Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUREAU OF INSPECTION

PERMIT

Permit Numbei 060618

Please Read Application And Notes, If Any, Attached

This is to **certify** that 1039 RIVERSIDE LLC /Bis Construction, Inc.

has **permission** to 7,500 sf pre-engineered steel ilding (s only)

AT 1039 RIVERSIDE ST L 331 A001001

PERMIT ISSUED

JUN - 6 2006

CITY OF PORTLAND

provided that the person or persons rm or tion a epting this permit shall comply with all of the provisions of the Statutes of ine and of the nances of the City of Portland regulating the construction, maintenance and e of buildings and ctures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

N ficatio f inspe n mus e g n and w en permi on proc d b re this lding or rt there s l ed or osed-in 4 H UR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____

DepartmentName

6/6/06

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
06-0618	PERMIT ISSUED JUN - 6 2006 CITY OF PORTLAND	031 A001001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1039 RIVERSIDE ST	1039 RIVERSIDE LLC	340 FORE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone:**
	Biskup Construction, Inc.	16 Danielle Drive Windham	2078929800
Lessee/Buyer's Name	Phone:	Permit Type: Alterations - Commercial	Zone: I-M

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial	Commercial 7,500 sf pre-engineered steel building (shell only) Bldg #3	$1,461.00	$160,000.00	5

FIRE DEPT: ☑ Approved ☐ Denied

See Conditions

Signature: Greg Cass

INSPECTION:

Use Group: Shell Only Type: 5B

6/6/06

Signature:

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Proposed Project Description:

7,500 sf pre-engineered steel building (shell only)

Permit Taken By:	Date Applied For:
dmartin	05/01/2006

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
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..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
SK w/Conditions		
Date: 5/15/06	Date	Date:

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 PEKSON IN CHAKGE 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:	Date Applied For:	CBL:
06-0618	04/26/2006	331 A001001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1039 RIVERSIDE ST	1039 RIVERSIDE LLC	340 FORE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Biskup Construction, Inc.	16 Danielle Drive Windham	(207) 892-9800
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Alterations - Commercial	

Commercial 7,500 sf pre-engineered steel building (shell only)- Bldg #3	7,500 sf pre-engineered steel building (shell only)

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 05/15/2006

Note: BLDG #3 **Ok to Issue:** ☐

1) Separate permits are required for tenant fit up and to determine use and certificates of occupancy PRIOR to tenant occupancy.
2) Separate permits shall be required for any new signage.
3) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 06/06/2006

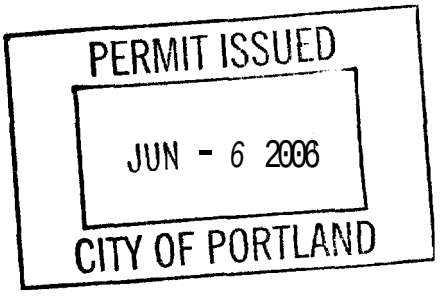
Note: **Ok to Issue:** ☑

1) Foundation and shell only-- A separate set of plansand all required technical submissions, prepared by a resideered design professional must be filed and a permit is required for the establishment of a use of the structure.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Cptn Greg Cass **Approval Date:** 05/22/2006

Note: **Ok to Issue:** ☑

1) Life Safety requirements shall be based on occupancy @ tenant fit-up.



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

ACCESSIBILITY CERTIFICATE

Designer: Michael R. Charek

Address of Project: 1039 Riverside Street

Nature of Project: 7,500 sf pre-engineered steel building, shell only

The undersigned, to the best of his knowledge, agrees that 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.

(SEAL)

REGISTERED ARCHITECT
MICHAEL R. CHAREK
No. 1174
STATE OF MAINE

Signature:

Title: Principal

Firm: Michael Charek Architects

Address: 25 Hartley Street
Portland, ME 04103

Phone: 207-761-0556

NOTE: If this project is a new Multi Family Structure of 4 Units or more, this project must also be designed in compliance with the Federal Fair Housing Act. On a separate submission, please explain in narrative form the method of compliance.

Applicant: 1039 Riverside LLC / Biskup Construction Date: 3/15/06

Address: 1039 Riverside St - Bldg #C-B-L: 331-A-001 3

CHECK-LIST AGAINST ZONING ORDINANCE

Date - Existing Def - This is one Bldg out of many on The Lot #06-0618

Zone Location - I-M

Interior or corner lot -

Proposed Use/Work - Construct Bldg # 3 - 7,500# - 75'x100'

Sewage Disposal - ~~Shell only~~ - City No tenants yes

Lot Street Frontage - 60' min - 606' given

Front Yard - 1' for each 1' of height - 21.5' min - 117' Scaled

Rear Yard - 1' for each 1' of height - 21.5' min - 100'+ shown

Side Yard - 1' for each 1' of height - 21.5' min - 209' Scaled

Projections -

Width of Lot - N/A

Height - 75' max - 21.5' to highest

Lot Area - No min - ~~128,768~~# 18.68 Acres with Additional 15 story

Lot Coverage/ Impervious Surface - 75% for entire lot req - ~~59~~% Actual given

Area per Family - N/A

Off-street Parking - Not rented yet - 18 Spaces in front of Bldg - more on site will need use permit with

Loading Bays - 2 loading bays shown - 1 req

Site Plan - # 2005-0152

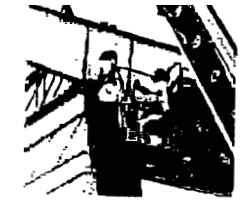
Shoreland Zoning/ Stream Protection - N/A

Flood Plains - panel 1B - Zone C

10' min Pavement Setbacks - 25+ shown

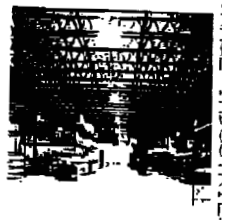







AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

AISC Fabricator Certification Program

Package Industries, Inc.

Sutton, MA

Has met the requirements for certification in the following programs

Category MB, Metal Building Systems

May 2006

President, American Institute of Steel Construction, Inc.

Certification valid through the last day of this month

TOTAL P.01

P.01/01 SEP 08 2006 11:10

AISC CATEGORY MB
METAL BUILDING SYSTEMS
QUALITY CERTIFICATION PROGRAM

Manufacturer: Package Industries
Location: Sutton. Massachusetts
Year: 2006

Facility Type: Design and Fabrication
Audit Type: Renewal
Auditor: Dennis Johnson
Audit Date: April 13, 2006

GENERAL AREAS OF CONCERN"

- o Corporate Policies
- o Org. Charts/Position Descript./ Exp. Levels
- • Welder Qualifications
- • Welding Documentation
- o Subcontract Services
- • Order Instructions
- o Order Documentatinn
- o Order Screening
- o Letter of Certification
- • Design Procedures
- • Project Audit Design Codes & Stds. Compliance
- o Erection & Fabrication Dwgs.
- • Materials Purchasing Documentation
- o Materials Receiving Documentation
- • Quality Assurance Procedures
- • Quality Assurance Documentation
- o Structural Welding
- o Structural Fabrication
- o Receiving Practices
- o Loading & Handling
- o Subcontract Structural Components

**See final report comments for specific deficiencies.*

PRELIMINARY AUDIT FINDINGS:

• Pass o Fail o rending further review.

o Audit materials requiring additional review: *

Auditor Signature; Dennis L Johnson Date: 04/13/06

Manufacturer's Rep. Signature: Dennis L O'Mooney Date; 04/13/06

City of Portland, Maine - Building or Use Permit
389 Congress Street, 04101 Tel: (207) 874-8703, **Fax:** (207) 874-8716

Permit No:	Date Applied For:	CBL:
06-0618	04/26/2006	331 A001001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1039 RIVERSIDE ST	1039 RIVERSIDE LLC	340 FORE ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Biskup Construction, Inc.	16 Danielle Drive Windham	(207) 892-9800
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Alterations - Commercial	

Proposed Use:	Proposed Project Description:
Commercial 7,500 sf pre-engineered steel building (shell only)- Bldg #3	7,500 sf pre-engineered steel building (shell only)

☑

Comments:
5/25/2006-mjn: Have Seismic question, engineer sending the calcs.....

STATEMENT OF SPECIAL CONSTRUCTION MONITORING

PROJECT: **Second Tee Business Park Building #3**
Portland, Maine

PERMIT APPLICANT: **Jim Biskup**
APPLICANT'S ADDRESS: **14 Danielle Dr, Windham, ME 04062**

STRUCTURAL ENGINEER OF RECORD
Foundations: **Associated Design Partners, Inc**
Pre-Fabricated Steel Building: **Package Industries, Inc.**

CONTRACTOR: **Biskup Construction**

This Statement of Special Construction Monitoring is submitted as a condition for building permit issuance in accordance with Section 1704.0 of the 2003 International Building Code. It includes the Schedule of Special Construction Monitoring and Testing as applicable to this project. **Also** included is a listing of agents and other approved agencies to be retained for conducting the monitoring and testing applicable to this project.

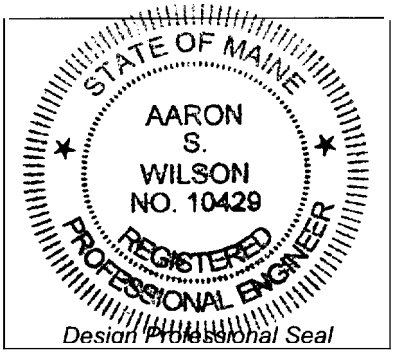
The Special Construction Monitoring Coordinator shall keep records of all observations listed herein, and shall furnish field reports to the Registered Design Professional of Record. **All** discrepancies shall be brought to the immediate attention of the Contractor for correction, and to the Registered Design Professional of Record. 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.

The Special Construction Monitoring program does not relieve the Contractor of his or her responsibilities. Job site safety is solely the responsibility of the Contractor. Materials and activities covered under the monitoring schedule are not to include the Contractor's equipment and methods used to erect or install the materials listed.

Prepared by:

Aaron S. Wilson
(type or print name)

Sig _____ Date 4/26/06



Design Professional Seal

Owner's Authorization:

Signature Date

Building Official's Acceptance:

Signature Date

SPECIAL CONSTRUCTION MONITORING AGENTS

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

- [XI] Soils and Foundations
- [ ] Cast-in-Place Concrete Retaining walls
- [ ] Precast Concrete
- [ ] Masonry
- [XI] Structural Steel
- [ ] Cold-Formed Steel Framing
- [ ] Spray Fire Resistant Material
- [ ] Wood Construction
- [ ] Exterior Insulation and Finish System
- [ ] Mechanical & Electrical Systems
- [ ] Architectural Systems
- [ ] Special Cases

AGENT	FIRM	CONTACT INFORMATION
1. Engineer of Record (Foundations & L.G. Steel)	**Associated Design Partners**	**80 Leighton Rd Falmouth ME 04105 Ph: 878-1751**
2. Special Construction Monitoring Coordinator	**Associated Design Partners**	**80 Leighton Rd Falmouth ME 04105 Ph: 878-1751**
3. Field Monitor	**S.W. Cole**	**286 Portland Road Gray, ME 04039-9586 P: (207) 657.2866**
4. Testing Agency	**S.W. Cole**	**286 Portland Road Gray, ME 04039-9586 P: (207) 657.2866**
5. Engineer of Record (Pre-Fab Metal Building)	**Package Industries, Inc**	**15 Harback Rd Sutton, MA 01590 PH. (508) 865-5871**

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

QUALITY ASSURANCE FOR LATERAL SYSTEMS

Quality Assurance for Seismic Requirements

Seismic Design Category *B*

Quality Assurance Plan Required (Y/N) *N*

If seismic design category C, and plan is not required, explain (see exceptions to 1705.1)

Description of seismic force resisting system and designated seismic systems:
Ordinary Steel Moment Frames, Ordinary Concentric Steel Braced Frames.

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust) *94MPH*

Quality Assurance Plan Required (Y/N) *N*

Description of wind force resisting system and designated wind resisting components:
Ordinary Steel Moment Frames, Ordinary Concentric Steel Braced Frames.

Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility in accordance with section 1705.3, and 1706.3 of the 2003 IBC code.

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency* ***Number*** on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.

International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector

TABLE 1 – SCHEDULE OF SPECIAL CONSTRUCTION MONITORING

MATERIAL / ACTIVITY		EXTENT of MONITORING (Continuous, Periodic, Other, Exempt, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
1704.3 STEEL CONSTRUCTION						
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	Provide inspection reports for field installed bolts to Agent 5 also.	3		
	b. Manufacturers Certificate of Compliance required.	Other	Fabricator to provide Certificate to Agent 1.	5		
2. Inspection of High – Strength Bolting	a. Bearing type connections	Periodic	Provide inspection reports to Agent 5 also.	3		
	b. Slip – critical connections	None	No S-C connections in building			
3. Material Verification of structural steel	a. Identification marking to conform to ASTM standards specified in the contract documents.	Exempt	Fabricator is AISC certified.			
	b. Manufacturers certified mill test Reports.	Exempt	Fabricator to provide Certificate to Agent 1.	5		
4. Material Verification of weld filler materials:	a. Identification marking to conform to AWS standards specified in the contract documents.	Exempt	Fabricator is AISC certified.			
	b. Manufacturers Certificate of Compliance required.	Exempt	No field welding. Shop welding performed by AISC certified fabricator			
5. Inspection of Welding – Structural Steel	a. Single Pass fillet welds < 5/16"	Exempt	No field welding. Shop welding performed by AISC certified fabricator			
	b. Roof deck welds	Periodic	Provide inspection reports to Agent 5 also.	3		
6. Inspection of Steel Frame Joint details for compliance with approved documents.	a. Bracing / moment frame connections	Periodic	Provide inspection reports to Agent 5 also.	3		
	b. Member locations	Periodic	Provide inspection reports to Agent 5 also.	3		
	c. Application of joint details at each connection.	Periodic	Provide inspection reports to Agent 5 also.	3		

TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
1704.4 CONCRETE CONSTRUCTION						
1. Inspection of reinforcing steel, including placement.		Periodic		3		
2. Inspection of reinforcing steel welding		None	No welding of rebar specified in contract drawings			
3. Inspect bolts embedded into concrete prior to and during placement of concrete where allowable loads have been increased.		None	Allowable loads have not been increased for lateral loads.			
4. Verify concrete mix design(s)		Periodic	SER to review and approve mix design(s) prior to delivery. Field agent to verify delivery ticket matches approved mix design.	1,3		
5. Sample fresh concrete for strength tests, perform slump and air content tests, and determine temperature of concrete.		Continuous		3,4		
6. Inspection of concrete placement for proper techniques.		Continuous		3		
7. Inspection for maintenance of specified curing temperature and techniques.		Periodic		3		
1704.5 MASONRY CONSTRUCTION - Level 1 Special Inspection for non-essential facility – 1704.5.2						
1. As Masonry Construction begins, the following shall be verified to ensure conformance	a. Proportions of site-prepared mortar	None				
	b. Construction of mortar joints	None				
	c. Location of reinforcement	None				
	d. Pre-stressing technique	None	No pre-stressing in building			
	e. Grade and size of pre-stressing tendons.	None	No pre-stressing in building			
2. The Inspection program shall verify the following:	a. Size and location of structural elements.	None				

TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
	b. Type, size, and location of embedded anchors.	None				
	c. Size, grade, and type of reinforcing	None				
1704.5 MASONRY CONSTRUCTION - Level 1 Special Inspection for non-essential facility – 1704.5.2						
2. The Inspection program shall verify the following, cont:	d. welding of reinforcing bars	None				
	e. Protection of Masonry during cold weather (temp. below 40 deg F.)	None				
	f. Application and measurement of pre-stressing reinforcement	None	No pre-stressing in building			
3. Prior to grouting, the following shall be verified to ensure compliance.	a. Grout space is clean	None				
	b. Placement of reinforcement	None				
	c. Proportions of site-prepared grout	None				
	d. Construction of mortar joints	None				
4. Grout placement shall be verified to ensure compliance with code and construction document provisions.		None				
5. Preparation of any grout specimens, mortar specimens and/or prisms shall be observed		None				
6. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.		None				
1704.6 WOOD CONSTRUCTION						
1. Horizontal Diaphragms and Vertical Shearwalls	a. Inspect sheathing size, grade, and thickness for conformance with construction documents.	None				
	b. Inspect sheathing fastener size and pattern for conformance with construction documents.	None				
	c. Verify attachment to supporting elements is per contract documents.	None				
2. Wood truss fabricator certification / quality control procedures	Verify shop fabrication and quality control procedures for wood truss plant.	None				
3. Material Grading	Verify material grading for sawn lumber for compliance with construction documents. Verify manufactured lumber (LVL'S, PSL's) for conformance with	None				

TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
	construction documents					
1704.6 WOOD CONSTRUCTION						
4. Wood Connections	Verify that connections are made as shown in the contract documents. For connections not specifically detailed, verify conformance with IBC 2003 Ch. 23	None				
5. Framing	Verify that framing is installed in accordance with construction documents.	None				
6. Pre-Fabricated Wood Trusses	Inspect truss and all bracing installation. Bracing to be installed per fabricator's recommendations and BCSI 1-03	None				
1704.7 SOILS						
1. Site Preparation	Inspect preparation of site for conformance with Geotechnical recommendations prior to placement of prepared fill.	Periodic		3		
2. Fill Placement	During Fill Placement verify that material and lift thickness comply with approved Geotechnical report.	Periodic		3		
3. In-Place Soil Density	Verify compliance of in-place compacted dry density with approved Geotechnical report.	Periodic		3		
1704.7 PILE FOUNDATIONS	Record installation and testing of procedures of each pile. Submit reports to building official and EOR. Reports to include pile tip cutoff elevation relative to a common benchmark.	No e	No Piles on Job			
1704.10 ARCHITECTURAL WALL PANELS AND VENEERS	Verify compliance of attachment of interior and exterior Architectural veneers to supporting structure for building in Seismic Design Category E or F.	None	Building is Seismic Design Category B			

TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
1704.11 SPRAYED FIRE-RESISTANT MATERIAL	a. Verify conformance of the prepared surface with manufacturer's specifications prior to application of material.	None	No Sprayed Fire-Resistant material in building.			
	b. Verify that substrate's ambient temperature meet manufacturer's specifications.	None				
	c. Verify that material thickness meets design specifications.	None				
	d. Verify that the material density meets the design specifications. Test in accordance with ASTM E 605	None				
	e. Verify that bond strength between material and substrate is greater than or equal to 150 psf. Test in accordance with ASTM E 736 and IBC 2003 1704.11.5.1 – 1704.11.5.2	None				
1704.12 EXTERIOR AND INSULATION AND FINISH SYSTEMS (EIFS)	Verify conformance of EFIS installation with manufacturers and design specifications.	None	No EIFS on building.			
1704.13 SPECIAL CASES COLD FORMED METAL FRAMING						
1. Horizontal Diaphragms and Vertical Shearwalls	a. Inspect sheathing size, grade, and thickness for conformance with construction documents.	None				
	b. Inspect sheathing fastener size and pattern for conformance with construction documents.	None				
2. Framing	Verify member size, thickness, material, and spacing is in accordance with design specifications and drawings.	None				

TABLE 1 – STATEMENT OF SPECIAL INSPECTIONS, cont.

MATERIAL/ACTIVITY		EXTENT of INSPECTION (Continuous, Periodic, Other, None)	COMMENTS	AGENT #	DATE COMPLETED	REV #
3. Framing Connections	Verify that member connections are in accordance with design specifications and drawings.	None				
4. Welding	Verify welding of cold formed members is in accordance with design specifications and AWS standards.	None				
5. Light Gage Trusses	a. Verify that light gage trusses are design in accordance with the loads specified on the contract documents.	None				
	b. Verify that light gage trusses and truss bracing is installed per manufacturers specifications, contract documents, and BCSI 1-3 guidelines.	None				
1704.10 SMOKE CONTROL						
	a. Test ductwork for leakage and recode device locations prior to concealment of mechanical systems.	None				
	b. Prior to building occupation, perform pressure difference testing, flow measurements and detection, and control monitoring.	None				

Package Industries, Inc.
15 Harback Road Sutton, MA 01590
TEL (508) 865-5871 FAX (508) 865-9130 Email sales@pkgmail.com

Letter of Certification (Page 1 of 2)

Customer:
Biskup Construction Inc.
16 Danielle Drive
Windham, ME 04062

Project:
Second Tee
~~1639~~ Riverside Street
Portland, ME 04103

Date: 4/11/2006
Project ID: 0603-060

Overall Building Description

Width (ft.)	Length (ft.)	Left Eave (ft.)	Right Eave (ft.)	Left Pitch (:12)	Right Pitch (:12)	Peak Height (ft.)	Ridge Offset (ft.)
75.0	100.0	21.56	20.0	N/A	0.25	21.56	75.0

This is to certify the above referenced building and its components have been designed in accordance with Package Industries, Inc.'s standard design practices and established pertinent procedures and recommendations of the following Organizations and/or Specifications.

American Institute of Steel Construction AISC 89
American Iron and Steel Institute NASPEC 01
American Welding Society Structural Welding Code (AWS D1.1)
Metal Building Manufacturers Association (MBMA)
American Society for Testing and Materials (ASTM)
AISC Category MB Manufacturers Certification

Design Data

Building Code: IBC 03 Building Classification Category: Standard Building End Use: Mixed

Snow Loads

Ground Snow (Pg) : 60.0 *psf*
Snow Exposure Factor (Ce) : 1.0
Snow Thermal Factor (Ct) : 1.0
Snow Importance Factor (Is) : 1.0
Flat Roof Snow (Pf) : 42.0 *psf*
Sloped Roof Factor (Cs) : 1.0
Sloped Roof Snow (Ps) : 42.0 *psf*
Design Roof Snow : 42.0 *psf*
% Snow Used in Seismic : 20

Roof Dead, Collateral & Live Loads

Dead Load : 3.0 *psf*
Collateral Load : 5.0 *psf*
Live Load : 20 *psf*
Live Load Reduction Taken : No

Wind Loads

Basic Wind Speed (3-second gust) : 94 *mph*
Wind Exposure : B
Wind Directionality Factor (Kd) : 0.85
Wind Topographic Factor (Kzt) : 1.0
Building Enclosure : c - closed
Importance (Iw) : 1.00
Reference Wind Pressure (Pv) : 22.6 *psf*
Internal Pressure Coeff. (GCpi) : +-0.18

Seismic Loads

Seismic Hazard Group : I
Seismic Importance (Ie) : 1.0
0.2 Sec Spectral Response (Ss) : 0.3179
1.0 Sec Spectral Response (S_1) : 0.0775
Design Spectral Response (Sds) : 0.328
Design Spectral Response (Sd_1) : 0.124
Seismic Design Category : B
Soil Profile : D
Response Modification (OMF),R : 3.0
Response Modification (OCBF),R : 5.0
Seismic Response Coefficient (OMF),Cs : 0.1092
Seismic Response Coefficient (OCBF),Cs : 0.0655
Deflection Amplification (OMF),Cd : 3.0
Deflection Amplification (OCBF),Cd : 4.5
Design Base Shear **(V)** = Cs * W :
Analysis Procedure : 1617.4

Auxiliary Load(s)

(3) 200 lb. suspended heater units (located max. 3' off frames)

Package Industries, Inc.

15 Harback Road Sutton, **MA** 01590
TEL (508) 865-5871 FAX:(508) 865-9130 Email **sales@pkgmail.com**

Letter of Certification (Page 2 of 2)

Customer:	*Project:*	*Date:* 411 112006
Biskup Construction Inc.	Second Tee	***Project** ID:* 0603-060
16 Danielle Drive	Riverside Street	
Windham, ME 04062	Portland, ME 04103	

Additional Structural Material may be fabricated and provided for use in a Package Industries, Inc. building by any of the following fabricators:

Panels and Trims:

MBCI/NCI Building Components	Rome, ***NY***
MBCI/NCI Building Components	Richmond, **VA**
MBCI/NCI Building Components	Atlanta, GA

Barjoist and Decking:

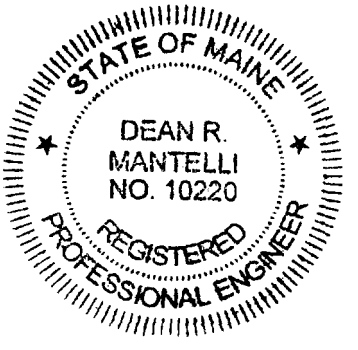
Canam Steel Corp.	Point of Rocks, MD
Canam Steel Corp.	Columbus, OH
John W. Hancock, Jr., Inc.	Salem, **VA**
Vulcraft Div., Nucor Corp.	St. Joe, IN
SMI Joist Company	Hope, Arkansas

This Letter of Certification applies solely to the building and its component parks as furnished by Package Industries, Inc., and specifically excludes any foundation, masonry, general contract work, materials or components not furnished by Package Industries, Inc., or any unauthorized modifications to framing systems furnished by Package Industries, Inc.. Inspections andior erection certifications are not by Package Industries, Inc..

The Design and Certification for this project is in accord with the provisions and loads specified in the Order Documentation. The buyer is responsible for verifying that the specified loads above are in compliance with the local regulatory authorities.

Sincerely,

Dean R. Mantelli P.E.



Project: Second Tee
Location: Portland, ME 04103
Project#: 0603-060

Date: 4/18/2006
By: DRM

Code **IBC 2003**

Input Zip Code: 04103

USGS Location: 43.689 Latitude
-70.288 Longitude

USGS Hazard by Lat/Long 2002 (2% PE in 50yr.)

S_s = 31.79%g
S_1 = 7.75%g

T. 1604.5 Buildin Occupanc Cate o for Wind, Snow and Seismic Loads

Cate or	Nature of Occu anc
	Low hazard buildings
	All other buildings
III	Public gathering buildings
IV	Essential buildin s
II	**All** other buildings

1616.2 Seismic Use Group

Bldg Cat.	Seismic Use Group
I	I
II	II
III	III
IV	I
II	II

T. 1604.5 Occupancy Importance Factors

Seismic Use Group	Seismic Imoortance Factor
I	1
II	1
III	1.25
IV	1.5

Seismic Use Group II
Site Class: D

Calculate S_{ms}: (Eq. 16-38)

$S_{ms} = F_a S_s = (1.5457)(0.3179) = 0.4914$

$S_{DS} = 2/3(S_{ms}) = (2/3)(0.4914) = 0.3276$

T.1615.1.2(1) Values of F_a= 1.5457 S_{MS} = 0.4914 S_{DS} = 0.3276

Site Class		S_s<=0.25	S_s=0.5	S_s=0.75	S_s=1.0	S_s>=1.25
A	Hard rock	0.8	0.8	0.8	0.8	0.8
B	Rock	1	1	1	1	1
C	Dense soil	1.2	1.2	1.1	1.00	1
D	Stiff soil	1.6	1.4	1.2	1.10	1
E	Soil	2.5	1.7	1.2	0.90	**
F	Soft	**	**	**	**	**
D	Stiff soil	1.6	1.4	1.2	1.1	1

Use straight-line interpolation between these values

T. 1616.3(1) Seismic Design Category Based on Short Period Response Accelerations

	Value of S_{DS}	Seismic Use Group		
		I	II	III
1	S_{DS} < 0.167g	A	A	A
2	0.167g<=S_{DS}< 0.33g	B	B	C
3	0.33g<=S_{DS}< 0.5g	C	C	D
4	0.5g <= S_{DS}	D	D	D

S_{DS} = 0.3276

Design Category: B

Calculate S_{m1}: (Eq. 16-39)

$S_{m1} = F_v S_1 = (2.4)(0.0775) = 0.1860$

$S_{d1} = 2/3(S_{m1}) = (2/3)(0.1860) = 0.1240$

Site Class		S_1<=0.1	S_1=0.2	S_1=0.3	S_1=0.4	S_1>=0.5
A	Hard rock	0.8	0.8	0.8	0.8	0.8
B	Rock	1	1	1	1	1
C	Dense soil	1.7	1.6	1.5	1.40	1.3
D	Stiff soil	2.4	2	1.8	1.60	1.5
E	Soil	3.5	3.2	2.8	2.40	**
F	*soft*	**	**	**	**	**

Straight-line interpolation not required (S_1 <= 0.1)

	Value of S_{D1}	Seismic Use Group		
		I	II	III
1	S_{D1} < 0.067g	A	A	A
2	0.067g<=S_{D1}<0.133g	B	B	C
3	0.133g<=S_{D1}< 0.2g	C	C	D
4	0.29 <= S_{D1}	D	D	D

S_{D1} = 0.124

Design Category: B

Summary: Seismic Design Category = B

FROM DESIGNER: AARON S. WILSON - ASSOCIATED DESIGN PARTNERS INC.

DATE: 4/25/06

Job Name: 1039 RIVERSIDE - LOT #3 SHELL ONLY

Address of Construction: 1039 RIVERSIDE DR.

2003 International Building Code

Construction project was designed according to the building code criteria listed below:

Building Code and Year 2003 IBC Use Group Classification(s) _____

Type of Construction _____

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

Y — Submitted for all structural members *(106.1, 106.1.1)*

DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1603)

Uniformly distributed floor live loads *(7603.11, 1607)*

Floor Area Use	Loads Shown
TBD	

Wind loads *(1603.1.4, 1609)*

- 1609.6 — Design option utilized (1609.1.1, 1609.6)
- 94 — Basic wind speed *(1809.3)*
- 1.0 — Building category and wind Importance factor, I_w (Table 1604.5, 1609.5)
- B — Wind exposure category *(1608.4)*
- +/- 0.18 — Internal pressure coefficient *(ASCE 7)*
- +/- 34 — Component and cladding pressures *(1609.1.1; 1609.6.2.2)*
- +/- 19.1 — Main force wind pressures (7603.1.1, *1609.6.2.1)*

Earthquake design data *(1603.1.5, 1614 - 1623)*

- 1617.4 — Design option utilized *(1614.1)*
- II — Seismic use group ("Category") *(Table 1604.5; 1616.2)*
- 0.327 / 0.124 — Spectral response coefficients, S_{DS} & S_{D1} *(1615.7)*
- D — Site class *(1615.1.5)*

- N/O — Live load reduction *(1603.1.1, 1607.9, 1607.10)*
- 20 — Roof *Live* loads *(1603.1.2, 1607.11)*

Roof snow loads *(7603.7.3, 1608)*

- 60 — Ground snow load, P_g (1608.2)
- 42 — If P_g > 10 psf, flat-roof snow load, P_f *(1608.3)*
- 1.0 — If P_g > 10 psf, snow exposure factor, C_e *(Table 1608.3.1)*
- 1.0 — If P_g > 10 psf, snow load Importance factor, I_s *(Table 1604.5)*
- 1.0 — Roof thermal factor, C_t *(Table 1608.3.2)*
- 42 — Sloped roof snowload, P_s *(1608.4)*
- B — Seismic design category *(1616.3)*
- 3-D — Basic seismic-force-resisting system *(Table 1617.6.2)*
- 3/3 — Response modification coefficient, R_I and deflection amplification factor, C_d *(Table 1617.6.2)*
- 1617.4 — Analysis procedure *(1616.6, 1617.5)*
- V = 65.W — Design base shear (1617.4, *1617.5.1)*

Floodloads *(1603.1.6, 1612)*

- N/A — Flood hazard area (1612.3)
- 69.0' — Elevation of structure

Other loads

- N/A — Concentrated loads (1607.4)
- N/A — Partition loads (1607.5)
- N/A — Impact loads *(1607.8)*
- N/A — Misc. loads (*Table 1807.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)*

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

04-0238

April 1, 2004

Hardy Pond Construction
Attention: Bob Goudreau
1039 Riverside Street, Suite 11
Portland, Maine 04103

Subject: Preliminary Geotechnical Engineering Services
Limited Investigation
Bearing Capacity Assessment
Proposed Second Tee Business Park
1039 Riverside Street
Portland, Maine

Dear Mr. Goudreau:

As requested, S. **W.** COLE ENGINEERING, INC. has observed a subsurface investigation for the proposed Second Tee Business Park located at 1039 Riverside Street in Portland, Maine. The purpose of our work was to observe the subsurface conditions at the site and provide a preliminary assessment **of** allowable soil bearing capacity. The contents of this report are subject to the limitations set forth in Attachment A.

PROPOSED CONSTRUCTION

We understand that a new business park **is** proposed on a 16-acre parcel of land at 1039 Riverside Street in Portland, Maine. The parcel will be developed for 10 structures measuring from 6,000 to 25,000 square feet. The structures will be one story metal buildings with finish floor grades within **1** to 2 feet of existing grade and light floor loading.

EXPLORATION AND TESTING

As requested, we observed four test pits made at the site on March 26, 2004. The explorations were selected and located in the field by Hardy Pond Construction. The approximate locations of the explorations are shown on the "Exploration Location Sketch" attached as Sheet 1.

Logs of the explorations, based on our observations and laboratory testing are attached as Sheets 2 and 3. A key to the notes and symbols used on the logs is attached as Sheet 4.

Laboratory testing was performed on selected samples recovered from the explorations. One grain size analysis was performed and the results are presented on Sheets 5 and 6.

SUBSURFACE CONDITIONS

Test Pits TP-I through TP-4 generally encountered 0.5 to 1.0 feet of dark brown sandy silt with organics overlying 4 to 6 feet of brown silty fine to medium sand. The silty sand overlies gray silty sand with silt and clay layers. Test Pits TP-1 through TP-3 were terminated in the gray silty sand at a depth of 8.5, 8.0 and 6.0 feet, respectively. Test Pit TP-4 encountered gray silty clay at a depth of 7 feet and was terminated at 8.0 feet.

Groundwater was observed in the explorations at depths of about 4 to 4.5 feet at the time of the fieldwork. The soils were generally wet below the ground surface. Long-term groundwater information is not available.

EVALUATIONS AND RECOMMENDATIONS

Based on our observations and shallow groundwater conditions encountered, we recommend that the footings be placed on 8 inches of crushed stone over a geotextile fabric placed on the undisturbed native silt sand. We further recommend that a smooth edged bucket be utilized to excavate to subgrade in order to reduce disturbance of the bearing soils. Footings should be placed at a depth of at least 4.5 feet below exterior finish grade to provide frost protection. Based on the findings at the widely spaced test pits, we recommend that preliminary foundation design consider a net allowable bearing contact pressure not exceeding 2.5 ksf. All footings should be at least 24 inches in width.

Groundwater will be encountered during excavation work. Sumping and pumping dewatering techniques should be adequate to control groundwater below footing subgrade elevation. Controlling the water levels to a at least one foot below subgrade elevations will help stabilize the subgrade and provide a more suitable working surface during construction.

Our services have been limited by the client to widely spaced test pits and providing a preliminary assessment of allowable soil bearing capacity at those locations. Other services were specifically not requested by the client. We recommend that additional explorations

including test pits and/or test borings be made specific to each structure proposed at the site. This is to determine if soil conditions are consistent with those found at these explorations.

S. W. COLE ENGINEERING, INC. should be on-site to observe subgrades prior to fill or concrete placement in the event that subsurface conditions are found to differ from those anticipated. **S. W.** COLE ENGINEERING, **INC.** is available to provide field and laboratory testing of soils, concrete, asphalt, masonry , spray-applied fire-proofing and structural steel.

CLOSING

It has been a pleasure to be of assistance to you with this phase of your project. If you have any questions or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
S. W. COLE ENGINEERING, INC.

Robert E. Chaput Jr.

STATE OF MAINE
ROBERT
E.
CHAPUT JR.
No. 8567
REGISTERED
PROFESSIONAL ENGINEER

Robert **E.** Chaput, Jr., P.E.
Vice President

REC:kml
P:\Swc-2004\04-0238\04-0238 Report.doc

ATTACHMENT A
Limitations

This report has been prepared for the exclusive use of Hardy Pond Construction for specific application to the Proposed Second Tee Business Park at 1039 Riverside Street in Portland, Maine as described herein. Our services were limited by Hardy Pond Construction to an assessment of soil bearing capacity only and a deeper soils investigation to evaluate settlement and other geotechnical considerations was specifically excluded by Hardy Pond Construction. Hardy Pond Construction 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.

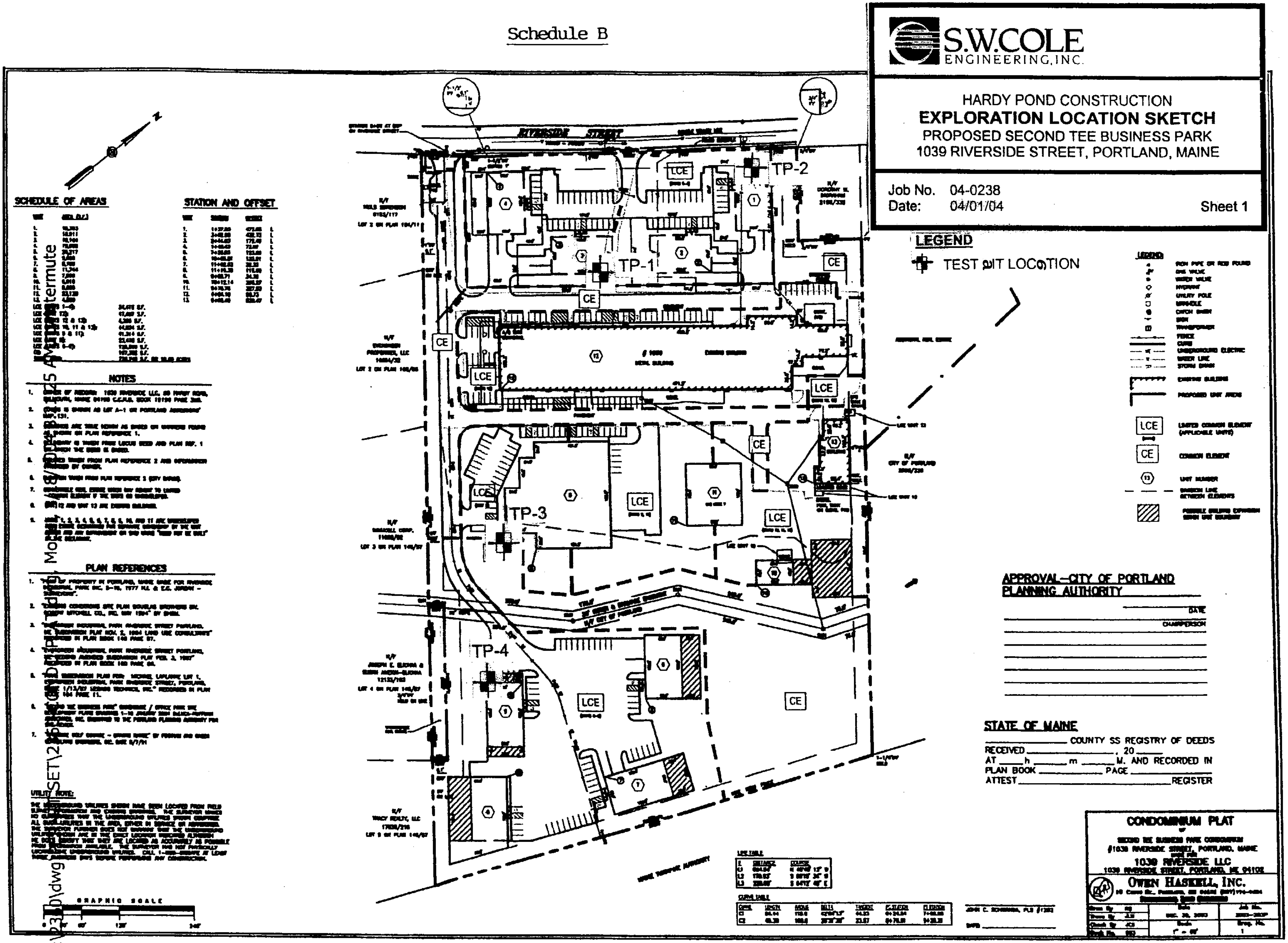
The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples. Observations have been made during exploration work to assess site groundwater levels. 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.

Schedule B


S.W.COLE ENGINEERING, INC.
HARDY POND CONSTRUCTION
EXPLORATION LOCATION SKETCH
PROPOSED SECOND TEE BUSINESS PARK
1039 RIVERSIDE STREET, PORTLAND, MAINE
Job No. 04-0238
Date: 04/01/04
Sheet 1
LEGEND
TEST PIT LOCATION
TP-1
TP-2
TP-3
TP-4
RIVERSIDE STREET
LCE
CE
SCHEDULE OF AREAS
STATION AND OFFSET
NOTES
PLAN REFERENCES
UTILITY NOTE:
GRAPHIC SCALE
APPROVAL—CITY OF PORTLAND
PLANNING AUTHORITY
DATE
CHAIRPERSON
STATE OF MAINE
COUNTY SS REGISTRY OF DEEDS
RECEIVED , 20
AT h m M. AND RECORDED IN
PLAN BOOK PAGE
ATTEST REGISTER
CONDOMINIUM PLAT
1039 RIVERSIDE LLC
OWEN HASKELL, INC.
LIMITED COMMON ELEMENT
COMMON ELEMENT
UNIT NUMBER

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT PROPOSED SECOND TEE BUSINESS PARK / HARDY POND CONSTRUCTION
LOCATION 1039 RIVERSIDE STREET, PORTLAND, MAINE
BACKHOE FIRM HARDY POND CONSTRUCTION OPERATOR BOB GOUDREAU

PROJECT NO 04-0238
SWC REP TJG

TEST PIT TP-1

DATE: 3/26/2004 SURFACE ELEVATION: NOT AVAIL. LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
			DARK BROWN SANDY SILT, TRACE GRAVEL WITH ORGANICS	
		1.0'		
			LIGHT BROWN SILTY FINE TO MEDIUM SAND	
		6.0'		
			GRAY SILTY FINE SAND WITH SILT AND CLAY LAYERS	
		8.5'		
			BOTTOM OF EXPLORATIN AT 8.5'	

COMPLETION DEPTH: 8.5' DEPTH TO WATER: 4'

TEST PIT TP-2

DATE: 3/26/2004 SURFACE ELEVATION: NOT AVAIL. LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
			DARK BROWN SANDY SILT WITH ORGANICS	
		1.0'		
			LIGHT BROWN SILTY FINE TO MEDIUM SAND	
S-2	4'			
		5.0'		
			GRAY SILTY FINE SAND WITH SILT AND CLAY LAYERS	
		8.0'		
			BOTTOM OF EXPLORATOIN AT 8'	

COMPLETION DEPTH: 8'
COMPLETION DEPTH: 8'

DEPTH TO WATER:
DEPTH TO WATER: 4.5'

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: PROPOSED SECOND TEE BUSINESS PARK / HARDY POND CONSTRUCTION
LOCATION: 1039 RIVERSIDE STREET, PORTLAND, MAINE
BACKHOE FIRM: HARDY POND CONSTRUCTION OPERATOR: BOB GOUDREAU

JO.: 04-0238
PROJECT NO.: 04-0238
SWC REP.: TJG

TEST PIT TP-3

DATE: 3/26/2004 SURFACE ELEVATION: NOT AVAIL. LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.5'	BROWN SAND AND GRAVEL, TRACE COBBLES	
			ORANGE/BROWN SILTY FINE TO MEDIUM SAND	
		4.5'	GRAY FINE SAND WITH SILT AND CLAY LAYERS	
S-3	5.5'	6.00	BOTTOM OF EXPLORATION AT 6'	

COMPLETION DEPTH: 6' DEPTH TO WATER: 4'

TEST PIT TP-4

DATE: 3/26/2004 SURFACE ELEVATION: NOT AVAIL. LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
			DARK BROWN SANDY SILT WITH ORGANICS	
		8"	LIGHT BROWN FINE SANDY SILT	
		3.5	BROWN SILTY SAND	
		65'	GRAY SILTY FINE SAND **WITH** SILT AND CLAY LAYERS	
S-4	7.5'	70'	GRAY SILTY CLAY	
		80'	BOTTOM OF EXPLORATION AT 8'	

COMPLETION DEPTH: 8' DEPTH TO WATER: **NO** FREE WATER 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

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.

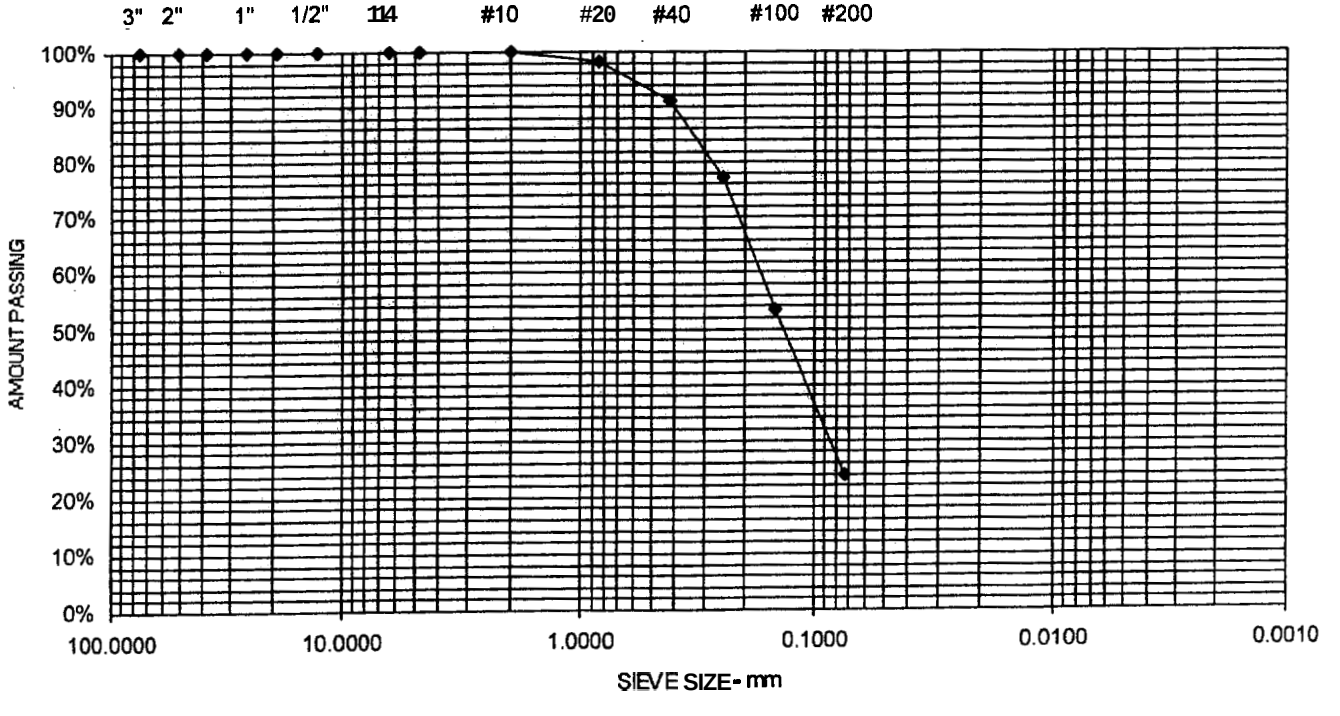
SWCOLE ENGINEERING, INC.

Report of Gradation

ASTM C-117 & C-136

Project Name	HARDYPOND PORTLAND RIVERSIDE COMMERCIAL SUBDIVISION SSI	Project Number	04-0238
Client	HARDYPOND CONSTRUCTION INC	Lab ID	984A
Exploration	**TP-2,S-2,4.0'**	Date Received	3/26/2004
Material Source		Date Completed	3/29/2004
		Tested By	RYAN BRAGG

SIEVE OPENING (mm)	SIEVE SIZE	AMOUNT PASSING (%)	
152.4	**6"**	**100**	
127	**5"**	**100**	
101.6	**4"**	**100**	
76.1	**3"**	**100**	
50.8	**2"**	**100**	
38.1	**1-1/2"**	**100**	
25.7	**1"**	**100**	
19	**3/4"**	**100**	
12.7	**1/2"**	**100**	
6.35	**1/4"**	**100**	
4.76	**No. 4**	**100**	***0%* Gravel**
2	**No. 10**	**100**	
0.841	**No. 20**	**98**	
0.42	**No. 40**	**91**	76.3% Sand
0.25	**No. 60**	**77**	
0.149	**No. 100**	**53**	
0.074	**No. 200**	**23.7**	23.7% Fines



Comments

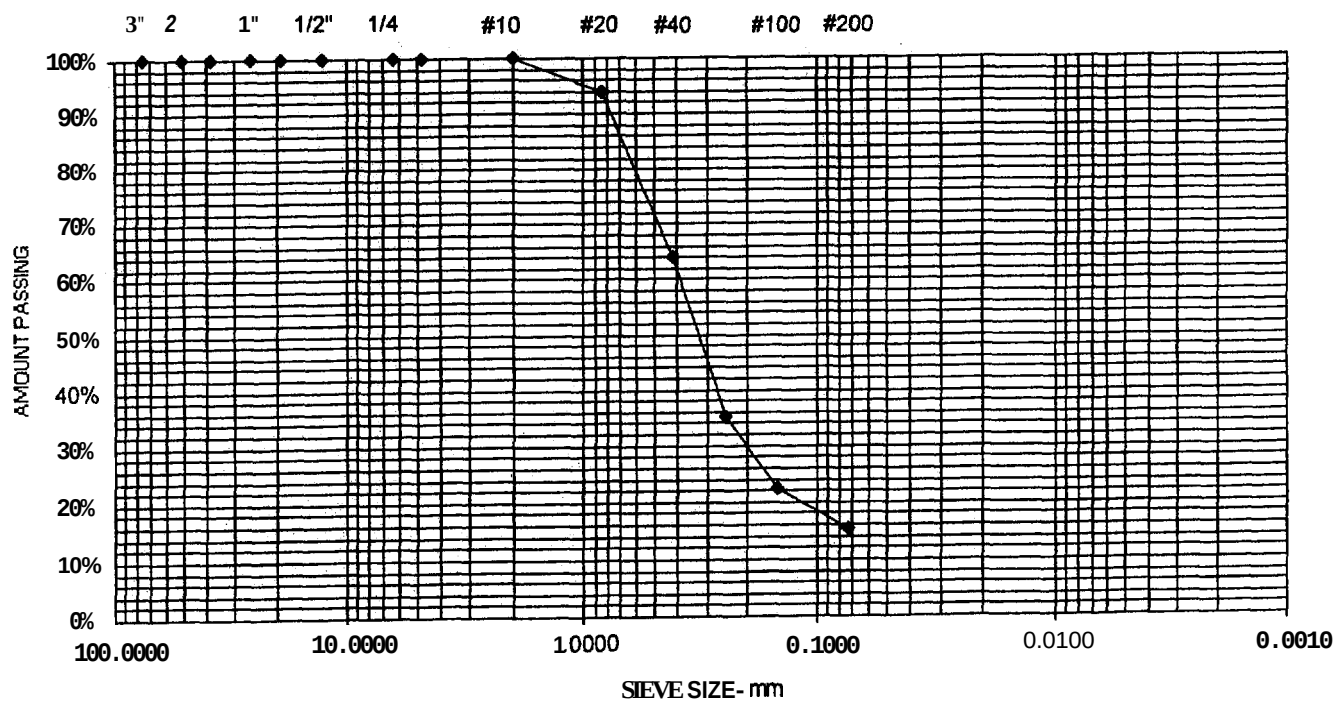
S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C-117 & C-136

Project Name	HARDYPOND PORTLAND RIVERSIDE COMMERCIAL SUBDIVISION SSI	Project Number	04-0238
Client	HARDYPOND CONSTRUCTION INC	Lab ID	985A
Exploration	TP-3,S-3,5.5'	Date Received	3/26/2004
Material Source		Date Completed	3/29/2004
		Tested By	RYAN BRAGG

SIEVE OPENING (mm)	SIEVE SIZE	AMOUNT PASSING (%)	
152.4	6"	100	
127	5"	100	
101.6	4"	100	
76.1	3"	100	
50.8	2	100	
38.1	1-1/2"	100	
25.7	1"	100	
19	3/4"	100	
12.7	1/2"	100	
6.35	1/4"	100	
4.76	No. 4	100	0% Gravel
2	No. 10	100	
0.841	No. 20	94	
0.42	No. 40	64	84.5% Sand
0.25	No. 60	35	
0.149	No. 100	23	
0.074	No. 200	15.5	15.5% Fines



Comments