2004
 RECEIVED

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-6

Section: Chapter 4 - Purchasing

Of: 13

Section D

Sheeting

Purchasing Specification

Use	Material Description	Specification
Panels "R", "A", "AM", "U"	26 Ga. Galvalume®	ASTM A792 Gr. 50 & 80
	0.019 X 41 9/16 Bare	50 ksi min. Yield - Gr. 50
	With AZ55 Coating	65 ksi min. Tensile
	0.020 X 41 9/16 Painted	Gr. 50
	With AZ55 min. Coating	80 ksi min. Yield - Gr. 80
	24 Ga. Galvalume®	82 ksi min. Tensile
	0.023 X 41 9/16 Bare	Gr. 80
	With AZ55 Coating	
Panels PBR & PBU	0.024 X 41 9/16 Painted	
	With AZ55 min. Coating	
	22 Ga. Galvalume®	
	0.029 X 41 9/16 Bare	
	With AZ55 Coating	
	0.030 X 41 9/16 Painted	
	With AZ55 min. Coating	
		ASTM A792 Gr. 50 & 80
		50 ksi min. Yield
		65 ksi min. Tensile
		Gr. 50
		80 ksi min. Yield - Gr. 80
		82 ksi min. Tensile

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
DEC 17 2004
RECORDED

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-7

Section: Chapter 4 - Purchasing

Of: 13


Section D
Sheeting
Purchasing Specification

Use	Material Description	Specification
Panels CR/Supra-Rib	29 Ga. Galvalume®	ASTM A792 Gr. 50 & 80 50 ksi min. Yield 85 ksi min. Tensile Gr. 50 80 ksi min. Yield - Gr. 80 82 ksi min. Tensile Gr. 80
	0.014 X 44 1/2 Bare	
	With AZ55 Coating	
	0.015 X 44 1/2 Painted	
	With AZ55 min. Coating	
	26 Ga. Galvalume®	
	0.019 X 44 1/2 Bare	
	With AZ55 Coating	
	0.020 X 44 1/2 Painted	
	With AZ55 min. Coating	
	24 Ga. Galvalume®	
	0.023 X 44 1/2 Bare	
	With AZ55 Coating	
	0.024 X 44 1/2 Painted	
With AZ55 min. Coating		
22 Ga. Galvalume®		
0.029 X 44 1/2 Bare		
With AZ55 Coating		
0.030 X 44 1/2 Painted		
With AZ55 min. Coating		
Panels Retro-R®	29 Ga. Galvalume®	ASTM A792 Gr. 80 80 ksi min. Yield 82 ksi min. Tensile
	0.014 X 40 7/8 Bare	
	With AZ55 Coating	
	0.015 X 40 7/8 Painted	
With AZ55 min. Coating		

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12

	Manual: Quality Control	Page: P-8
	Section: Chapter 4 - Purchasing	Of: 13

Section D
Sheeting
Purchasing Specification

Use	Material Description	Specification
Panels Ultra-Dek® & Double-Lok®	P24 Ca. Galvalume® 0.023 X 29 25/16 Bare With AZ55 casting	ASTMA792 Gr. 50 50 ksi min. Yield 65 ksi min. Tensile
	0.024 X 29 15/16 Painted With AZ55 min. Coating	
	22 Ga. Galvalume® 0.029 X 29 15/16 Bare With AZ55 Coating	
	0.030 X 29 15/16 Painted With AZ55 min. Coating	
Panels BattenLok®	24 Sa. Galvalume® 0.023 X 22 Bare With AZ55 Coating	ASTMA792 Gr. 50 50 ksi min. Yield 65 ksi min. Tensile
	0.024 X 22 Painted With AZ55 min. Coating	
	22 Ga. Galvalume® 0.029 X 22 Bare With AZ55 Coating	
	0.030 X 22 Painted With AZ55 min. Coating	
	With AZ55 min. Coating	

Prepared By: David Fulton	Effective Date: April 14, 2002	Revision No.: 12
---------------------------	--------------------------------	------------------



Manual: Quality Control

Page: F-9

Section: Chapter 4 - Purchasing

Of: 13

Section D
Sheeting
Purchasing Specification

Use	Material Description	Specification
Panels Lokseam® 18	24 Ga. Galvalume® 0.023 X 24 Bare With AZ55 Coating 0.024 X 24 Painted With AZ55 min. Coating 22 Ga. Galvalume® 0.029 X 24 Bare With AZ55 Coating 0.030 X 24 Painted With AZ55 min. Coating	ASTM A792 Gr. 50 50 ksi min. Yield 65 ksi min. Tensile
Panels Lokseam® 16	24 Ga. Galvalume® 0.523 X 22 Bare With AZ55 Coating 0.024 X 22 Painted With AZ55 min. Coating 22 Ga. Galvalume® 0.029 X 22 Bare With AZ55 Coating 0.530 X 22 Painted With AZ55 min. Coating	ASTM A792 Gr. 50 50 ksi min. Yield 65 ksi min. Tensile
Panels Lokseam® 12	24 Ga. Galvalume® 0.023 X 18 Bare With AZ55 Coating 0.024 X 18 Painted With AZ55 min. Coating 22 Ga. Galvalume® 0.029 X 18 Bare With AZ55 Coating 0.030 X 18 Painted With AZ55 min. Coating	ASTM A792 Gr. 50 50 ksi min. Yield 65 ksi min. Tensile

DEPT. OF BUILDINGS INSPECTION
CITY OF PORTLAND, ME
DEC 17 2004
RECEIVED

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-10

Section: Chapter 4 - Purchasing

Of: 13

Section D

Sheeting

Purchasing &

Use	Material Description	Specification
Panels Flat 12" Wide	24 Ga. Galvalume®	ASTM A792 Gr. 50 60 ksi min. Yield 65 ksi min. Tensile
	0.023 X 15 7/8 Bare With AZ55 Coating	
	0.024 X 15 7/8 Painted With AZ55 min. Coating	
	22 Ga. Galvalume®	
	0.029 X 15 7/8 Bare With AZ55 Coating	
	0.030 X 15 7/8 Painted With AZ55 min. Coating	

DEPT. OF BUILDING INSPECTION
CITY OF BOSTON, MASS.
DEC 17 2004
RECEIVED

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-11

Section: Chapter 4 - Purchasing

Of: 13

Section D

Sheeting

Purchasing Specification

Use	Material Description	Specification
Panel Craftsman™	26 Ga. Galvalume® 0.019 X 13 1/2 Bare With AZ55 Coating	ASTMA792 Gr. 50 & 80 50 ksi min. Yield - Gr. 50 65 ksi min. Tensile Gr. 50
	0.020 X 13 1/2 Painted With AZ55 min. Coating 24 Ga. Galvalume® 0.023 X t3 1/2 Bare With AZ55 Coating	80 ksi min. Yield - Gr. 80 82 ksi min. Tensile Gr. 80
Batten for SB	28 Ga. Galvalume® 0.019 X 2 8/16 Bare With AZ55 Coating	ASTMA792 Gr. 50 & 80 50 ksi min. Yield - Gr. 50 65 ksi min. Tensile Gr. 50
	0.020 X 2 9/16 Painted With AZ55 min. Coating 24 Ga. Galvalume® 0.023 X 2 9/16 Bare With AZ55 Coating	80 ksi min. Yield - Gr. 80 82 ksi min. Tensile Gr. 80
Batten for LB	26 Ga. Galvalume® 0.019 X 5 5/8 Bare With AZ55 Coating	ASTMA792 Gr. 50 & 80 50 ksi min. Yield - Gr. 50 85 ksi min. Tensile Gr. 50
	0.020 X 5 5/8 Painted With AZ55 min. Coating 24 Ga. Galvalume® 0.023 X 5 5/8 Bare With AZ55 Coating	80 ksi min. Yield - Gr. 80 82 ksi min. Tensile Gr. 80
	0.024 X 13 1/2 Painted With AZ55 min. Coating	

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



Manual: Quality Control

Page: P-12

Section: Chapter 4 - Purchasing

Of: 13

Section E

Trim

Purchasing Specification

Use	Material Description	Specification
Flashing Materials	26 or 24 Ga. Galvalume® 0.019 X varies Bare With AZ55 Coating 0.020 X varies Painted With AZ55 min. Coating or 0.023 X varies Bare With AZ55 Coating 0.024 X varies Painted With AZ55 min. Coating	ASTM A792 Gr. 50 50 ksi min. Yield 65 ksi min. Tensile

Prepared By: David Fulton

Effective Date: April 14, 2002

Revision No.: 12



PORTLAND MAINE

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

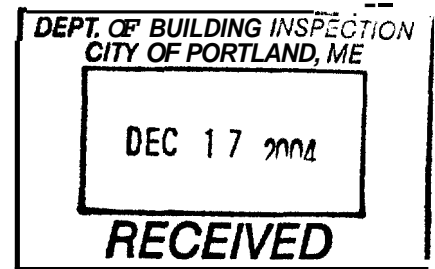
Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

December 10, 2004

Will Boyle
B & L Partners, LLC
70 Bishop Street
Portland, ME 04103

RE: Rainmaker Business Park
ID #2004-0229, CBL #3 12B004
Amendment to an Approved Plan Application



Dear Mr. Boyle:

On December 10, 2004 the Portland Planning Authority approved the above referenced project as presented in plans prepared by Sevee & Maher Engineers, Inc. dated March 3, 2004, last revised December 6, 2004. This approval is based on the findings and subject to the provisions, requirements and conditions contained in this letter.

Findings

1. The project is in conformance with the use, performance and dimensional standards of the I-M zone.
2. The project, as presented in final plans is in conformance with the Site Plan Ordinance.

Conditions

1. The applicant shall install at a minimum an 8" underdrain pipe with an inline neoplast drain that will connect into the stormdrain on the easterly side of Riverside Street. The final location of the drain shall be such that it is at a low point adjacent to the Newton property line approximately 100 feet from the Riverside Street curbline. The final location and installation shall be approved by the City DRC in the field prior to construction and/or grading at the structure.

2. The applicant shall revise the light fixture type proposed for the North sides of the existing building and building #1 to specify a cut-off fixture type. Catalog of the cut-off fixtures cuts shall be presented to the planning authority for final review and approval.

Provisions and Requirements

Please note the following provisions and requirements for all site plan approvals:

1. Where submission drawings are available in electronic form, the applicant shall submit any available electronic Autocad files (*.dwg), release 14 or greater, with seven (7) sets of the final plans.
2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and 7 final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.
3. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.
4. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
5. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
6. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Department at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

Appeal

Where the Planning Authority has finally disapproved a site plan, any person aggrieved may appeal the decision to the Planning Board within ten (10) days of the decision being rendered. Upon the taking of such appeal, the application shall be reviewed as if referred by the Planning Authority, except that the Planning Board may not decline to accept the reference.

If you have any questions regarding this approval, please contact Ethan Boxer-Macomber, Planner at 756-8083 or ebm@portlandmaine.gov.

Sincerely,


Alex Jaegerman, Planning Division Director

Cc: Ethan Boxer-Macomber, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections Division
Eric Labelle, City Engineer
Correspondence File

This page contains a detailed description of the Parcel ID you selected. Press the **New Search** button at the bottom of the screen to submit a new query.

Current Owner Information

Card Number	1 of 1
Parcel ID	306 8006001
Location	585 RIVERSIDE ST
Land Use	WHOLESALE
 Owner Address	 B & L PARTNERS LLC 277 MILTON RD ROCHESTER NH 03868
 Book/ Page	 20848/082
Legal	306-B-6 312-8-4 RIVERSIDE ST 581-583 184719 SF

Valuation Information

Land	Building	Total
\$199,920	\$251,790	\$451,710

Building Information

Bldg #	Year Built	# units	Bldg Sq. Ft.	Identical Units
1	1973	1	12960	1
Total Acres	Total Buildings	Sq. Ft.	Structure Type	Building Name
4.241	12960		PREFAB WAREHOUSE	SANI-CLEAN DIST

Exterior/Interior Information

Section	Levels	Size	Use
1	01/01	11360	WAREHOUSE
1	01/01	800	MULTI-USE SALES
1	M1/M1	800	OFFICE ENCLOSURE
 Height	Walls	Acating	A/C
18	METAL-LIGHT	HW/STEAM	
9	METAL-LIGHT	NONE	
9	ENCLOSURE	HW/STEAM	

Building Other Features

Line	Structure Type	Identical Units
1	OVERHEAD DOOR - WD/MT	3
1	DOCK LEVELERS	1
1	OVERHEAD DOOR - WD/MT	1
1	SPRINKLER - WET	1

Yard Improvements

Year Built	Structure Type	Length or Sq. Ft.	# Units
1973	ASPHALT PARKING	12000	1

From: Marge Schmuckal
To: Ethan Boxer-Macomber
Date: Fri, Jun 18, 2004 4:02 PM
Subject: 585 Riverside Street - Rainmaker

Ethan,

I have reviewed the latest plans dated 5/19/04 - This property *is* located within an I-M Industrial Zone. All setbacks, impervious surface, parking, and pavement setbacks are being met. All I-M zone requirements are being met.

Marge



S.W. COLE
ENGINEERING, INC.

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

FACSIMILE MESSAGE

COMPANY
ATTENTION
SWC JOB NUMBER
FAX NUMBER
DATE
SENDER
SUBJECT:

City of Portland
Mike Nugent
874-8714
12/16/04
Roger Domagala
585 Riverside Street

NO. OF PAGES INCLUDING COVER 6
HARD COPY TO FOLLOW IN MAIL No

The information contained in this facsimile transmission is privileged and confidential and intended for the use of the addresses named above. If the receiver of the following pages is not (one of) the above named recipient(s), you are hereby notified that any retention, dissemination, distribution or copying of this facsimile is prohibited. If you received this facsimile in error, please notify us immediately by telephone. Thank you.

GRAY, ME OFFICE
286 Portland Road, Gray, ME 04039, Tel (207) 657-2866, Fax (207) 657-2840, (E-MAIL) infogray@swcole.com, 1) www.swcole.com

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



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

STATEMENT OF SPECIAL INSPECTIONS

PROJECT: 585 Riverside Street, Loading Dock Addition

PERMIT APPLICANT: B&L Partners
APPLICANTS ADDRESS: 70 Bishop Street
Portland, ME 04103

STRUCTURAL ENGINEER OF RECORD: Chander P. Nangia, PE (Maine Registration 3334)

CONTRACTOR: SAS Construction

This statement of Special Inspections is submitted in accordance with Section 1704.0 of the 2003 International Building Code. It includes a listing of special inspections applicable to this project, as well as the name of the Special Inspector, and the names of other agencies intended to be retained for conducting these inspections.

The Special Inspector shall keep records of all inspections listed herein, and shall furnish inspection reports to the Registered Design Professional of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction, if the discrepancies are not corrected, the discrepancies shall be brought to the attention of the Registered Design Professional of Record. Interim reports shall be submitted to the Registered Design Professional of Record monthly, unless more frequent submissions are requested.

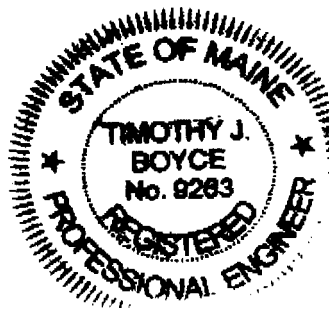
Job site Safety is solely the responsibility of the Contractor. Materials and activities to be inspected are not to include the Contractor's equipment and methods used to erect or install the materials listed.

Prepared By:

TYPED NAME Timothy J. Boyce

Handwritten signature of Timothy J. Boyce

12-16-04
DATE



Applicant's Authorization

SIGNATURE

Handwritten signature and date 12/16/04

DATE

GRAY, ME OFFICE
286 Portland Road, Gray, ME 04039-9586 • Tel (207) 657-2866 • Fax (207) 657-2840 • E-Mail info@gray@swcole.com • www.swcole.com

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

LIST OF AGENTS

PROJECT: 585 Riverside Street, Loading Dock Addition

STRUCTURAL ENGINEER OF RECORD: Chander P. Nangia, PE (Maine Registration 3334)

Following is the List of Agents selected for performance of Special Inspections for this project.

FIRM

- | | | |
|----|--------------------|-----------------------------|
| 1. | Special Inspector | S.W. Cole Engineering, Inc. |
| 2. | Testing Laboratory | S.W. Cole Engineering, Inc. |

**Table 1704.3
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION**

Verification and Inspection	Extent of Inspection	Agent	Date Completed	Comments
1. Material verification of high-strength bolts, nuts and washers:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Periodic	2		
b. Manufacturer's certificate of compliance	Periodic	1,3		SER to verify shop drawings
2. Inspection of high strength bolting	Periodic	2		
3. Material verification of structural steel				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	All	3		SER to verify shop drawings
b. Manufacturer's certified mill test	All	3		SER to verify shop drawings
4. Material verification of weld filler				
b. Identification markings to conform to AWS specification in the approved construction documents.	All	3		SER to verify shop drawings
b. Manufacturer's certificate of compliance	All	3		SER to verify shop drawings
5. Inspection of steel framing				
a. Bracket connections	Periodic	2		
b. Member location	Periodic	2		
c. Application of joint details	Periodic	2		

**Table 1704.4
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION**

Verification and Inspection	Extent of Inspection	Agent	Date Completed	Comments
1. Inspection of reinforcing steel for compliance with size, grade, spacing, location and embedment	Periodic	2,3		SER to verify shop drawings
2. Verify use of required mix design	Periodic	2,3		SER to review and approve mix design prior to installation
3. Sample fresh concrete for strength tests, perform slump and air content tests, and determine temperature of concrete	Continuous	2		
4. Inspection for maintenance of specified curing temperature and techniques	Periodic	2		

Table 1704.7

Verification and Inspection	Extent of Inspection	Agent	Date Completed	Comments
1. Review subgrade condition prior to placement of any fill or concrete in accordance with geotechnical report	Continuous	2		
2. Verify use of required fill material	Periodic	2		
3. Observe placement and fill lift thickness of foundation and sub-slab fill	Periodic	2		
4. Perform compaction tests on foundation and sub-slab fill	Periodic	2		

STRUCTURAL CALCULATIONS

RECEIVED

DEC 16 2004

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME

PROJECT:

80' x 80' x 18'-0" - BLDG. 'A'
20' x 24' x 19'-2" / 20'-0" - BLDG. 'B'

FOR

B/L CONSTRUCTION

SCOPE OF WORK

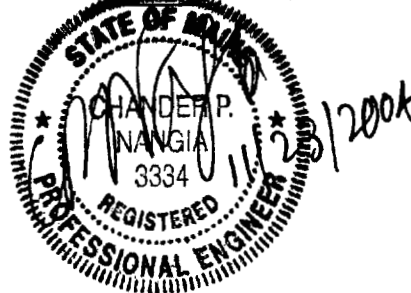
FOUNDATION DESIGN

DATE:

11-16-04

PROFESSIONAL ENGINEER'S

STAMP



JOB NUMBER: 07204 PAGE 07 OF _____
 PROJECT: _____
 DESCRIPTION: _____

ISSUE:	1	A	REV.
BY:	NO		
DATE:	11-15-04		
CHKD:			
APPR:			

206.8' - D4-917 20'x24' x 19'2" (L.S.)

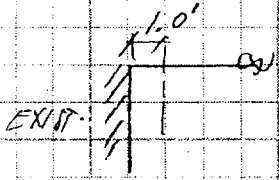
DOWN REACTIONS

DL+LL

$$\begin{aligned} & \leftarrow 0.06 \pm 0.7 = 0.76^* \\ & \uparrow 0.84 \pm 6.03 = 6.92^* \end{aligned}$$

DL+WL

$$\begin{aligned} & \leftarrow 0.06 \pm 2.44 = 2.5^* \\ & \uparrow 0.84 - 6.36 - 2.0 = 7.52 \end{aligned}$$



UPRAFT

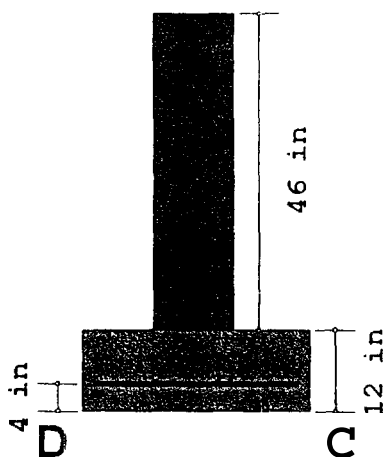
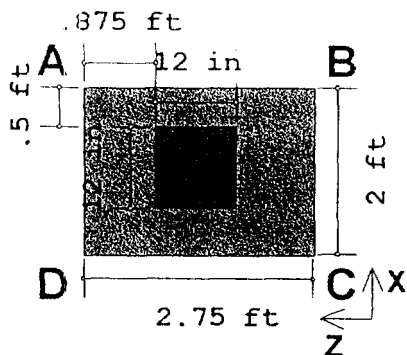
2.5 x 2 x 0.15 =	0.75	FTRG
2.5 x 4 x 0.1 =	1.0	DIRT
10' x 10' x 0.416 x 0.15 =	6.25	SCAB. 5'
20 x 4.5 x 0.66 x 0.15 =	8.91	GR. REAR
	<u>16.96</u>	

$FS. = 16.96 / 7.52 = 2.26 > 2.0 \text{ OK}$

5
10
15
20
25
30
35
40

M.F. COLUMN (S.SLOPE)

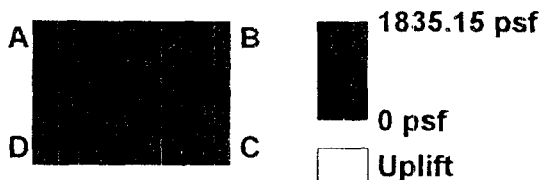
OT 2041
PG-CB
11-15-04



Allowable Soil Bearing :2000 psf
Concrete Weight :145 pcf
Concrete f_c :2.5 ksi
Steel f_y :60 ksi

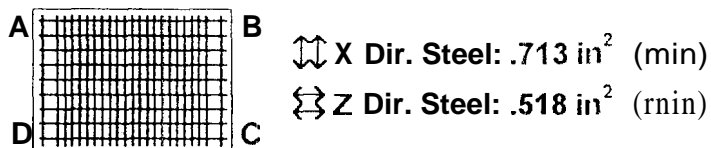
Service Soil Bearing

Maximum Bearing 1835.15 psf DL+LL
Max/Allowable Ratio .918



Flexure Design

Maximum Mu_{XX} / ϕ 2.469 k-ft ACI 9.1
Maximum Mu_{ZZ} / ϕ 1.408 k-ft ACI 9.1



X direction steel requires the following placement:

Region 4 (starts at A): 4.5 in Steel: .056 in'
Region 2 (middle): 24 in Steel: .6 in'
Region 3 (ends at B): 4.5 in Steel: .056 in'

Maximum Shear Check Ratios ($V_u / \phi V_c$)

Two Way (Punching) Shear NA
One Way Shear, X dir. cut .074 ACI 9.1
One Way Shear, Z dir. cut 0 ACI 9.1

Overtuning Moment Safety Factors (QTM SF)

OTM SF About X-X Axis NA DL+LL
OTM SF About Z-Z Axis NA DL+LL

Concrete Bearing (For Vertical Loads Only!)

Maximum B_u / ϕ 22.801 k ACI 9.1
Allowable B_c 612 k

Loads	P (k)	V _x (k)	V _z (k)	M _x (k-ft)	M _z (k-ft)	Overburden (psf)
DL	.84					400
LL	6.1					

Diagram	Diagram	Diagram	Diagram	Diagram	Diagram
	A D	D C	B A	A D	

(4) # 5 E.W. A.S. = 1.24 in² > 0.71 in² OK

NOTE: 2' x 3' x 1' FTUC USED

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

04-0509 August 31, 2004

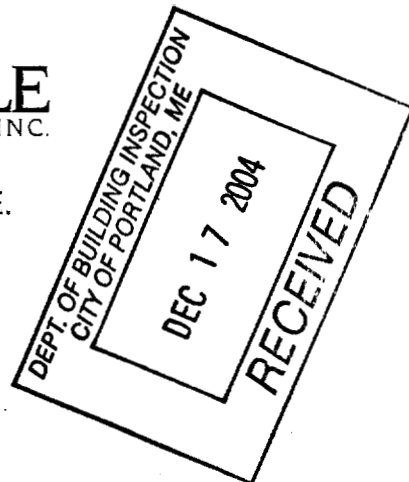
Prepared for:

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





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:

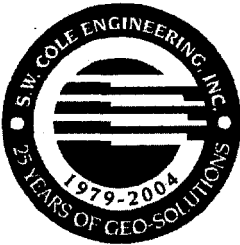
In accordance with our Agreement dated June 1, 2004, we have observed test pit explorations and made a bearing capacity assessment of the subsurface soils for foundation support of the proposed buildings at the above referenced site. Our scope of work was limited to observations of test pits explorations, 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



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

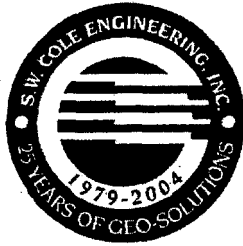
The test pits generally encountered a soil profile consisting of about 1-foot of forest duff overlying 1 to 3 feet of silty sand overlying hard to stiff olive silty clay. The test pits were terminated at depths of 4.5 to 7.0 feet below the ground surface.

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-



04-0509
August 31, 2004

draining, non-frost susceptible gravelly sand to prevent potentially adverse adfreezing and frost thrust issues and to promote drainage.

We recommend that excavation to subgrade be completed with a smooth-edged bucket to preclude disturbance of the olive silty clay anticipated at footing grade. We recommend that footing subgrades be overexcavated by at least 6 inches for installation of a working mat of $\frac{3}{4}$ -inch crushed stone overlying a geotextile filter fabric. The crushed stone working mat will help provide a stable surface for foundation construction over the moisture sensitive native clays and a media to sump and pump for excavation dewatering. If subgrade soils become soft, wet or disturbed during construction, we recommend that the disturbed soils be overexcavated and replaced with compacted crushed stone placed over a geotextile filter fabric. Alternatively, footing subgrade may be protected with 6 inches of compacted crushed gravel in place of the crushed stone and filter fabric mat. S.W.COLE ENGINEERING, INC. is available to observe subgrades to determine that our recommendations have been properly interpreted prior to placement of the spread footings.

For spread footings founded on properly prepared subgrades, we recommend an allowable soils bearing pressure of 2.0 ksf with a base friction factor of 0.35 for foundation design. Foundations exposed to freezing temperatures must be placed at least 4.5 feet below exterior finish grades in order to provide frost protection. We recommend that a perimeter underdrain be installed at footing grade. The underdrain must have a gravity outlet.

We recommend that on-grade floor slabs in heated spaces be underlain with at least 12 inches of compacted crushed gravel meeting the requirements of MDOT Standard Specification 703.06 Type D Gravel modified to maximum aggregate size of 4 inches. We recommend a vapor retarder be installed beneath on-grade slabs with moisture sensitive flooring and that on-grade floor slabs be designed with control joints to control shrinkage cracking.



04-0509
August 31, 2004

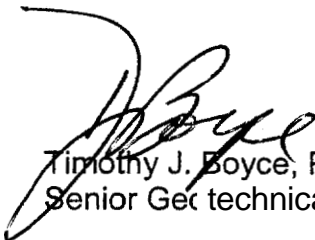
S.W. COLE ENGINEERING, INC. is available to provide geotechnical observations and testing of soil, concrete, asphalt and structural steel construction materials during construction if necessary.

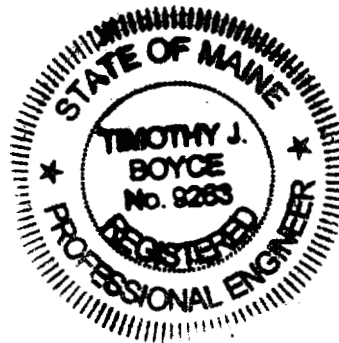
CLOSURE

We trust this letter meets your current needs. If you have any questions or require additional assistance, please do not hesitate to contact us.

Sincerely,

S.W. COLE ENGINEERING, INC.


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



Attachment A Limitations

This report has been prepared for the exclusive use of SBM Associates for specific application to the Proposed Building No.1 and Building No.2 on the Rainmaker Business Park at 585 Riverside Street in Portland, Maine as described herein. SBM Associates limited our services to an assessment of soil bearing capacity only and a deeper soils investigation to evaluate settlement and other geotechnical considerations was specifically excluded by SBM Associates. SBM Associates has agreed to protect and hold harmless S.W.COLE ENGINEERING, INC. from any and all claims, including third-party claims, for damages or consequential damages due to underlying soil conditions including but not limited to post-construction settlement. S.W.COLE ENGINEERING, INC. has endeavored to conduct the work in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

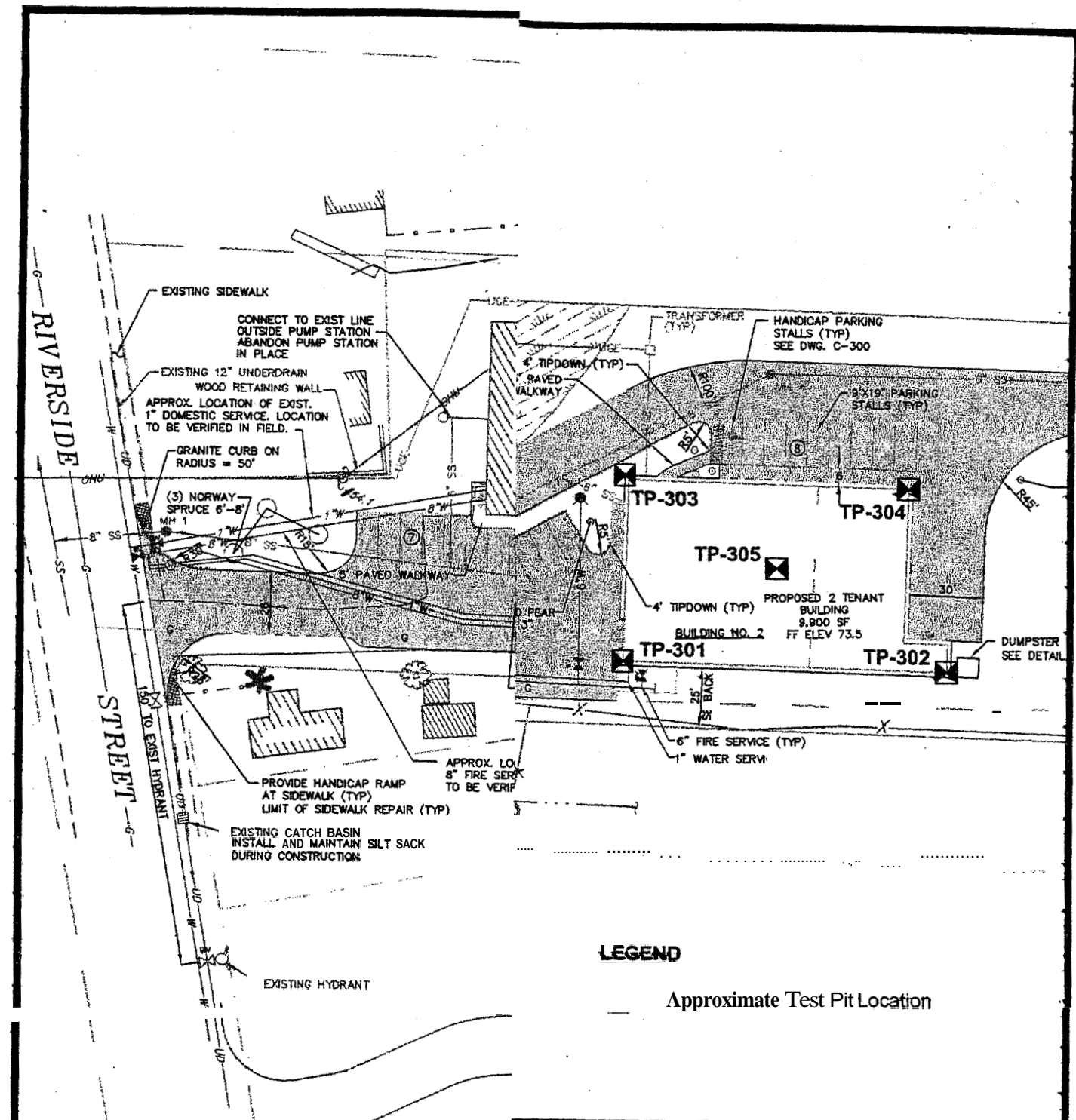
The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples. Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

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.

S.W.COLE ENGINEERING, INC.'s scope of work 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 ENGINEERING, INC. 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 ENGINEERING, INC.

:PROJECTS\2004\04-0509\04-0509.exp loc.dwg, SWC EXP LOC, 8/17/2004 10:30:43 AM, DRay, HP DesignJet 450C.pc3, Oversize: ANSI B (landscape), 1:1



LEGEND

— X — Approximate Test Pit Location

S.W. COLE
ENGINEERING, INC.

SBM ASSOCIATES, INC.

EXPLORATION LOCATION PLAN

Proposed Rainmaker Business Park
585 Riverside Street
Portland, Maine

04-0509 S
08/17/04

Scale 1" = 60'
Sheet 1



PROJECT/CLIENT: RAINMAKER BUSINESS PARK / SBM ASSOCIATES
LOCATION: 585 RIVERSIDE STREET PORTLAND MAINE

PROJECT NO. 04-0509

TEST PIT 201			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>
SAMPLE NO.	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	DARK BROWN FOREST DUFF WITH ORGANICS	
	2.0'	BROWN SILTY SAND WITH ORGANICS	
	4.5'	OLIVE SILTY CLAY $q_p = 7.0 \text{ ksf}$	
		BOTTOM OF EXPLORATION AT 4.5'	
COMPLETION DEPTH: <u>4.5'</u>		DEPTH TO WATER: <u>MODERATE SEEPAGE 0 - 2'</u> <u>NO CAVING OBSERVED</u>	

TEST PIT 202			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>
SAMPLE NO.	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
	1.2'	DARK BROWN FOREST DUFF WITH ORGANICS	
	1.9'	BROWN SILT AND SAND	
		OLIVE SILTY CLAY $q_p = 7.5 - 8.5 \text{ ksf}$	
	6.5'	 $q_p = 7.0 \text{ ksf}$	
		BOTTOM OF EXPLORATION AT 6.5'	
COMPLETION DEPTH: <u>6.5'</u>		DEPTH TO WATER: <u>MINOR SEEPAGE 0 - 1.9'</u> <u>NO CAVING OBSERVED</u>	



PROJECT/CLIENT: RAINMAKER BUSINESSPARK / SBM ASSOCIATES
LOCATION: 585 RIVERSIDE STREET PORTLAND MAINE

PROJECT NO. 04-0509

TEST PIT 203			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	DARK BROWN FOREST DUFF WITH ORGANICS	
	1.9'	BROWN TO ORANGE SILTY SAND	
	2.7'	BROWN SAND SOME SILT	
	5.0'	OLIVE SILTY CLAY q_p = 9.0 ksf	
	5.0'	OLIVE SILTY CLAY q_b = 6.0 ksf	
		BOTTOM OF EXPLORATION AT 5.0'	
COMPLETION DEPTH: <u>5.0'</u>		DEPTH TO WATER: <u>MINOR SEEPAGE 0 - 2'</u> NO CAVING OBSERVED	

TEST PIT 204			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	DARK BROWN FOREST DUFF WITH ORGANICS	
	2.0'	BROWN SILTY FINE TO MEDIUM SAND	
	5.0'	OLIVE SILTY CLAY q_p = 9.0 ksf	
	5.0'	BOTTOM OF EXPLORATION AT 5.0'	
		BOTTOM OF EXPLORATION AT 5.0'	
COMPLETION DEPTH: <u>5.0'</u>		DEPTH TO WATER: <u>MODERATE SEEPAGE 0 - 2'</u> NO CAVING OBSERVED	



PROJECT/CLIENT: RAINMAKER BUSINESS PARK / SBM ASSOCIATES
 LOCATION: 585 RIVERSIDE STREET PORTLAND MAINE

PROJECT NO. 04-0509

TEST PIT 301			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	
		LOCATION: <u>SEE SHEET 1</u>	
SAMPLE NO.	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
	0.9'	DARK BROWN FOREST DUFF WITH ORGANICS	
	1.4'	BROWN TO ORANGE SILTY SAND	
		BROWN FINE TO MEDIUM SAND TRACE SILT	
	2.3'		
	2.9'	BROWN SILTY SAND SOME CLAY	
	3.5'	BROWN MEDIUM SAND TRACE SILT	
		OLIVE SILTY CLAY $q_p = 9.0 \text{ksf}$	
	7.0'		
		BOTTOM OF EXPLORATION AT 7.0'	
COMPLETION DEPTH: <u>7.0'</u>		DEPTH TO WATER: <u>MINOR SEEPAGE 3" - 3.5"</u> <u>NO CAVING OBSERVED</u>	

TEST PIT 302			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	
		LOCATION: <u>SEE SHEET 1</u>	
SAMPLE NO.	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
	0.8'	DARK BROWN FOREST DUFF WITH ORGANICS	
	1.7'	BROWN SILT AND SAND SOME CLAY	
		OLIVE SILTY CLAY $q_p = 9.0^+ \text{ksf}$	
			$q_p = 9.0^+ \text{ksf}$
	6.5'		
		BOTTOM OF EXPLORATION AT 6.5'	
COMPLETION DEPTH: <u>6.5'</u>		DEPTH TO WATER: <u>NO SEEPAGE OBSERVED</u> <u>NO CAVING OBSERVED</u>	

PROJECT/CLIENT: RAINMAKER BUSINESS PARK / SBM ASSOCIATES
 LOCATION: 585 RIVERSIDE STREET PORTLAND MAINE

PROJECT NO. 04-0509

TEST PIT 303			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.9'	DARK BROWN FOREST DUFF WITH ORGANICS	
	1.7'	BROWN TO ORANGE SILTY SAND	
	2.5'	BROWN FINE SAND TRACE SILT	
	3.0'	BROWN SILTY SAND TRACE CLAY	
	4.0'	BROWN MEDIUM SAND TRACE SILT	
	7.0'	OLIVE SILTY CLAY $q_p = 8.0 - 8.5 \text{ksf}$	
		BOTTOM OF EXPLORATION AT 7.0'	
COMPLETION DEPTH: <u>7.0'</u>		DEPTH TO WATER: <u>MODERATE SEEPAGE 3 - 4</u> <u>NO CAVING OBSERVED</u>	

TEST PIT 304			
DATE: <u>8/4/2004</u>		SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.9'	DARK BROWN FOREST DUFF WITH ORGANICS	
	1.4'	BROWN SILTY SAND WITH ORGANICS	
	6.0'	OLIVE SILTY CLAY $q_p = 9.0' \text{ksf}$	
		$q_p = 9.0' \text{ksf}$	
		BOTTOM OF EXPLORATION AT 6.0'	
COMPLETION DEPTH: <u>6.0'</u>		DEPTH TO WATER: <u>NO SEEPAGE OBSERVED</u> <u>NO CAVING OBSERVED</u>	



TEST PIT LOGS

PROJECT/CLIENT: RAINMAKER BUSINESSPARK / SBMASSOCIATES
 LOCATION: 585 RIVERSIDE STREET PORTLAND MAINE

PROJECT NO. 04-0509

TESTPIT <u>305</u>		DATE: <u>8/4/2004</u>	SURFACE ELEVATION: <u>NO SURVEY</u>	LOCATION: <u>SEE SHEET 1</u>	
SAMPLE		DEPTH	STRATUM DESCRIPTION		TEST RESULTS
NO.	DEPTH	(FT)			
		0.7'	DARK BROWN FOREST DUFF WITH ORGANICS		
		1.6'	BROWN TO ORANGE SILTY SAND		
			BROWN FINE SAND TRACE SILT		
		2.6'			
		3.1'	BROWN MEDIUM SAND TRACE SILT		
			OLIVE SILTY CLAY $q_p = 9.0$ ksf		
S-1	4 - 5'	5.0			
			BOTTOM OF EXPLORATION AT 5.0'		

COMPLETION DEPTH: <u>5.0'</u>	DEPTH TO WATER: <u>MINOR SEEPAGE 3.1 - 3.7'</u>
	NO CAVING OBSERVED



KEY TO THE 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)
- q_u - unconfined compressive strength, kips/sq. ft. - based on laboratory unconfined compressive test
- S_v - field vane shear strength, kips/sq. ft.
- L_v - lab vane shear strength, kips/sq. ft.
- q_p - unconfined compressive strength, kips/sq. ft. based on pocket penetrometer test
- O - organic content, percent (dry weight basis)
- W_L - liquid limit - Atterberg test
- W_P - 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. RQD is computed from recovered core samples.
- γ_T - total soil weight
- γ_B - buoyant soil weight
- HSA - Hollow Stem Auger
- HW - 4" Casing
- NW - 3" Casing
- SS - split-spoon sampler

Description of Proportions:

- 0 to 5% TRACE
- 5 to 12% SOME
- 12 to 35% "Y"
- 35+% AND

REFUSAL: Test Boring Explorations - 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: Test Pit Explorations - 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.